

Sewage, Wastewater and Sanitation Hearing Board Meeting Notice and Agenda

Members

Ronald J. Anderson, P.E., Chair
Matthew Buehler
Vonnie Fundin
Nick Vestbie, P.E.
Matt Smith - Alternate
Ray Pezonella, P.E - Alternate

**Monday, May 7, 2018
6:00 p.m.**

**Washoe County Administration Complex, Building B
Health District South Conference Room
1001 East Ninth Street
Reno, NV**

An item listed with asterisk (*) next to it is an item for which no action will be taken.

6:00 p.m.

- 1. *Roll Call and Determination of Quorum**
- 2. *Pledge of Allegiance**
- 3. *Public Comment**

Any person is invited to speak on any item on or off the agenda during this period. Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item.

- 4. Approval of Agenda – (For possible action)**
May 7, 2018
- 5. Approval of Draft Minutes – (For possible action)**
June 5, 2017
- 6. Public Hearing** to determine whether or not to recommend approval to the District Board of Health for a variance for APN 017-123-05 owned by Mike Fritz for Section 040.080 and Table 2 “Watercourses” including Sub-Script (4) of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation. – (**For possible action**)
Staff Representative: James English

Mr. Mike Fritz
15425 Pinion Drive
Reno, NV 89521
Assessor’s Parcel Number 017-123-05
- 7. *Public Comment**
Any person is invited to speak on any item on or off the agenda during this period. Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item.
- 8. Adjournment – (For possible action)**

Possible Changes to Agenda Order and Timing: Items on the agenda may be taken out of order, combined with other items, withdrawn from the agenda, moved to the agenda of another later meeting, moved to or from the Consent section, or they may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later. Items listed in the Consent section of the agenda are voted on as a block and will not be read or considered separately unless withdrawn from the Consent agenda.

Special Accommodations: The Sewage, Wastewater and Sanitation Board Meetings are accessible to the disabled. Disabled members of the public who require special accommodations or assistance at the meeting are requested to notify Administrative Health Services in writing at the Washoe County Health District, PO Box 1130, Reno, NV 89520-0027, or by calling 775.328.2415, 24 hours prior to the meeting.

Public Comment: During the “Public Comment” items, anyone may speak pertaining to any matter either on or off the agenda, to include items to be heard on consent. For the remainder of the agenda, public comment will only be heard during items that are not marked with an asterisk (*). Any public comment for hearing items will be heard before action is taken on the item and must be about the specific item being considered by the Board. In order to speak during any public comment, each speaker must fill out a “Request to Speak” form and/or submit comments for the record to the Recording Secretary. Public comment and presentations for individual agenda items are limited as follows: fifteen minutes each for staff and appellant presentations, five minutes for a speaker representing a group, and three minutes for individual speakers unless extended by questions from the Board or by action of the Chair.

Response to Public Comment: The Sewage, Wastewater and Sanitation Board can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The *Open Meeting Law* does not expressly prohibit responses to public comments by the Sewage, Wastewater and Sanitation Board. However, responses from the Board members to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Sewage, Wastewater and Sanitation Board will consider, Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for Health District Staff action or to ask that a matter be listed on a future agenda. The Sewage, Wastewater and Sanitation Board may do this either during the public comment item or during the following item: “Board Comments – Limited to Announcement or Issues for future Agendas.”

Posting of Agenda; Location of Website:

Pursuant to NRS 241.020, Notice of this meeting was posted at the following locations:

Washoe County Health District, 1001 E. 9th St., Reno, NV
Downtown Reno Library, 301 S. Center St., Reno, NV
Reno City Hall, 1 E. 1st St., Reno, NV
Sparks City Hall, 431 Prater Way, Sparks, NV
Washoe County Administration Building, 1001 E. 9th St, Reno, NV
Washoe County Health District Website www.washoecounty.us/health
State of Nevada Website: <https://notice.nv.gov>

How to Get Copies of Agenda and Support Materials: Supporting materials are available to the public at the Washoe County Health District located at 1001 E. 9th Street, in Reno, Nevada. Ms. Laura Rogers, Administrative Secretary to the District Board of Health is the person designated by the Washoe County District Board of Health to respond to requests for supporting materials. Ms. Rogers is located at the Washoe County Health District and may be reached by telephone at (775) 328-2415 or by email at lrogers@washoecounty.us. Supporting materials are also available at the Washoe County Health District Website www.washoecounty.us/health pursuant to the requirements of NRS 241.020.

**SEWAGE, WASTEWATER, AND SANITATION HEARING BOARD
MEETING MINUTES EXCERPT**

Members

Ronald J. Anderson, P.E., Chair
Steven H. Brigman, P.E., Vice Chair
Michele C. Dennis, P.E.
Matthew Buehler
Vonnie Fundin

Monday, June 5, 2017

6:00 p.m.

**Washoe County Administration Complex
Health District South Conference Room
1001 East Ninth Street
Reno, NV**

6:00 p.m.

1. *Roll Call and Determination of Quorum

Chair Anderson called the meeting to order at 6:03 p.m.

The following members and staff were present:

Members present: Ronald J. Anderson, P.E., Chair
Steven H. Brigman, P.E., Vice Chair
Matthew Buehler

Members absent: Vonnie Fundin
Michele C. Dennis, P.E.

Ms. Rogers verified a quorum was present.

2. *Public Comment

As there was no one wishing to speak, Chair Anderson closed the public comment period.

3. Approval of Draft Minutes

March 10, 2016

Mr. Buehler moved to accept the minutes of the March 10, 2016 Sewage, Wastewater, & Sanitation Board (SWS Board) regular meeting as written. Vice Chair Brigman seconded the motion which was approved three in favor and none against.

4. Public Hearing to consider staff's recommendation to deny the appeal of the District Health Officer's decision as based on the requirements of Section 040.085 of the Washoe County District Board of Health Regulations Governing Sewage, Wastewater, & Sanitation – On-site sewage disposal systems are prohibited in any area subject to vehicular traffic. Section 010.185 defines an Onsite Sewage Disposal System as a system for sewage collection, treatment and disposal located on an individual parcel as approved by the Health Authority. Section 010.065 defines disposal area as that portion of the on-site sewage disposal system area which contains the disposal trench(es), the designated repair area for the disposal trench(es), provides for the required trench separations and meets the required setbacks.

Staff Representative: James English

Mr. Harley La Roche
3810 Macaw Ln.
Reno, NV 89508
Assessor's Parcel Number 087-213-09 Parcel 10, Block E
Cold Springs Valley Homes 2 Washoe County, NV

Mr. English stated that this item is in regards to a citizen who is appealing a decision of staff and the District Health Officer regarding his repair location and the requirement of having the area readily available in the event of septic failure. Mr. English informed that the home was built in 1987, and regulations at that time did not require a reserve or repair area as they do today. He noted that the home has been remodeled once. Currently, the homeowner is trying to build a detached garage on the property, but the proposed location is in the area that the Health District had designated for the repair area at the time of the remodel in 2006. The subsequent location suggested by the owner to EHS for the repair area was the driveway at the front of the house.

Mr. English explained that current staff protocol is to make sure the repair area is readily available for the most expedient repair to prevent potential public health issues, and to complete the repair as inexpensively as possible.

Mr. English informed that Mr. La Roche appealed staff's decision to the Division Director (Mr. Bob Sack, retired 3/31/2017). Mr. Sack upheld staff's decision to require the driveway be removed at the time to make the area accessible. Mr. La Roche then appealed the Division Director's decision to the District Health Officer who again upheld staff's decision.

Chair Anderson inquired if it had been recommended to Mr. La Roche to involve a professional engineer to draw plans for a repair design.

Mr. English responded that Mr. La Roche had been given multiple options and was not positive that this had been provided as a possibility, although he had been informed that the repair area could potentially require an engineer be involved due to the possible requirement of pumping based on fall. Mr. English opined that the house was probably designed as the rest of the area with the tank and the field in the middle of the back yard. With Mr. La Roche's proposed building location, the hard piping for sewage would have to be installed under and to the front of the house, where there may not be sufficient fall. Mr. English opined it was probable that Mr. La Roche had been encouraged to involve a professional engineer.

