

HEALTH OFFICER DECISION

Application Type: Building Site Application -
Residential

Memo #: 46253
Tax ID #: 4253-000-022-0109
RP ACCT ID: 2290070
Expiration: 03/21/2023

Property Information

34194 BRIDGE VIEW DR NE
Kingston WA 98346

Contractor of Record

Contractor Name: Dave's Septic Services
Contractor Phone #: (360) 830-9699

Applicant

Ross & Katherine Sygulla
37292 OLYMPIC VIEW RD NE
HANSVILLE WA 98340

Waivers

Waiver Type	Memo #	Notes
Waiver Class B	46255	18" of vertical separation for pressure distribution

Health Officer Decision for Onsite Sewage System

Approved (See Conditions Below)	Name of Inspector: KIMBERLY JONES	Date: 02/28/2020

Health Officer Decision for Water Supply

Approved (See Conditions Below)	Name of Inspector: KIMBERLY JONES	Date: 02/28/2020

Final Decision: Approved

FEB 20 2020

KITSAP PUBLIC
HEALTH DISTRICT

345 6th Street Suite 300
Bremerton, WA 98337
360 728 2235

BUILDING SITE APPLICATION

FOR WATER SUPPLY & ONSITE SEWAGE SYSTEM

Submittal Date	Memo Number	Review Fee	S.S.I.
FEB 20 2020	046253	\$810	ng

BUILDING SITE INFORMATION

Building Site Address – Street, City, Zip Code:

34194 Bridge View DR NE Kingston

Assessor Tax Account Number:

4253-000-022-0109

Property Size:

.48 acres

Lot Number:

APPLICANT INFORMATION

First & Last Name

Ross Sygulla

Phone Number:

E-Mail:

Mailing Address – Street, City, State, Zip Code:

37292 Olympic View RD NE Hansville WA 98340

APPLICATION GENERAL PROPOSAL

Application Type:

- ☒ New
☐ Repair (no building permit needed)
☐ Modification (building permit needed)
☐ Building Clearance with Compliance

Application Use Type:

- ☒ Residential
☐ Multi-Family
☐ Community
☐ Commercial

Application Water Type:

- ☒ Public Water
☐ Private Water (residential only)

APPROVED

☐ This is a Redesign (describe what is being changed) OR a Building Clearance with Compliance (describe proposal)

FOR SEWAGE AND WATER ONLY

APPLICANT/AGENT & DESIGNER ACKNOWLEDGEMENT

I certify that (1) the information contained in this application is true and accurate to the best of my knowledge; (2) the application represents my intended use of this property; and (3) any related building permits for which I apply for will be consistent with the plans and specifications contained in this application.

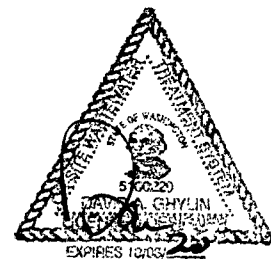
I acknowledge and understand that I, along with my contractors, are responsible for adhering to the conditions of approval of this application and are responsible for conforming to applicable Kitsap County Board of Health ordinances and Washington State Department of Health regulations for onsite sewage systems and water supply.

I acknowledge and understand that the design, location, and construction of my onsite sewage system and/or well is/are critical and of a sensitive nature, and I agree to protect these areas as required by the regulations.

I understand that once this application is submitted and/or approved, any changes to, or variations from, the information or conditions related to this plan may require a revised application submittal and/or could result in the revocation, denial, or suspension of this application or a related building permit and that this application will fully expire within 3 (three) years and 30 (thirty) days from the original date of application submittal.

I understand that I have the right to appeal the Health Officer's decision concerning this application pursuant to the regulations, and that approval of this application does not guarantee that a building permit will be issued.

Designer/Engineer Stamp



Designer/Engineer Contact Phone Number:

(360) 710-2449

Designer/Engineer E-Mail Address:

Applicant/Agent Signature

[Signature]

Date

02/02/2011

Intake Notes – Health District Use Only

DRINKING WATER & ONSITE SEWAGE SYSTEM SPECIFICATION SHEET

Assessor Tax Account Number:
4253-000-022-0109

A. DRINKING WATER SUPPLY INFORMATION

<input checked="" type="checkbox"/> Proposed <input type="checkbox"/> Existing	<input checked="" type="checkbox"/> Public	System Name <i>North Peninsula</i>	System ID
	<input type="checkbox"/> Private <input type="checkbox"/> Individual <input type="checkbox"/> 2-Party	ASSESSOR TAX ACCOUNT NUMBERS FOR PROPERTIES SERVED BY WELL Water Connection 1 (Parcel with Well) Water Connection 2 (Parcel connected to Well)	

B. SOIL EVALUATION PROFILES

Soil Evaluation Date		SOIL LOG NUMBERS MUST CORRELATE WITH SITE PLAN – INDICATE TOTAL EXCAVATED DEPTH, SOIL TYPES, WATER TABLE LEVEL & DEPTH OF RESTRICTIVE LAYER	
SOIL LOG #1	SOIL LOG #2	SOIL LOG #3	SOIL LOG #4
Downslope Side Measurements 0-32" Lt brown fine sandy loam to compaction. soil type 4	Downslope Side Measurements 0-33" Lt brown fine sandy loam to compaction. soil type 4	Downslope Side Measurements 0-33" Lt brown fine sandy loam to compaction. soil type 4	Downslope Side Measurements RECEIVED FEB 20 2020 KITSAP PUBLIC HEALTH DISTRICT