Chair Anderson noted that design preparation from the last case heard by the SWS Board was done without the input of a professional engineer. Chair Anderson stated that, in the past, County staff has discouraged professional engineers or indicated that professional engineers are not needed for standard designs, and understood that there was an initiative to change regulations and phase out this committee. The point of these comments, he stated, was that he'd been able to design an alternative plan for the design that didn't require a variance or being installed in the driveway. He opined that retaining a professional engineer would have resolved the issue immediately.

Mr. English stated that previous staff may have discouraged the use of engineers, but current staff strongly encourages their involvement. He informed that staff has also been able to see various options available in their review of plans and have suggested those involved obtain the services of professional engineers. Mr. English continued that Environmental Health has worked with the engineering community more frequently due to these efforts.

In regards to proposed changes in regulations, Mr. English informed that he was never fully supportive of the direction of those changes, and that proposed changes have not moved forward at this time. He noted that there are no draft regulations being created at this time and current regulations continue to be the standard. Mr. English stressed that the Environmental Health

Division does not discourage the involvement of professional engineers in plan design. He stated that EHS has an engineer on staff and their group has discovered many options in plan design review.

With that said, Mr. English informed that it is usually the decision of the resident to exclude engineering services in plan design due to the expense, adding that he was not inferring that was the case in this instance.

Chair Anderson noted items on the staff report that were not to his approval, one being that his name had been omitted on the report. Another was the mention that repair areas were not required before 1988. Chair Anderson stated that he has been involved in engineering since the 1970's and had been involved in the design of this subdivision. Although he could not find the original perc report for the subdivision, he believed that the design required a primary and repair area. Also, he stated, as far as he knew, that requirement has been consistent through the years.

Chair Anderson informed that, on the Washoe County website, it references the 2003 edition of the SWS regulations, and he believed it should show the 2013 regulations.

Mr. English noted that EHS records do not show any repairs for Mr. La Roche's home. As explained to him by his predecessors, Mr. English had been informed that previous repairs were not always required to be detailed on plans as is the procedure today.

Vice Chair Brigman agreed that there appeared to be other options available for Mr. La Roche that would avoid having to designate the driveway as a repair area. He stated that this design was not acceptable, and did not wish to set precedent by allowing it in this instance. Vice Chair Brigman asked if infiltrator chambers had been considered due to their small footprint.

Vice Chair Brigman opined that EHS had informed Mr. La Roche that it would be nearly impossible to obtain Board's approval to install a repair field under the driveway.

Mr. La Roche stated that had never been his intention. He explained his plan was to remove the drive way to expose area for a repair field at such a time the septic system failed, but not until. He informed that the area proposed for use as a repair field was not an area necessary for access to his garage as it is an area of a circular drive.

Mr. La Roche introduced himself as the owner of the property and informed that on the first set of plans submitted, it showed two forty-foot leach fields to be installed in the future. He indicated that the report shows only one. This plan had been rejected. He then designed the leach field to the front of the property, which meets set-back requirements, but it was required that the asphalt had to be removed immediately.

Mr. La Roche informed that there is sewer line at the school approximately 700-800 feet away from his property. An employee of the sewer company that services the school indicated the possibility of sewer services extending to the area of Mr. La Roche's home in 3-5 years. He stated that this gave him hope that a solution would be available before the septic might fail, and indicated that it would take minimal time to remove the asphalt should the septic fail.

Chair Anderson asked Mr. La Roche if he would be willing to hire an engineer design a plan that would be acceptable.

Mr. La Roche agreed that he would do so at the time the septic fails, if it does. He stated that he had with him Mr. Dave Jones, a soils expert, for the Board to question if they had wanted specific information on the soil type at the property. Mr. La Roche stressed that he was willing to remove the asphalt, but did not want to do so until necessary. He stated there was no way to estimate how long the septic system will last, that he is the only occupant in the residence and he maintains the system regularly.

Mr. Anderson stated that it was his understanding of Mr. La Roche's position that he was unwilling to hire a professional engineer in order to resolve this situation.

Mr. La Roche opined that it would be a waste of capital at this point, since the septic system

is sound at this point and that future connection to sewer would be thousands of dollars. He stated that he would be willing to sign documents on that property stating that the asphalt will have to be removed if the septic system fails to and the back-up area needs to be used.

Chair Anderson asked for comments and there were none.

Mr. Jones introduced himself as working for Construction Materials Engineers and as a professional geologist in the States of California and Idaho, noting that Nevada does not have a registration. He stated that his work is leach field analysis, perc tests and soil analysis to determine the design of septic systems, and that Mr. La Roche had requested him to review his documents and provide feedback. He noted that there were probably alternate designs that could be used for the repair field to the back of the lot by either extending the existing trench or creating several other diagonal options that would meet the offset requirements at the back of the property. Mr. Jones stated that Mr. La Roche made it clear to him that the area designated for the proposed repair area is not his primary access to his garage. If that area were utilized, Mr. La Roche would have full access to his garage without infringing on the repair field. If the system fails, he would then hire an engineer to design and build the repair field either in the front or back of the property, removing the asphalt removed as necessary.

Mr. La Roche informed that the dimensions of the garage, if reduce to 200 square feet, could be built without code requirements other than zoning. His proposed design is 280 square feet and would prefer that size.

Mr. English informed that this is not the first instance that the location of a repair field has been the subject of contention, and that the decision the Board makes today could set precedent in future plan review. He informed that EHS have had other individuals remove both concrete and asphalt driveways in similar situations due to there being no other option to locate a repair field with the plans for their project.

Mr. English also noted that there have been properties sold to persons that had not been made aware of decisions such as this and then are faced with unexpected and costly repair.

Mr. English informed that the only requirements for sewer under regulations are the 200 and 400 foot limitations. Proposal for options outside of those limits where there is no regulatory jurisdiction has only happened once before, and those were commercial plans that the developer bonded the cost of the connection to sewer at 750 feet.

Mr. Buehler asked if there was a way to incorporate a grading or access material to protect it from compaction under a concrete or asphalt drive.

Mr. English stated that he did not believe that it was Mr. La Roche's plan to cover the area with concrete or asphalt should he have to install the septic system. He informed the reason Mr. La Roche's plans were denied is because he did not want to remove the driveway at this time, and that this has always been standard procedure at Environmental Health Services. Mr. English reiterated that the Division Director and the District Health Officer both upheld staff's position, and that EHS would never approve a driveway to be installed over a repair field, unless it were completely engineered and those plans approved by EHS; but interpretation of the regulations require the field to be available prior to construction.

Mr. La Roche stated that he has been a licensed general contractor since 1980 and prior to that had been a spec builder and has built homes throughout Washoe County. It was required to show a back-up septic system on these builds. He indicated that, in a meeting with Health Officer it was disclosed that a system could be covered if approved as engineered. He also stressed that he wasn't requesting to be connected to the sewer system at that distance, but was noting that it was a future possibility for the entire area.

Vice Chair Brigman stated that he'd been on the SWS Board and couldn't recall ever seen or allowed a repair or primary field under a driveway whether paved or not. He noted that there

were possible options other than this driveway to locate a repair field and so would not be supportive of the plans as shown. He stressed that he did not wish to set a precedent that could result in multiple cases coming before the Board. Vice Chair Brigman stated that it was not a matter of Mr. La Roche's reluctance to remove the asphalt until necessary, that for him, it was basic design issues and in conflict with regulations that have been in place for a very long time.

Mr. La Roche reiterated that he doesn't have an issue in removing the asphalt at such a time the system fails, that there is no leach field there now, and would employ an engineer at the time to design and install the project, and that the area would no longer be a driveway. He continued that another option would be to have an engineer configure a design that would not involve the driveway area. He opined that to have to remove the asphalt before it is necessary is a hardship that should not be required of any taxpayer. He informed that he is a building inspector and understands the rigidity of regulations, that regulations can be interpreted in different ways, and asked for the Board to make their decision based on the most sensible interpretation.

Chair Anderson agreed that many issues are not clearly cut and that is the reason for the SWS Board. He stated that this instance to him was clear in that there are other options available to Mr. La Roche, the first being to hire an engineer to draw an acceptable plan, thereby resolving the issue of the asphalt.

Mr. Buehler asked there was a way to calculate the remaining feasibility of the septic system by area comparisons. Chair Anderson stated that was not a subject he wanted to pursue. He did note that he was not aware of many failures in the area. Mr. Jones informed that there were granular soils in the area that were amenable to a stable, quality leach field.

Mr. Buehler asked if there were a way to grant a limited time permit if the estimated life-span of the system could be calculated.

Chair Anderson opined that suggestion might be over-thinking the situation, because of the ease in which he was able to devise an alternate design.

Vice-Chair Brigman moved to deny the appeal of the District Health Officer's decision based on the requirements of Section 040.085 of the Washoe County District Board of Health Regulations Governing Sewage, Wastewater, & Sanitation. Chair Anderson seconded the motion which was approved three in favor and none against.

Mr. La Roche asked if he has an engineer propose a new area if it should be submitted to the Board or directly to EHS. Chair Anderson stated that it was not necessary to submit it to the Board.

6. *Public Comment

As there was no one wishing to speak, Chair Anderson closed the public comment period.

7. Adjournment

At 6:45 p.m., Chair Anderson moved to adjourn the meeting. Vice Chair Brigman seconded the motion which was approved three in favor and none against.

Respectfully submitted,

James English, Environmental Health Specialist Supervisor
Secretary to the Sewage, Wastewater and Sanitation Board

Laura Rogers, Administrative Secretary
Recording Secretary

Approved by Board in session on _____, 2017.

DD	_____
DHO	_____
DA	_____
Risk	_____

STAFF REPORT

BOARD MEETING DATE: May 7, 2018

TO: Sewage, Wastewater, and Sanitation Hearing Advisory Board

FROM: James English, EHS Supervisor
775-328-2610, jenglish@washoecounty.us

SUBJECT: Public Hearing to determine whether or not to recommend approval to the District Board of Health for a variance for APN 017-123-05 owned by Mike Fritz for Section 040.080 and Table 2 “Watercourses” including Sub-Script (4) of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation.

SUMMARY

This staff report summarizes the Environmental Health Services Division’s (EHS) review of the submitted variance application for your decision to recommend or deny approval to the District Board of Health (DBOH) a variance for APN 017-123-05 which is owned by Mike Fritz. The variance requests reduced setbacks to a watercourse and to have a pressure sewage line cross Baily Creek.

PREVIOUS ACTION

There has been no previous action with this variance request. The parcel is undeveloped at this time.

BACKGROUND

Environmental Health Services Staff (EHS) has worked with both the property owner and the engineer to find the best possible solution to design an onsite sewage disposal system for this property. The property is 1.004 acres and served by a community water system, the parcel has Bailey Creek running through it flowing from south to north when water is present. During the design phase to build on the property and place an onsite sewage disposal system, it was determined there was no way to meet the setbacks required in Section 040.080 of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation (SWS Regulations).

The property owner contracted with Chad Carnes P.E. with Marvin E. Davis & Associates, Inc. to design an onsite sewage disposal system to be the most protective of the public and environmental health for the parcel. The proposed design has the building sewer lines, tanks and part of the engineered sand filter system within the 100 foot setback to the edge of the highest water level of Baily Creek as required in Section 040.080. The proposed repair or reserve sand filter location is also partially within the 100 foot setback of Baily Creek.

Additionally, the building sewer will have to cross Baily Creek. The proposed design has recommended the ejector line be encased in concrete, steel or PVC pipe with concrete plugs through the creek and beyond 25 feet of the top of the creek bank.

Staff have been on site to validate the proposed onsite sewage disposal system layout as it is in the field. Based on field observations and the property corners being marked, it is noted the proposed design and creek layout match the plans as submitted.

EHS staff note that if a primary and repair sewage disposal area cannot be agreed upon, this parcel will become un-buildable until such time that municipal sewer is within 400-feet to the property boundary.

EHS staff also received input from a concerned citizen regarding the proposed construction on the site and the creek crossing with a sewer line. The resident submitted photos of the creek from March of 2018 which are including in this report.

Considerations for the Sewage, Wastewater and Sanitation Board (Board)

The Board must consider the following when making a recommendation on this variance to the DBOH:

1. Will the proposed system significantly and/or adversely impact any water so that the water may no longer be used for its existing or expected beneficial use?

A test trench was excavated to 13 feet below ground surface and no groundwater was encountered. If standard trenches were proposed on the property, EHS would allow their depth to 9 feet. The proposed design is more protective of groundwater by using an engineered sand filter bed with an excavation depth of 4 feet below ground surface.

Baily Creek is a seasonal or intermittent creek, the water flows to Steamboat Creek and ultimately to the Truckee River. The beneficial use of the creek is to replenish the Truckee River. If the pressurized sewer line crossing the creek fails, it possibly could contaminate Baily Creek with raw sewage until such time as the flow was stopped.

2. Will the proposed system be detrimental or pose a danger to public health or safety or create or contribute to a public health hazard?

The proposed system design is the most conservative and protective of public health for the parcel. The majority of the sand filter beds are outside of the 100 foot setback to Bailey Creek. The sand filter beds are also only four feet below grade. The proposed sewer line crossing the creek is encased for protection. In a natural disaster or flood event the sewer line may be exposed or possibly damaged.

3. Are there other reasonable alternatives for compliance with these regulations that are available to the applicant?

EHS staff sees the only other reasonable alternative may be to make the sand filter bed a raised system to increase separation to groundwater, although this may make it more vulnerable to damage in a major flood event. Another alternative may be to possibly change or redesign the creek crossing to be more protective of public health. The current proposed design is for the line to be buried 30 inches below the existing creek bed and be encased through the creek bed extending to either side for a minimum of 25 feet. Other than these options, EHS staff does not see any other feasible alternatives.

Conditions of approval

EHS staff asks the SWS Board to evaluate the proposed variance to determine if they will recommend it to the DBOH for approval. If the recommendation for approval is made, staff asks that the SWS Board to consider the following conditions for the variance:

1. Recommend minimum setbacks to Bailey Creek for the siting of the sand filter beds and other components of the onsite sewage disposal system. This condition allows for there to be some flexibility in design and construction based on field conditions.
2. Evaluate the pressure building sewer line which crosses the creek and determine if the proposed design is adequate and protective of the environment.
3. Require recording of the variance to the parcel to ensure proper public records notification in the event the property is sold to any other person or entity.

RECOMMENDATION

Based on the information presented, staff recommends: The Sewage, Wastewater, and Sanitation Hearing Advisory Board determine whether or not to recommend approval to the District Board of Health for a variance for APN 017-123-05 owned by Mike Fritz for Section 040.080 and Table 2 “Watercourses” including Sub-Script (4) of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation and if it is determined to recommend approval the Board determine what if any conditions to place on the variance.

POSSIBLE MOTION

Should the Board agree with staff’s recommendation, the three possible motions would be:

1. “Move to recommend denial of the variance to the District Board of Health for a variance for APN 017-123-05 owned by Mike Fritz for Section 040.080 and Table 2 “Watercourses” including Sub-Script (4) of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation; OR
2. “Move to recommend approval of the variance to the District Board of Health for a variance for APN 017-123-05 owned by Mike Fritz for Section 040.080 and Table 2 “Watercourses” including Sub-Script (4) of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation with the following conditions: (list conditions)”; OR

3. “Move to recommend approval of the variance to the District Board of Health for a variance for APN 017-123-05 owned by Mike Fritz for Section 040.080 and Table 2 “Watercourses” including Sub-Script (4) of the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation without conditions.”

<p>WASHOE COUNTY HEALTH DISTRICT <small>ENHANCING QUALITY OF LIFE</small></p>	<p align="center">WASHOE COUNTY HEALTH DISTRICT ENVIRONMENTAL HEALTH SERVICES DIVISION 1001 East Ninth Street • PO Box 11130 • Reno, Nevada 89520 Telephone (775) 328-2434 • Fax (775) 328-6176 www.washoecounty.us/health</p> <p align="center">APPLICATION FOR VARIANCE TO THE REGULATIONS GOVERNING SEWAGE, SANITATION AND WASTEWATER</p>	<p align="center">Office Use Only</p> Fee Paid _____ Date Paid _____ Cash/CC/Check _____ Receipt No. _____ Date Appl. Received _____ Considered Comp. _____
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DATE 03/02/18 PROJECT NAME Fritz Residence

OWNER

ENGINEER

Name Mike Fritz

Name Chad Carnes, P.E.