C. DAILY FLOW – TANKAGE – TREATMENT

DESIGNED MAX SEWAGE FLOW	TRASH/SEPTIC/PUMP TANKS			ADVANCED TREATMENT INFORMATION	
480 Gallons Per Day	Type	Size (gal)	QTY	<input type="checkbox"/> Proprietary Advanced Treatment	APPROVED FOR SEWAGE AND WATER ONLY
PROPOSED RESIDENTIAL BEDROOMS	<input type="checkbox"/> Trash Tank			Manufacturer:	
3 Maximum Bedrooms	<input checked="" type="checkbox"/> Septic Tank	1000	1	Model:	
PROPOSED TREATMENT LEVEL	<input checked="" type="checkbox"/> Pump Tank	1000	1	<input type="checkbox"/> Non-Proprietary Advanced Treatment	
TL E	<input type="checkbox"/> Other			Device Type:	

D. DISPERSAL COMPONENT CONSTRUCTION

DISPERSAL COMPONENT SIZING	TRENCH CONSTRUCTION PROFILE	
Hydraulic Loading Rate of Dispersal Area: .6 Minimum Dispersal Area (Sq. Ft.) In Primary: 800 Minimum Linear Feet or Dimensions: 270	A. Slope in Primary 3-5 % E. Additional Cover Required 12 inches D. Trench Width 36 B. Maximum Trench depth 12 inches C. Vertical Separation 18 inches Restrictive Layer OR Highest Seasonal Water Table	
DISTRIBUTION METHOD <input type="checkbox"/> Gravity Distribution <input checked="" type="checkbox"/> Pressure Distribution <input type="checkbox"/> Drip Irrigation <input type="checkbox"/> Other:	A. Percent Slope in Primary: 3-5 % B. Maximum Trench Depth: 12 inches C. Vertical Separation: 18 inches D. Trench Width: 36 inches E. Additional Cover Required: 12 inches	

Easements, Buffers and Open Spaces

Indicate the location and dimensions of all easements, buffers and open spaces in relation to property lines, structures and OSS components.

SHOW ALL PROPOSED PROPERTY IMPROVEMENTS

Structures and/or Building Envelopes

Indicate the location, dimensions, and clearing limits of all proposed structures and/or building envelopes in relation to property lines, other structures, easements, wells, and OSS components. Include all required setbacks from property lines and other structures.

Wells and 100' Well Radii

Indicate the location of all proposed wells and their respective 100' well radii. Include all primary and reserve drainfield areas on adjacent properties within the 100' well radius.

On-Site Sewage System (OSS) Components

Indicate the location and dimensions of all proposed OSS components, including septic tanks, pump tanks, pre-treatment units, primary drainfields and reserve drainfields. Indicate the direction and degree of slopes of the primary and reserve drainfield areas, and identify the 10-foot "no-build" zones surrounding them include at least two reference distances to property lines.

Storm/Surfacewater Drainage Systems

Indicate the location and dimensions of all proposed infiltration systems, stormwater ponds, drainage ditches, below grade pipes and easements.

Roads, Driveways, Parking Areas and Sidewalks

Indicate the location, dimensions, surfacing materials, and clearing limits of all proposed roads, driveways, parking areas, sidewalks and easements.

Water and Utility Lines

Indicate the location of all proposed water lines, sewer lines, and utility lines.

QUESTIONS?

If you have any questions regarding these Site Plan Requirements, please contact the Kitsap County Department of Community Development, at

(360) 337-5777; or

The Kitsap Public Health District at

(360) 337-5285.

Figure 1: Site Plan Requirements Checklist

All site plans shall be clearly and accurately drawn to 1"=20', 30', 40' or 50' scale on paper no larger than 11" x 17" and must indicate all of the following information. For each item below, mark either "Shown" or "N/A" as appropriate for your project. This checklist must be completed and included on all site plans. Any site plan without this checklist will be rejected and returned to the applicant for correction.

Shown
N/A

Parcel
Number

4253-000-022-0109

A General Property Information:

<input checked="" type="checkbox"/>	Tax ID Number and Property Address
<input checked="" type="checkbox"/>	Property lines and dimensions
<input checked="" type="checkbox"/>	Elevations of property and the direction of natural drainage
<input type="checkbox"/> N/A	Slopes that exceed 15%, including any cut banks greater than 4' in height
<input checked="" type="checkbox"/>	North arrow and site plan scale
<input type="checkbox"/> <input checked="" type="checkbox"/>	Marine waters, lakes and ponds and their associated high water lines
<input type="checkbox"/> <input checked="" type="checkbox"/>	Streams, creeks & wetlands and their associated buffer areas

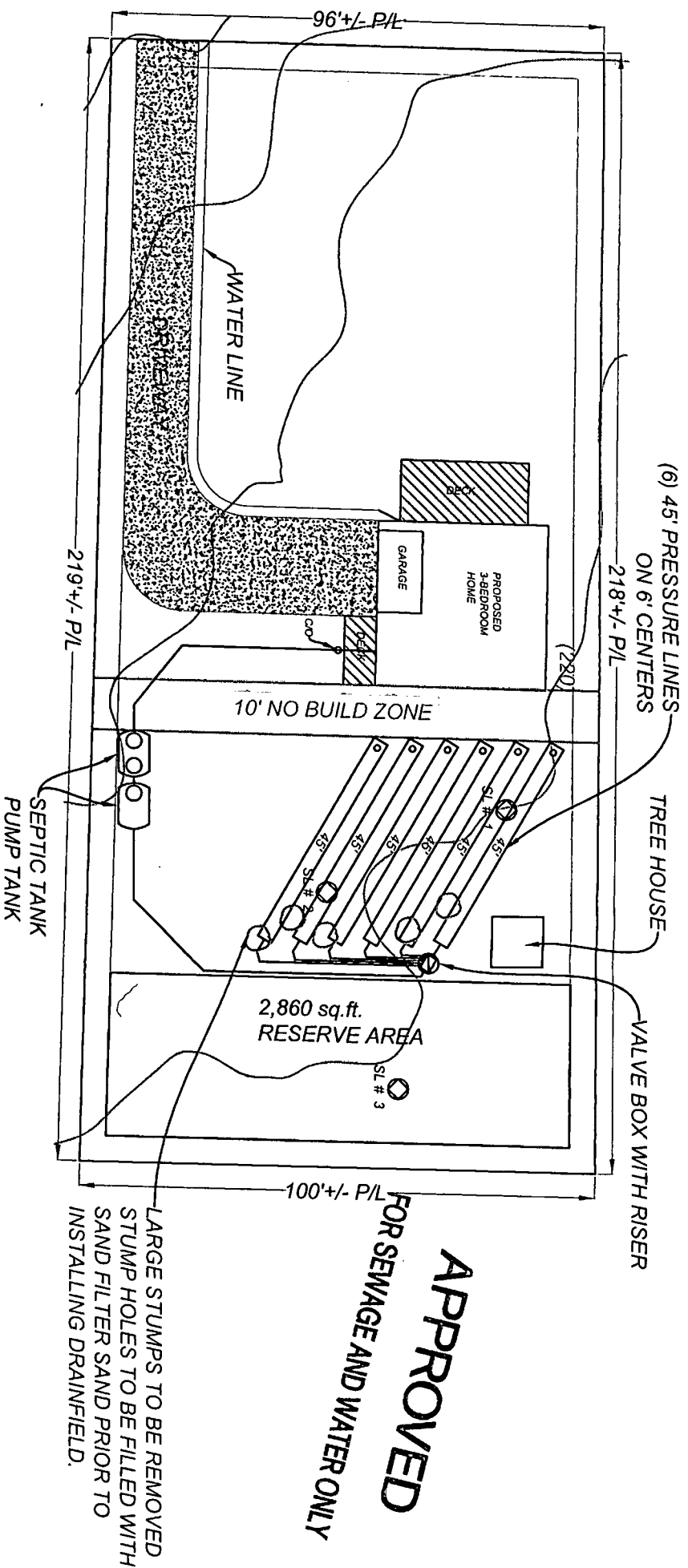
B Existing Property Improvements:

<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of all existing structures, including the locations of existing structures on adjacent waterfront properties
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of all existing wells and their well radii, including those wells on adjacent properties within 100' of property lines
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of all existing drainfields, including the 10' "No Build Zone" as well as the locations of existing drainfields on adjacent properties within 100' of any well
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of existing drainage facilities, including all sub-surface infiltration systems
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of all existing and abutting roadways, driveways, easements, buffers and required open spaces
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of all existing water, sewer and utility lines.

C Proposed Property Improvements:

<input checked="" type="checkbox"/> <input type="checkbox"/>	Location and dimensions of all proposed structures or building envelopes in relation to property lines, other structures, etc.
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location of all proposed wells, including their 100' well radii and all water lines
<input checked="" type="checkbox"/> <input type="checkbox"/>	Location of all proposed septic tanks, pump tanks, pre-treatment units, and drainfields, including the 10' "no build" zone
<input type="checkbox"/> <input checked="" type="checkbox"/>	Location and dimensions of all proposed drainage and infiltration systems (I-Pits)
<input checked="" type="checkbox"/> <input type="checkbox"/>	Location, dimensions, surfacing materials, and clearing limits of all proposed parking areas, driveways, sidewalks, & road app'r's.
<input checked="" type="checkbox"/> <input type="checkbox"/>	Location of all proposed water, sewer and utility lines.

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Do not Damage Or Disturb Soils When Clearing Drainfield Area

* Pump is required
* Pump alarm is required

INSTALLER TO ENSURE ALL ON-SITE SEWAGE TANKS/COMPONENTS MUST BE WATERTIGHT TO SURFACE

Tank location may vary but must meet K.P.H.D. regulations

DISCLAIMER
This map does not represent a survey nor does it purport to show all easements or encroachments, if any.

Additional Drains May Be Required To Divert Surface Or Subsurface Water Problems

INSTALLER MAY USE GRAVEL OR SUBSTITUTE WITH INFILTRATORS
FOOT FOR FOOT. SEE ATTACHED NOTES!

STUMP SPLITTING OR STUMP GRINDING IS RECOMMENDED FOR TREES GREATER THAN 12" IN DIAMETER WITHIN DRAINFIELD AREA. PROTECT SOILS WHEN CLEARING

Building envelope area location and size may vary. Do not cross no building zone lines with buildings

NO WELLS WITHIN 100' ♦

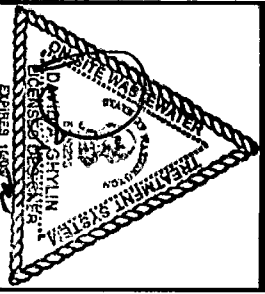
ALL COVER TO BE ≤ 5 MIN/INCH

DIVERT ALL SURFACE WATER AWAY FROM DRAINFIELD AREA.