Address PO Box 17043, Reno, NV 89511

Address PO Box 18449, Reno, NV 89511

Phone (775) 843-2802

Phone (775) 853-9100

Email Address mfritz518@gmail.com

Email Address ccarnes@mdageotechnical.com

The following items must be submitted with this application:

JOB ADDRESS 15425 Pinion Drive, Reno, Washoe County, Nevada 89521

SIZE OF PARCEL 1.004 /Acre

COPY OF LEGAL DESCRIPTION AND VERIFICATION OF CURRENT VESTING ON TITLE

EXISTING PARCEL(S) APN(S) 017-123-05 LOT N/A BLOCK N/A

REASON FOR VARIANCE REQUEST Allow for the construction of disposal system improvements on west end of the property; being the most usable area which provides separation from Bailey Creek 100'. Bank setback is encroached, and creek must be crossed with service line.

SECTION(S) OF REGULATIONS TO BE VARIED Section 040.080, Table 2 "Watercourses" including Sub-Script (4)

IF A PARCEL MAP: PROJECT NAME N/A

APN(S) _____ LOT _____ BLOCK _____

IF TENTATIVE MAP: PROJECT NAME N/A

NUMBER OF PROPOSED LOTS _____ LOTS REQUIRING VARIANCES _____

LOT DESCRIPTION(S) _____

Prepare and submit this original application with 9 copies and 10 copies of a construction plot plan with specifications drawn to scale (minimum 1 inch = 30 feet) and include the required following requirements:

- Vicinity map.
- The direction of North.
- A diagram of the location of roadways, easements or areas subject to vehicular traffic, material storage or large animal habitation.

... continued from previous page

- A diagram of the location and distance to any well and on-site sewage disposal system within 150 feet of the subject property (if none, so indicate).
- A diagram of the distances from the proposed on-site disposal system to any proposed or existing on-site well.
- A diagram of the location of any percolation hole or test trench(es) on the property.
- A diagram to scale of the location of all proposed on-site sewage disposal system components, including a delineated area for future replacement of disposal trench(es).
- A diagram of the distance to any available sewer system (if none, so indicate).
- The number of bedrooms in the proposed building.
- The maximum slope across the disposal area.
- A diagram of the lot dimensions and total lot area.
- The location of water supply lines.
- A diagram of all structures on site.
- A diagram of all existing and proposed drainage improvements.
- A diagram of the location of any watercourse and/or natural drainage channel within 150 feet of the property (if none, so indicate).
- Soil logs and percolation test results, including calculations and actual field data (if required).
- Sewage loading calculations and application rates.
- System sizing calculations.
- Pertinent geological and hydrogeological information.
- Construction drawings, cross-sections and specifications of the proposed system.
- Certification by an engineer that the proposed system is properly designed to function for at least ten (10) years (engineer's seal).
- Submit a completed Notice of Special On-Site Requirements. We will give you the form after variance is approved by the District Board of Health.

BE PREPARED TO SUBMIT:

- Other information may be required to enable the Board to adequately consider the application.

THE SUBMITTED DATA, DOCUMENTS AND DESIGNS MUST DEMONSTRATE WHETHER:

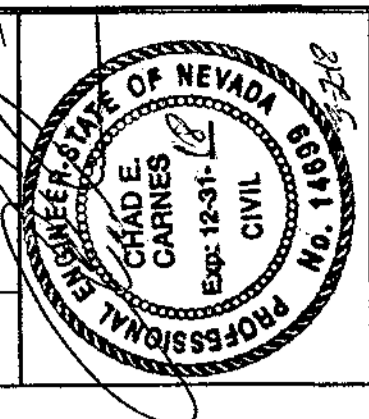
1. The proposed system will significantly and/or adversely impact any water so that the water may no longer be used for its existing or expected beneficial use.
2. The proposed system will be detrimental or pose a danger to the public health, safety or create or contribute to a public health hazard.
3. Other reasonable alternatives for compliance with these regulations are available to the applicant. State the alternatives considered, including reasons for rejection.

172400ALL INFORMATION MUST BE PROVIDED AND THIS APPLICATION MUST BE PROPERLY COMPLETED PRIOR TO SUBMITTAL. FAILURE TO DO SO MAY RESULT IN SIGNIFICANT DELAYS TO THE PROCESSING OF THIS VARIANCE REQUEST.

REV.	DATE	BY	APP'D

Marvin E. Davis & Associates, Inc.
 CONSULTING CIVIL ENGINEERS
 P.O. Box 18449
 Reno, Nevada 89511
 TEL (775)853-9100
 FAX (775)853-9199

ON-SITE DISPOSAL DETAILS
 VARIANCE APPLICATION FOR:
 FRITZ RESIDENCE
 15425 PINION DRIVE
 APN: 017-123-05
 WASHOE COUNTY
 NEVADA



DATE: 03/02/18
 JOB NUMBER: 17104.001
 DESIGNED BY: CEC
 DRAWN BY: CEC
 CHECKED BY: CEC
 SHEET

SD2

PROJECT NAME: FRITZ RESIDENCE - 15425 PINION DRIVE HOLE NO.: TP-1
 ASSESSOR'S PARCEL NUMBER: 017-123-05 DATE: 6/14/14
 LOCATION OF TEST HOLE: REFERENCE THIS PLAN SURFACE ELEVATION: 4746
 DATE COMPLETED: December 5, 2017
 DEPTH TO GROUNDWATER: NOT ENCOUNTERED, NO EVIDENCE OF GROUNDWATER

DEPTH	SOIL DESCRIPTION
0'-1'	LIGHT BROWN SILTY SAND (SM) W/ GRAVEL, DRY, LOOSE.
1'-5'	ABUNDANT FINE STRAINED ORGANICS
5'-13'	BROWN GRAVEL W/ SAND (GM), SLIGHTLY MOIST, MEDIUM DENSE, TRACE ORGANICS
	INCREASING COBBLE CONTENT BELOW 5' W/ BOULDERS TO 18"

PERCOLATION TEST DATA P-1	
TIME INTERVAL (MIN)	PERCOLATION RATE (MIN/IN)
10	3"
10	2-7/8"
10	2-1/4"
10	2"
10	1-3/4"
10	1-7/16"
10	1-3/8"
10	7.3

TEST DEPTH BELOW GROUND SURFACE: 2.5 FEET

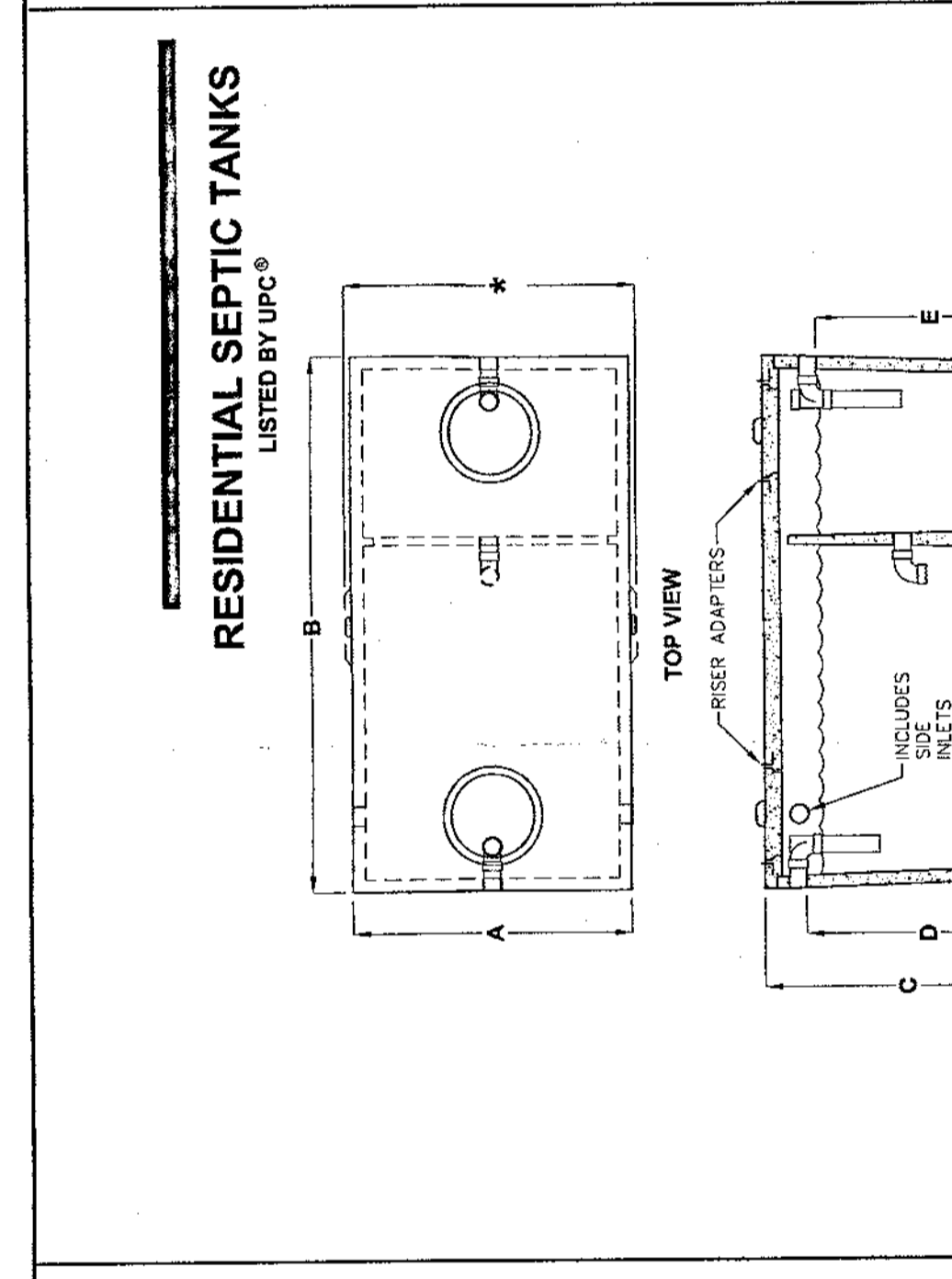
PERCOLATION TEST DATA P-2	
TIME INTERVAL (MIN)	PERCOLATION RATE (MIN/IN)
10	2-5/8"
10	2-3/8"
10	2-1/8"
10	1-15/16"
10	1-3/4"
10	1-3/4"
10	5.7