PREPARE SITE & INSTALL DRAINFIELD DURING DRY CONDITIONS

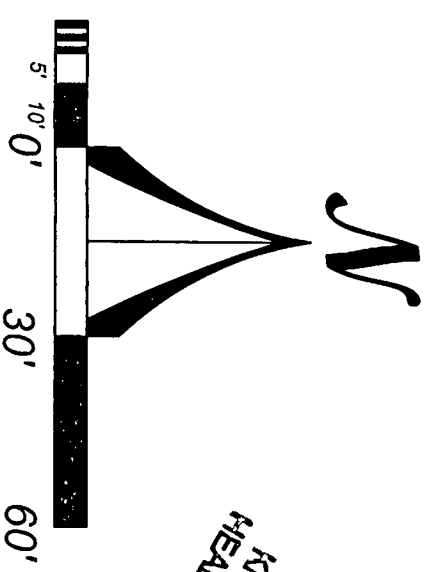
Normal usage must meet the following criteria or be lower	
Biochemical oxygen demand	130-174 MG/L
TSS:	47-71 MG/L
FOG:	10-20 MG/L
DO:	0-1.0 MG/L
PH:	6.5-7.2
TEMP:	48-70*
*With microscopic life forms present	
**Higher waste strengths will result in premature failure of the septic system.	

OWNER:
SYGULLA ROSS
34194 BRIDGE VIEW DR NE
KINGSTON, WA. 98346
TAX ID: 4253-000-022-0109



DAVE'S SEPTIC SERVICES INC.
P.O. BOX 301
SEABECK, WA 98380
(360) 830-710-2449

SCALE:
1" = 30'
DATE:
2-5-2020



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KITSAP PUBLIC HEALTH DISTRICT



Environmental Health
345 6th Street, Suite 300
Bremerton, WA 98337
360-728-2235

Memo #:	046255
Date Applied:	FEB 20 2020
Fee paid:	\$145
Clerks initials:	ng

DRINKING WATER / ONSITE SEWAGE WAIVER REQUEST FORM

Waiver Request Form (Please check the following in regard to which Regulations are the subject of the waiver):

- ☒ Local Septic Regulations (KCBOH Ordinance No. 2008A-1)
☐ Local Drinking Water Regulations (KCBOH Ordinance No. 1999-6)

Section I. (Completed by Applicant)

- (1) Name: Ross Sygulla
- (2) Site Address: 34194 Bridge View Dr NE
- (3) Tax Parcel No.: 4253-000-022-0109
- (4) Regulatory Requirement: 24" Vertical separation required for pressure distribution.
- (5) Waiver Requested: 18" vertical separation required for pressure distribution required for pressure distribution system.
- (6) Waiver Justification and Mitigation: meets class B waiver requirements.
- FEB 20 2020*

Section II. (Completed by Kitsap Public Health Officer)

- (7) Review Criteria: no wells or surface waters w/in 200' of M reg'd
- (8) Mitigation Measures (in addition to those proposed in Section I): _____
- (9) Comments/Conditions of Approval: _____
- (10) Type of Waiver: ☐ Class A ☒ Class B ☐ Class C ☐ Local

Section III. (Completed by Kitsap Public Health Officer)

This Waiver Request has been reviewed according to the applicable provisions of Chapter 246-272 WAC or KCBOH Ordinance No. 2008A-1 or 1999-6. The review criteria applied, and the mitigation measures proposed and/or required, have been evaluated for their ability to provide public health protection at least equal to that provided by the regulations.

This Waiver Request is ☒ **Approved/Granted** (Subject to the above Conditions of Approval)

☐ Denied

☐ Accepted for Non-Conforming Onsite Sewage System

KPHD Health Office Signature: _____

Date: 2/28/2020

KPHD Health Officer Name: _____

Kimberly Jones, PS.

Permit Number: 20-00976

Map Scale: 1 : 4,800

Printed: Wednesday, Feb 12, 2020



** This map is not a substitute for field survey **

0 200 400ft



Comments



General Designer Notes

Ref: Ross Sygulla 34194 Bridge View DR NE

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HEALTH DISTRICT

- #1- Soil logs have been dug on this site and are the responsibility of the property owner or owners agent to have these soil logs buried after the inspection process has been completed.
- #2- If during the construction process, soil conditions are found that may lead to premature failure of the system, construction shall stop immediately and the designer shall be notified. Such soil conditions may include but not limited to ground water, surface water, fill material, clay soil, bedrock, or excessively permeable gravels.
- #3- Any substitutions or deviations from these plans shall be approved by the health department and the designer prior to construction. All changes of the system components shall be documented by the designer on the final as-built drawing.
- #4- Peak design flow is 480 g.p.d., recommended daily flow should not exceed 384 g.p.d. or premature failure may occur.
- #5- Backfill sewage disposal system immediately after final inspection process, cover soils should be loamy sand or better. Seed final cover with grass or shallow rooting ground cover.
- #6- Keep all maintenance access lids and ports accessible to ground surface.
- #7- Installer should rake the finished grade smooth and slope it to divert all surface water runoff away from tank and drainfield areas.
- #8- Setbacks from house foundation to drainfields and reserve areas are 10', septic tanks 5' and transport lines 2' unless otherwise stated within the design.
- #9- Driveways and parking areas must stay 5' from drainfield areas. Tanks may be located within parking areas and driveways if approved for this application.
- #10- Sewage waste strength should meet the following criteria or be lower Bod-5 = 130-174 mg/l, TSS = 47-71 mg/l, FOG = 10-20 mg/l, PH = 6.5-7.2 with microscopic life forms present.
- #11- Installer must adhere to all manufacturer installation requirements for all products used.
- #12- The attached septic design does not represent a survey nor does it purport to show all easements or encroachments, if any. Designer recommends property lines be located prior to any final installation occurs. Surveys may be required to accomplish this.
- #13- Property lines and corners have been represented by owner or owners agent, the designer is not responsible for errors due to inaccurate measurements from property lines or corners that are inaccurate.
- #14- If a curtain drain is required with this design it must meet all health department installation requirements.
- #15- Developers, homeowners and installers, installations of on-site sewage disposal systems should always be installed in dry weather conditions. Irreparable soil damage may occur if systems are installed in wet conditions. Planning the installation of system is very important and should be done as early in the building development stage as possible. Wet weather conditions have caused delays in final approval dates.
- #16- Maintenance is required with all sewage disposal systems. Owners will receive details of this in the designer manual with the final approval of the application.
- #17- Adhere to all designer notes located on design layout page.
- #18- If development exceeds 10,000 square feet of impervious surface a engineered drainage plan may need to be submitted. Options are available to reduce square footage requirements, such

as wagon wheel driveways, contact DCD for further details. Owners are responsible for any fees for redesigns or revisions that may be needed after BSA submittal not due to designer error.

#19- Low flow water fixtures are recommended within the home to help lower the hydraulic load to the system.

#20- Watertight components are a must for all onsite sewage systems. Installers are required to ensure all components are watertight, extreme care should be used during backfilling of these components to prevent settling and or water intrusion issues. If leaking components are not fixed in a timely manor the designers warranty may be void.

#19- Installation of this design must meet all health department regulations and all adopted policies by the Health Department that may apply. Installer is required to be versed in these regulations if any questions contact designer.

#20- All components used must be on state department of health approved products list for use with residential waste.

#21- Installer must inspect all tanks used at time of delivery and any tanks with defects must be rejected and not used. When using any existing tank the installer must due a 24 hour leak test to ensure all tanks used are watertight.

#22- All plumbing must be routed into the new sewage system that has been designed. It is the property owners responsibility to show the designer all plumbing stub outs and all gray and black water discharge points. A plumber may be needed on old homes to ensure that all stub out locations are connected to the new proposed sewage disposal system. An inside pump basin may be needed in some cases where plumbing is located in basements and elevations for a gravity discharge cannot be maintained.

#23- Do not use low profile chambers or the system will be red tagged. All lateral lines must be a minimum of 6" off the infiltrative surface. Lateral ends must be secured at the cleanout and must be in the center of the port.

#24- Gravel trenches are recommended, but Arc 36" chambers are allowed.

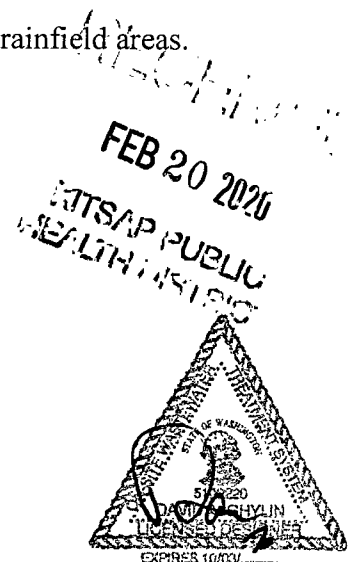
Specific Designer Notes :

#1- This application is for a new three bedroom home. A new 480 gallon sewage system is proposed.

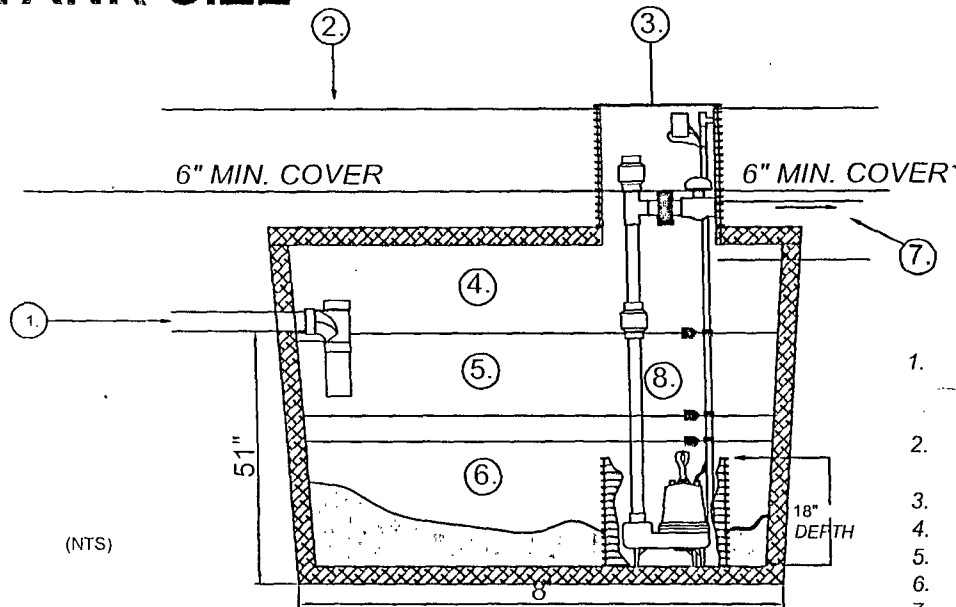
#2- All Large stump holes in any proposed drainfield areas must be filled with sand filter sand prior to installation of drain lines.