TEST DEPTH BELOW GROUND SURFACE: 5.0 FEET

DESIGN AND CONSTRUCTION NOTES:
 RESIDENCE: 4 BEDROOM REQUIRING A 1500 GALLON SEPTIC TANK.
 SOIL TYPE: BROWN GRAVEL W/ SAND (GM).
 GROUND WATER SEASONAL MAX: GREATER THAN 13 FEET.
 DEPTH TO IMPERVIOUS SOIL: NOT APPLICABLE.
 DESIGN PERCOLATION RATE: 15 minutes per inch (COMPENSATES FOR ROCK).
 LEACH FIELD TYPE: SAND FILTER BED SYSTEM.
 DESIGN: $Q = \frac{V}{t}$ WHERE Q=APPLICATION RATE (gpd/sq.ft.), t=DESIGN PERCOLATION RATE (minutes/inch)
 (BED SIZING WILL BE CONTROLLED BY PERCOLATION RATE)
 $Q = \frac{5}{15} = 1.29 \text{ gpd/sq.ft.}$
 FOR MAIN RESIDENCE
 BED AREA: $A = 150 \text{ sq/ft} \times 1.29 \text{ gpd/sq.ft.} = 193.5 \text{ gpd}$
 FOR FUTURE WORKSHOP
 BED AREA: $A = 50 \text{ sq/ft} \times 1.29 \text{ gpd/sq.ft.} = 64.5 \text{ gpd}$
 COMBINED AREA = 258.0 GPD

DESIGN AND CONSTRUCTION NOTES:
 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENTLY ADOPTED WASHOE COUNTY DISTRICT HEALTH DEPARTMENT SEWAGE, WASTEWATER, AND SANITATION REGULATIONS (S.W.S.), AMENDED JULY 3, 2013 AT THE TIME OF THIS DESIGN.
 NO PUBLIC SEWER IS AVAILABLE WITHIN 400 FEET OF THE SUBJECT PARCEL.
 NO WELLS OR OTHER SITE SEWAGE DISPOSAL SYSTEMS ARE LOCATED WITHIN 100 FEET OF THE PROPOSED SYSTEM.
 WATER SERVICE IS BY PUBLIC SUPPLY AS SHOWN ON PLAN.
 ALL HORIZONTAL SEPARATIONS SHALL BE IN ACCORDANCE WITH SECTION 040.100, TABLE 2 OF THE S.W.S. REGULATIONS.
 DISPOSAL BEDS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 040.100, TABLE 4 OF THE S.W.S. REGULATIONS.
 DESIGN PERCOLATION RATE IS 15 MINUTES/INCH.
 FILTER SAND SHALL HAVE AN EFFECTIVE SIZE (D10) BETWEEN 0.3mm (NO. 50 SIEVE APPROXIMATELY) AND 0.8mm (NO. 30 SIEVE APPROXIMATELY) WITH 95% PASSING (D95), THE NO. 4 SIEVE. UNIFORMITY COEFFICIENT (D60/D10) SHALL BE IN ACCORDANCE WITH FIGURE 11 OF THE S.W.S. REGULATIONS, AMENDED JULY 3, 2013.
 A REPRESENTATIVE SAMPLE OF THE FILTER SAND SHALL BE TESTED BY A RECOGNIZED TESTING AGENCY. THE SUPPLIER SHALL PROVIDE CERTIFICATION AS TO THE QUALITY OF THE SAND. IT IS RECOMMENDED THAT THE SAND BE TESTED PRIOR TO DELIVERY TO SITE.
 SETTLE SAND BY FLOODING TRENCH BEFORE PLACEMENT OF GRAVEL AND DRAIN PIPE IN DISPOSAL FIELD.
 ALL PIPE BENDS TO BE 45° OR LESS.
 ALL 4" PERFORATED PVC PIPE TO BE 1" ABOVE THE TOP OF THE DISPOSAL BED PRIOR TO USE OF DISTRIBUTION BOX FEED LINES THRU EDGE OF DISPOSAL BEDS.
 PERFORATED PIPES 1 FOOT FROM END OF FIELD AND CAP ALL ENDS.
 MINIMUM BURY OVER SEWER SERVICE LINES (GRAVITY OR PRESSURE) IS 30 INCHES.