#3- M/M is required with this application.

#4 -Do not damage or remove the native soils conditions in the proposed drainfield areas.



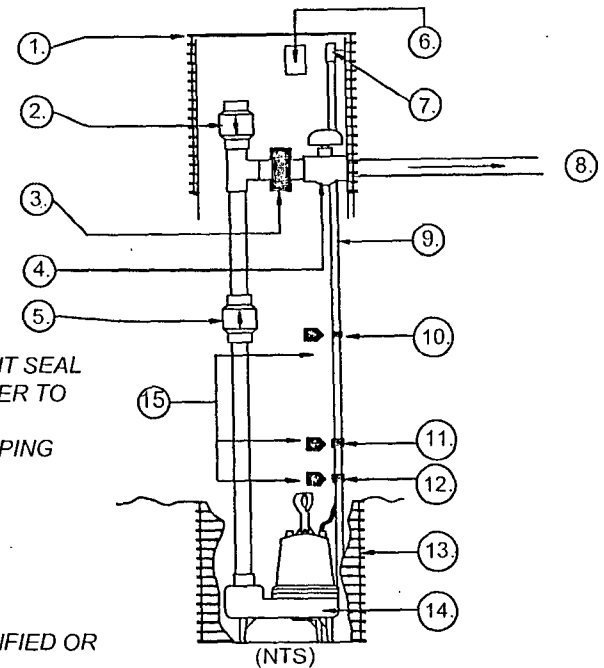
TYPICAL 1000 GALLON PUMP TANK REVIEW SEPTIC DESIGN FOR TANK SIZE



1. INLET FROM SEPTIC TANK OR ALTERNATIVE UNIT (ATU)
2. FINAL COVER OVER TANK NOT TO EXCEED 36" FROM TOP OF TANK
3. PUMP CHAMBER ACCESS
4. EMERGENCY STORAGE AREA IN TANK
5. NORMAL WORKING VOLUME AND ON/OFF LEVEL
6. SEDIMENT AREA IN PUMP CHAMBER
7. PRESSURE PIPE TO DRAINFIELD OR ALTERNATIVE UNIT
8. ALL FLOATS TO BE SET BY DESIGNER

FEB 20 2018

TYPICAL PUMP SETUP



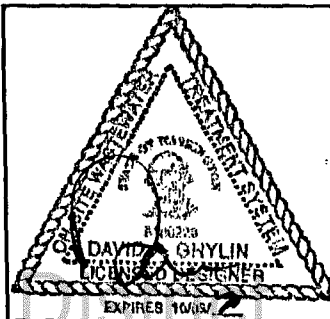
1. SECURE LID WITH GAS TIGHT SEAL
2. 24" DIAMETER ACCESS RISER TO FINISH GRADE
3. ANTI SIPHON VALVE IF PUMPING DOWNHILL.
4. THREADED UNION
5. SERVICE VALVE
6. CHECK VALVE
7. ELECTRIC BOX
8. FLOAT TREE ANCHOR
9. PRESSURE FLOW TO DRAINFIELD OR ALTERNATIVE SYSTEM
10. FLOAT TREE
11. HIGH WATER ALARM
12. ON/OFF FLOAT
13. REDUNDANT OFF FLOAT (optional).
14. ENCLOSED PUMP SEDIMENT SHROUD
15. SUBMERSIBLE CENTRIFUGAL PUMP
16. ALL FLOATS TO BE SET BY DESIGNER

APPLICANTS NAME:

Ross Sygulla

TAX ID #

4253-000-022-0109



DAVE'S SEPTIC SERVICES INC.