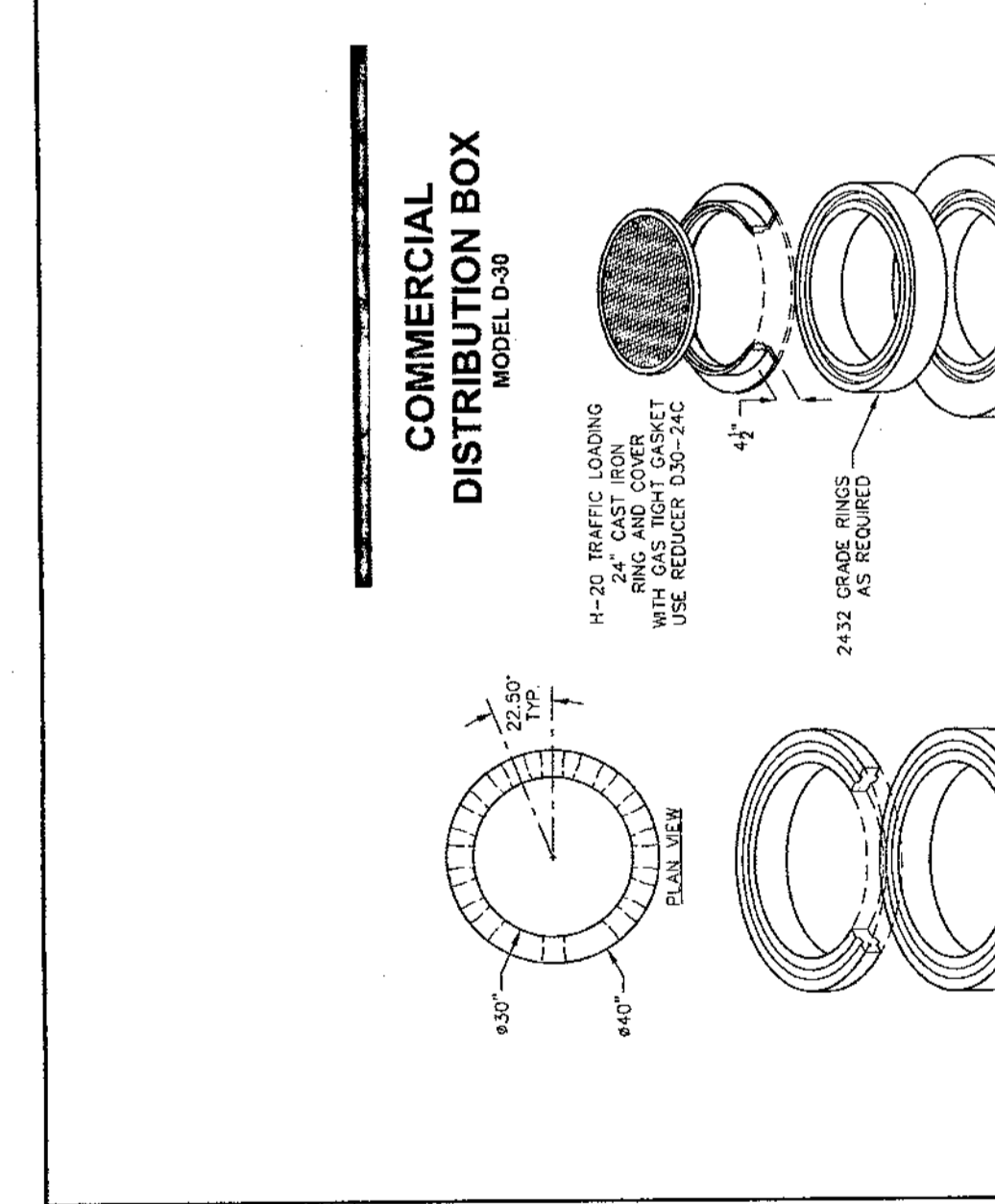
INSPECTION NOTES:
 THIS IS AN ENGINEERED SEPTIC DISPOSAL SYSTEM AND INSPECTION IS REQUIRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY MARVIN E. DAVIS & ASSOCIATES, INC. 48 HOURS (minimum) BEFORE THE FOLLOWING ACTIVITIES TO BE COORDINATED WITH THE WASHOE COUNTY DISTRICT HEALTH DEPARTMENT:
 A. EXCAVATION OF DISPOSAL BED AND SCARIFICATION OF SOIL BOTTOM.
 B. PLACEMENT OF FILTER SAND AND INSPECTION OF MEMBRANE ON DISPOSAL BED.
 C. PLACEMENT OF DRAINROCK AND PIPING ABOVE SAND.
 D. WET TEST OF PIPING PRIOR TO COVERING WITH DRAINROCK.
 E. WET TEST OF PUMP ACTIVATION SWITCHING AND ALARM.



MODEL NUMBER	LIQUID CAPACITY (GALLONS)	DM A	DM B	DM C	DM D	DM E	MINIMUM ELEVATION	MINIMUM EXCAVATION
US-1000	1000	18'-1"	18'-2"	18'-2"	18'-2"	18'-2"	4'-7"	6'-10"
US-1200	1200	18'-3"	18'-3"	18'-3"	18'-3"	18'-3"	4'-7"	7'-6"
US-1500	1500	18'-4"	18'-4"	18'-4"	18'-4"	18'-4"	4'-7"	8'-9"
US-2000	2000	18'-5"	18'-5"	18'-5"	18'-5"	18'-5"	4'-7"	11'-3"
US-2500	2500	18'-6"	18'-6"	18'-6"	18'-6"	18'-6"	4'-7"	13'-11"
US-3000	3000	18'-7"	18'-7"	18'-7"	18'-7"	18'-7"	4'-7"	17'-10"

DESIGN LOAD: NON-TRAFFIC WITH 3" EARTH COVER MAXIMUM AT 800 PSF.
 FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

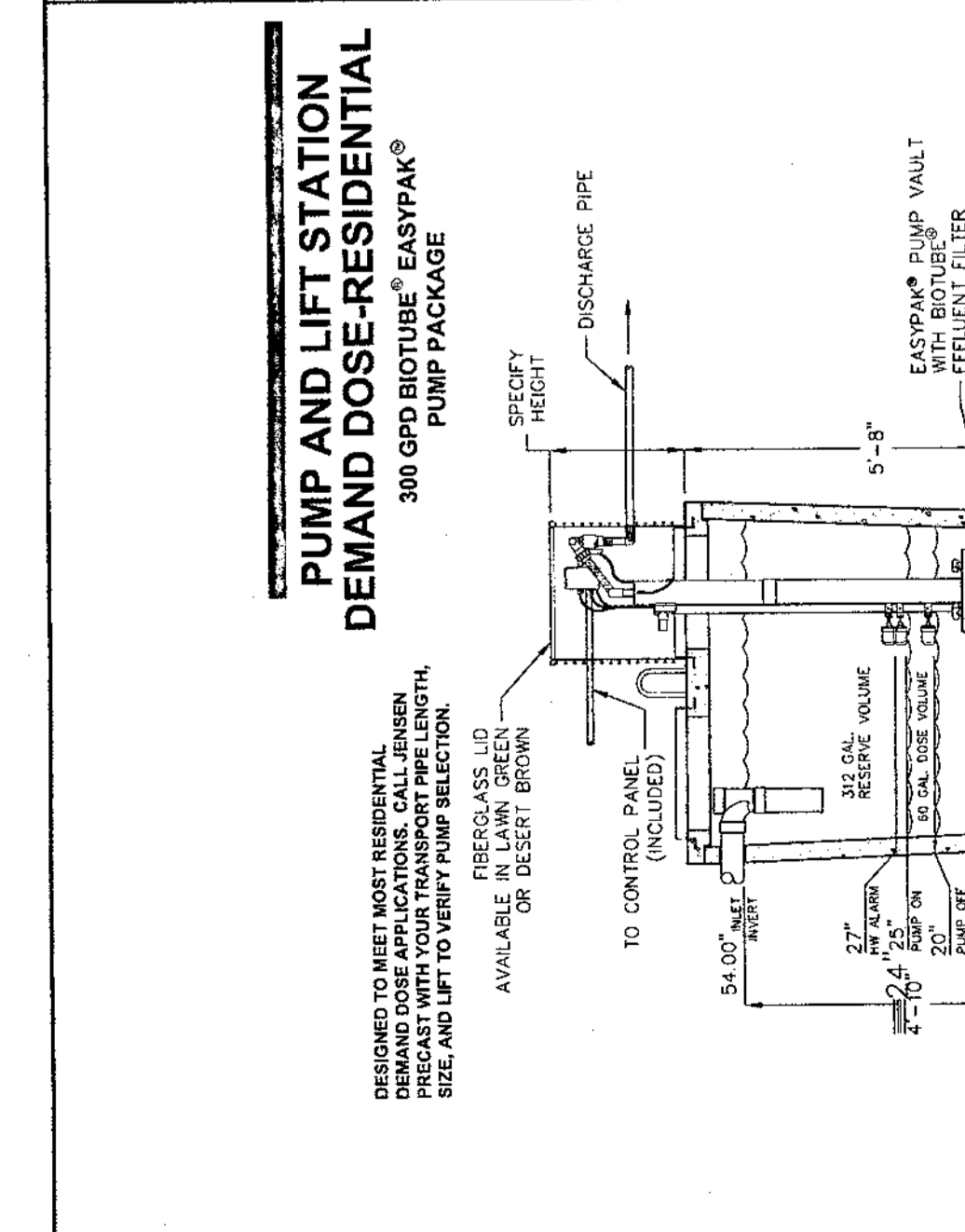
SEPTIC TANK TANK DETAIL N.T.S.