P.O. Box 826

Seabeck, WA 98380

(360) 830-9699

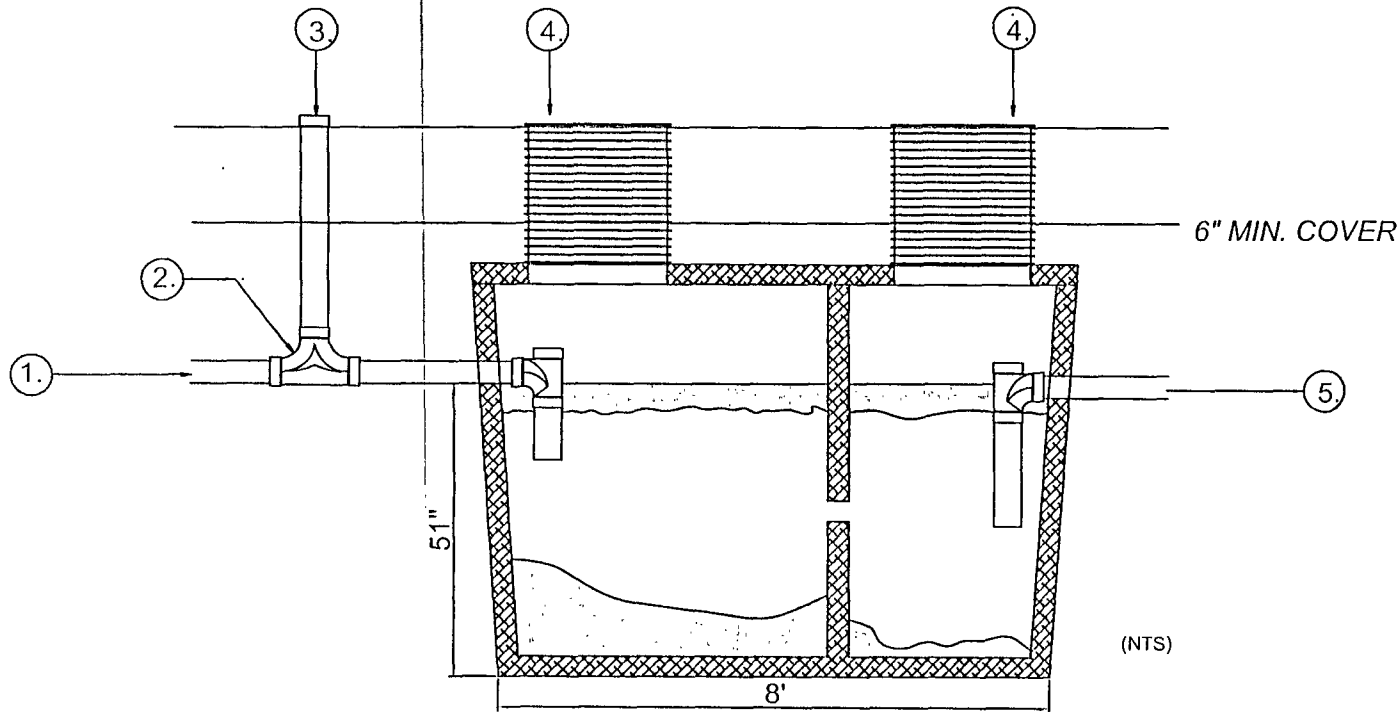
Kitsap Public Health

Permit Number: 20-00976

GRAVITY ON-SITE SEWAGE SYSTEM WORKSHEET

TYPICAL TWO CHAMBER SEPTIC TANK

MINIMUM TANK SIZE FOR PROJECT 1,000 GALLONS



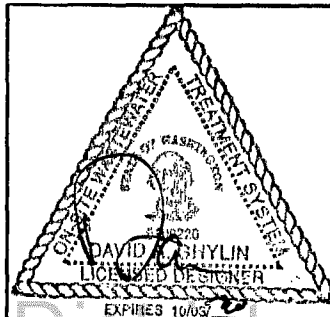
1. STUB OUT FROM HOME ELEVATION INDICATED ON SEPTIC DESIGN
2. DOUBLE SWEEP CLEANOUT
3. RISER TO FINISH GRADE WITH SLIP CAP
4. 24" DIAMETER RISER TO FINISHED GRADE W/LOCKING SCREWS
5. SEPTIC TANK STUB OUT TO ALTERNATIVE TREATMENT UNIT (ATU) / PUMP TANK OR DRAINFIELD

APPLICANTS NAME:

Ross Sygulla

TAX ID #

4253-000-022-0109



DAVE'S SEPTIC SERVICES INC.