MODEL NUMBER	LIQUID CAPACITY (GALLONS)	DM A	DM B	DM C	DM D	DM E	MINIMUM ELEVATION	MINIMUM EXCAVATION
US-1000	1000	18'-1"	18'-2"	18'-2"	18'-2"	18'-2"	4'-7"	6'-10"
US-1200	1200	18'-3"	18'-3"	18'-3"	18'-3"	18'-3"	4'-7"	7'-6"
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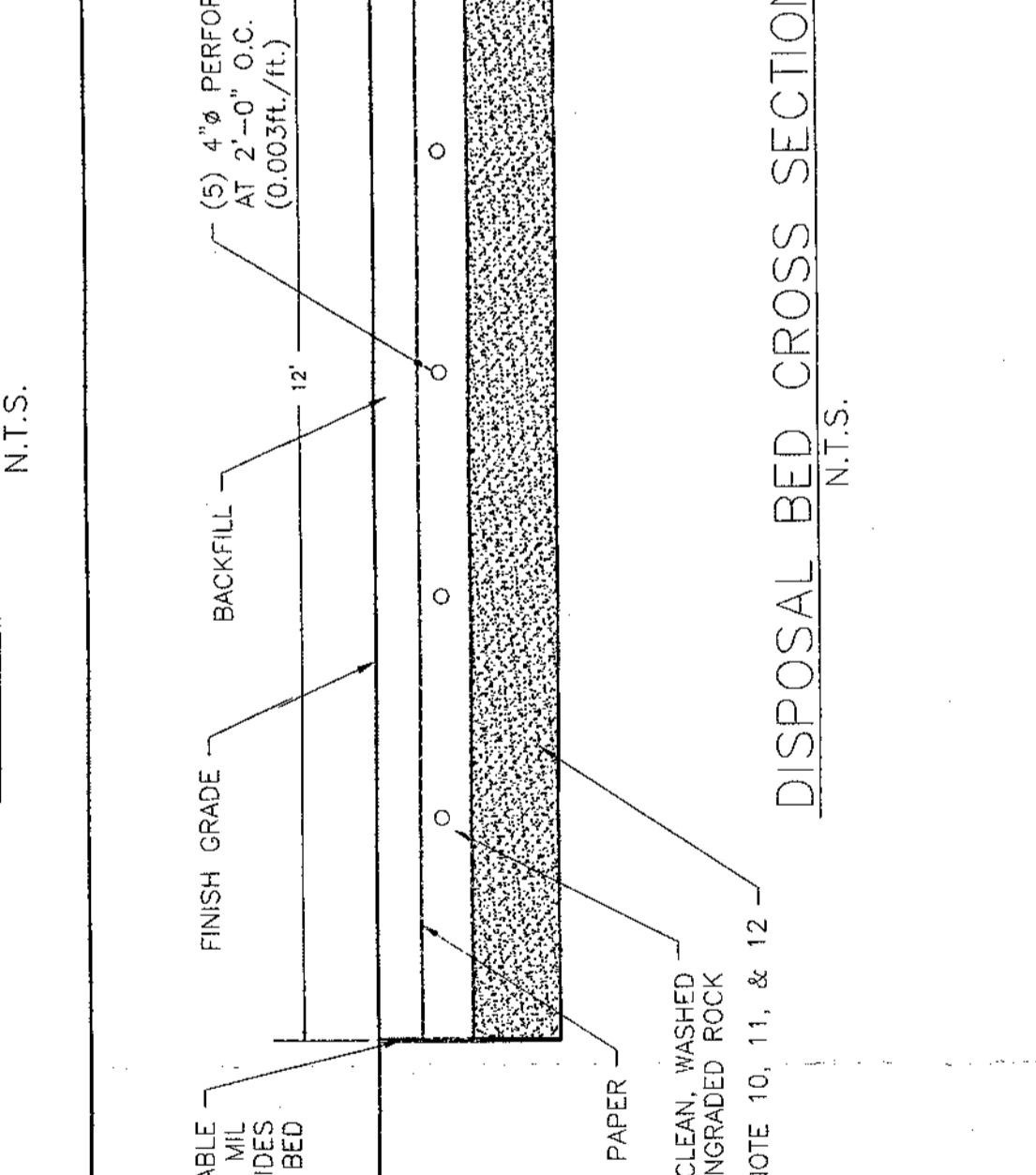
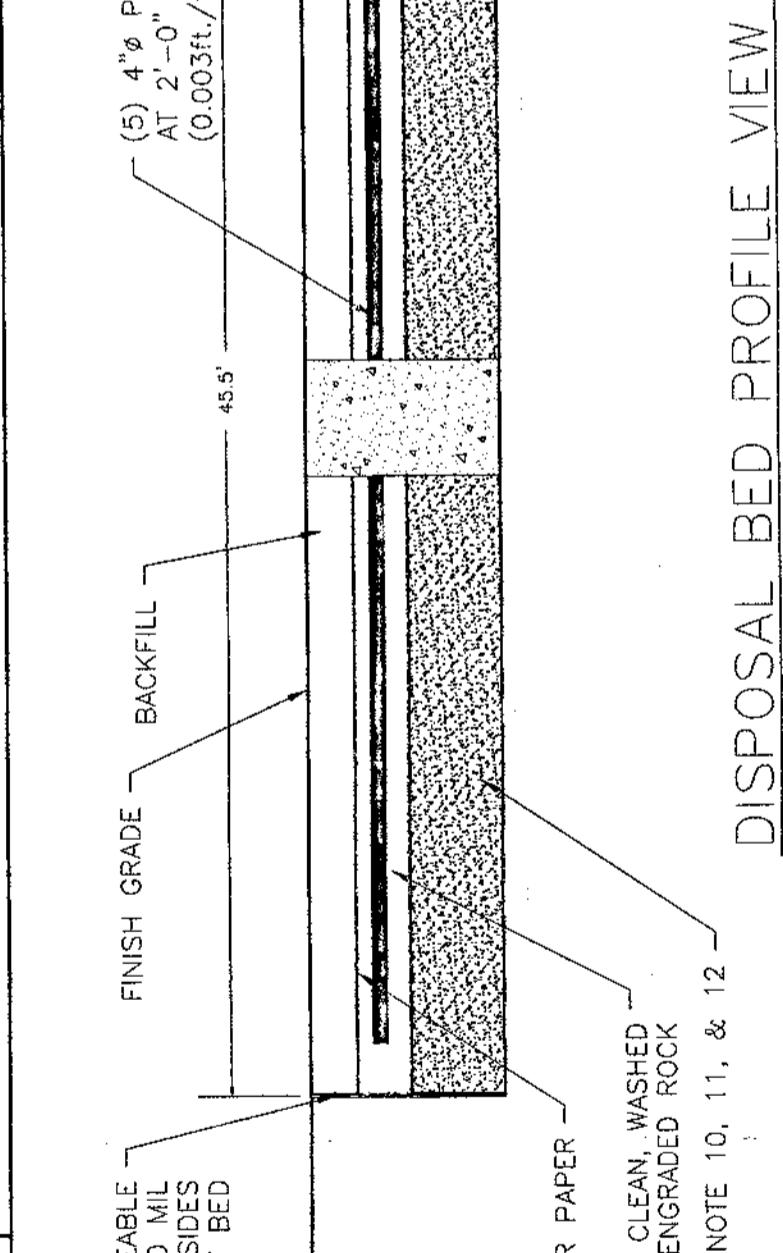
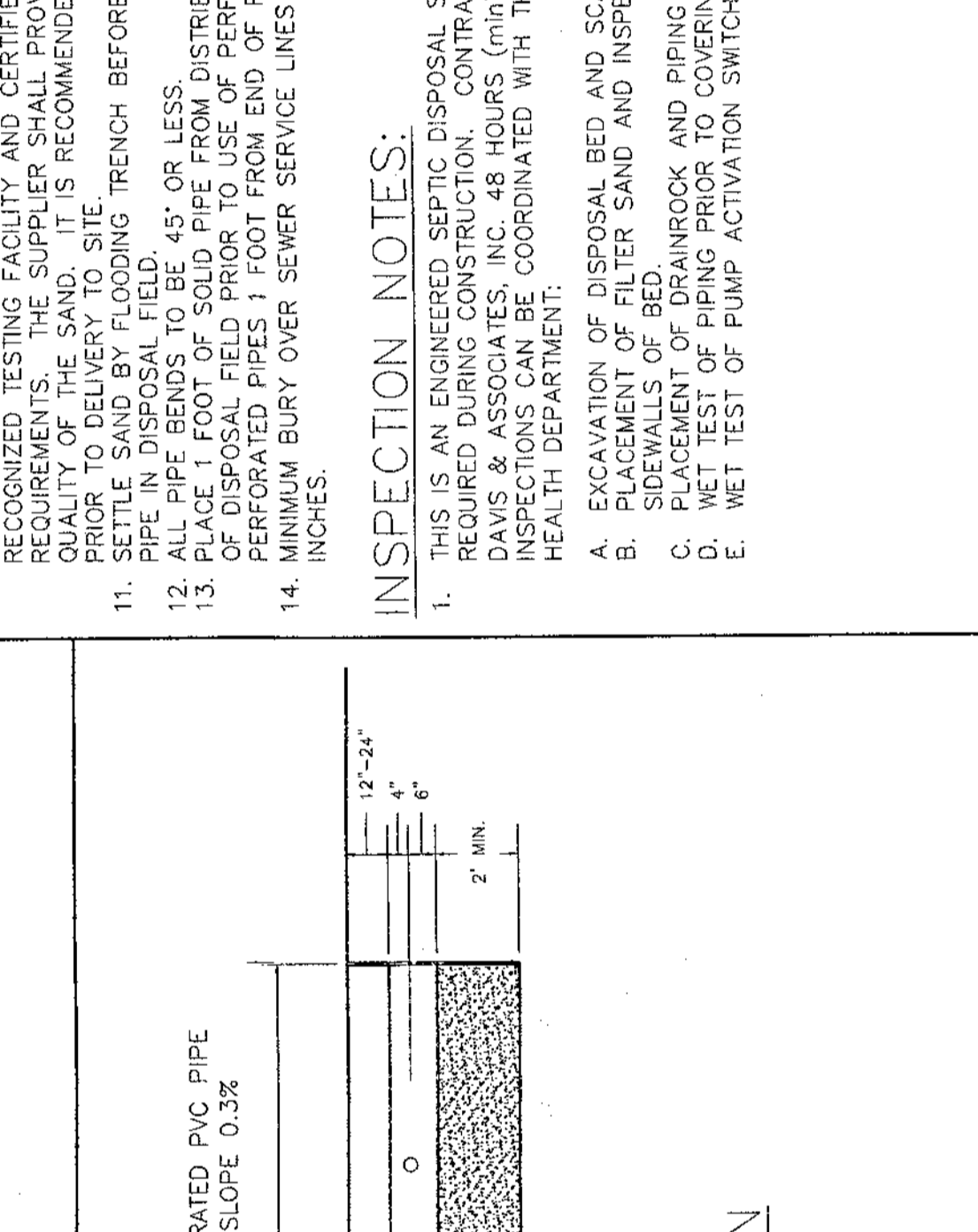
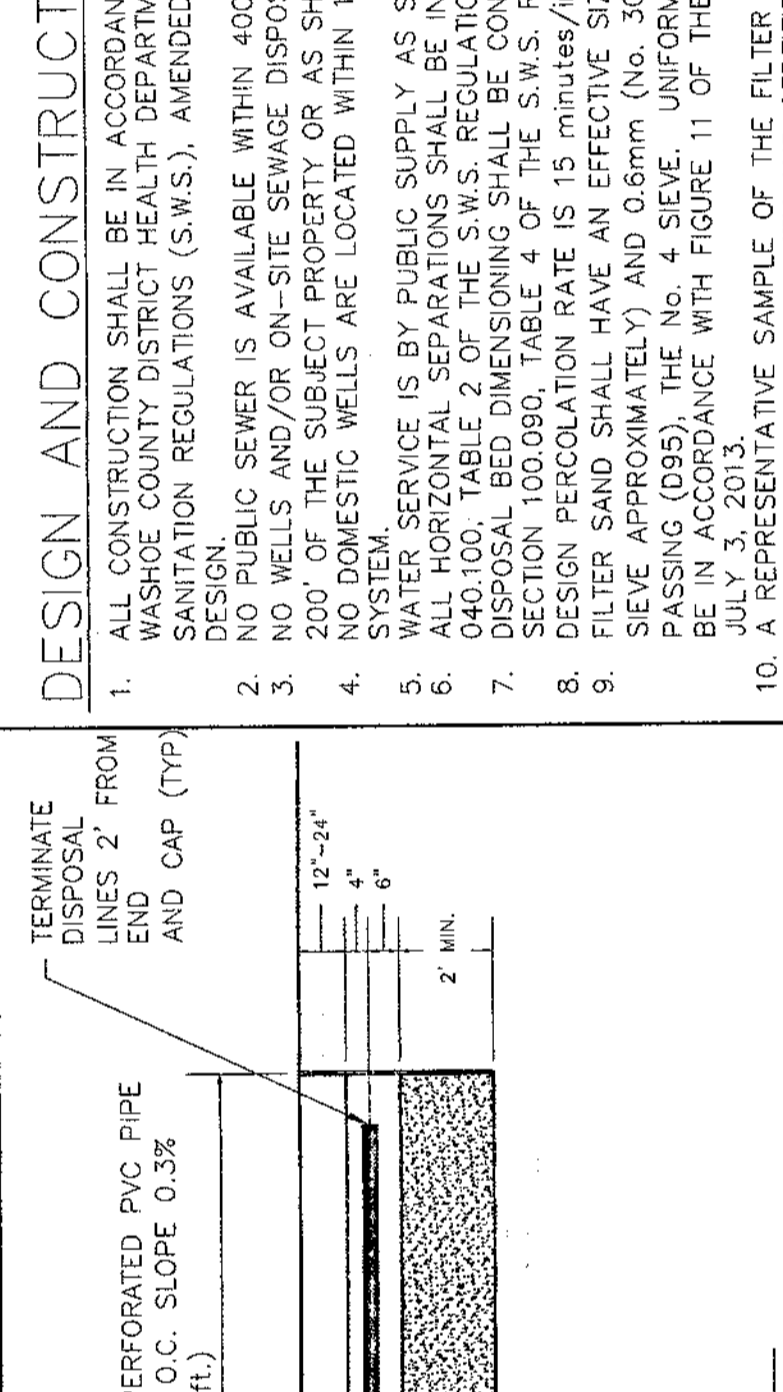
DISTRIBUTION BOX DETAIL N.T.S.



MODEL	DISCHARGE PIPE	WARRANTY
15000-200-100-10	10"	5 YEAR
15000-200-100-12	12"	5 YEAR
15000-200-100-15	15"	5 YEAR
15000-200-100-18	18"	5 YEAR
15000-200-100-20	20"	5 YEAR

DESIGN LOAD: NON-TRAFFIC WITH 3" EARTH COVER MAXIMUM AT 800 PSF.
 FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

PUMP STATION DETAIL N.T.S.



LOT INFORMATION:
 ADDRESS: 15425 PINION DRIVE
 RENO, WASHOE COUNTY, NEVADA 89521
 ASSESSOR'S PARCEL: 017-123-05
 SECTION: PORTION OF THE SW 1/4 OF THE NE 1/4 OF SECTION 34, T18N, R20E
 LOT SIZE: 43750 SQUARE FEET (1.004 ACRE)

LEGAL OWNER:
 MICHAEL & RHONDA FRITZ
 P.O. BOX 17043
 RENO, NV 89511
 (775) 843-2802
 mfriz518@gmail.com

DESIGN ENGINEER:
 CHAD E. CARNES P.E.
 MARVIN E. DAVIS & ASSOCIATES, INC.
 P.O. BOX 18449
 RENO, NEVADA 89511
 (775) 997-3862

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 RENO, NEVADA 89511
 (775) 997-3862

APN 017-123-05



APN 017-123-05
with floodway shown



English, James

From: Kelly, David A
Sent: Thursday, March 22, 2018 3:27 PM
To: English, James
Subject: FW: Parcel 017-123-05. Is this really a buildable lot?

This is the variance package. I have not responded to Ms. Armstrong.

David Kelly, REHS

Environmental Health Specialist | Environmental Health | Washoe County Health District
dakelly@washoecounty.us | O: (775) 328-2630 | 1001 E. Ninth St., Bldg. B, Reno, NV 89512

WASHOE COUNTY
HEALTH DISTRICT



ENHANCING QUALITY OF LIFE

Public Health

 Please consider the environment before printing this e-mail.

From: D. Armstrong [mailto:deb.armstrong@yahoo.com]
Sent: Thursday, March 22, 2018 3:11 PM
To: Corbridge, Kimble; Kelly, David A
Subject: Parcel 017-123-05. Is this really a buildable lot?

I understand that the owner of this property wants to run live sewage across the creek. I'm baffled about how that engineering will work. Thought you'd like to see the "creek" today... Are you sure this is a buildable lot? Maybe this guy needs to sue his realtor for selling him something that really isn't possible.