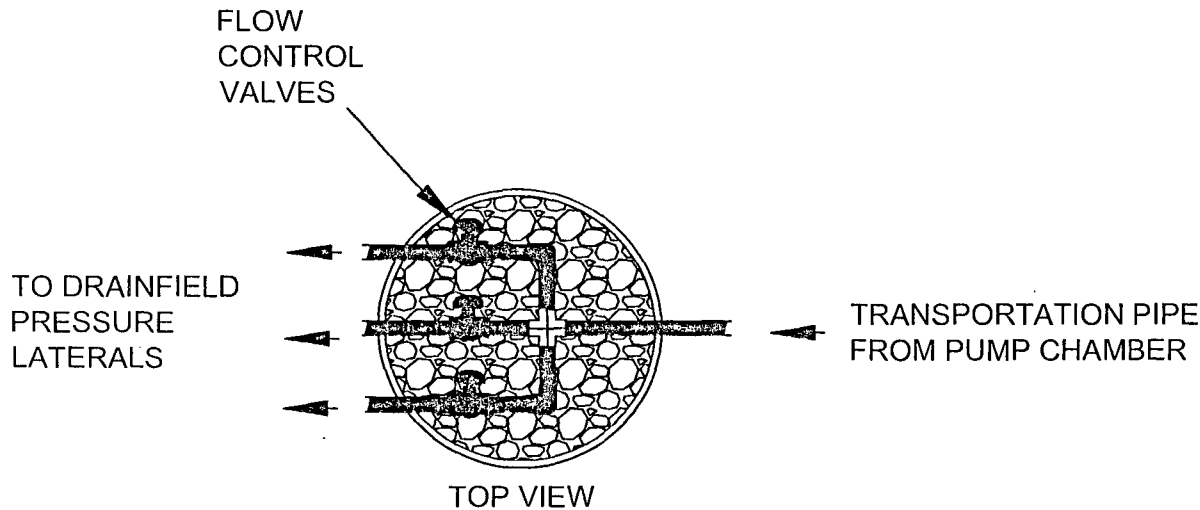
P.O. Box 826

Seabeck, WA 98380

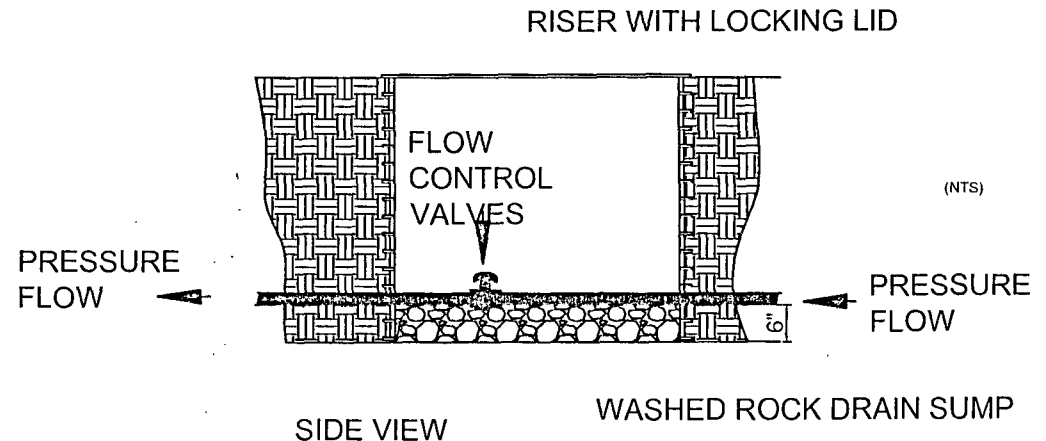
(360) 830-9699

TYPICAL HEADER MANIFOLD AND VALVE BOX

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HEALTH DISTRICT



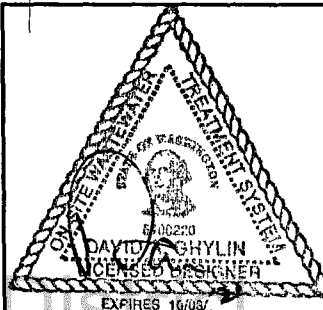
*NUMBER OF PIPES FROM VALVE BOX
MAY VARY SEE DESIGN FOR DETAILS.



APPLICANTS NAME:

Ross Sygulla
TAX ID #

4253-000-022-0109



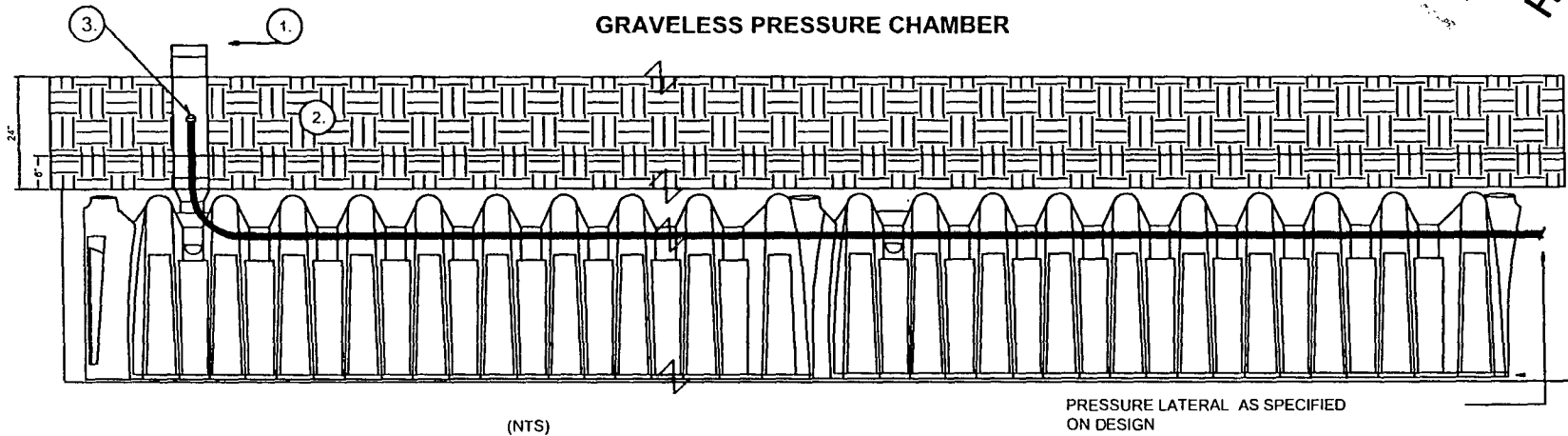
DAVE'S SEPTIC SERVICES INC.
P.O. Box 826
Seabeck, WA 98380
(360) 830-9699

Kitsap Public Health District

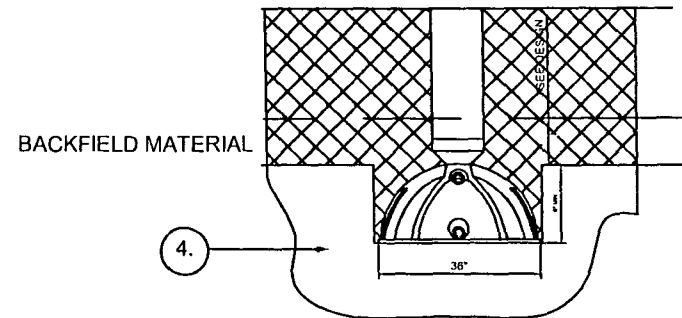
Permit Number: 20-00976

GRAVELESS PRESSURE CHAMBER

1430117100
FEB 20 2020
KITSAP PUBLIC HEALTH DISTRICT



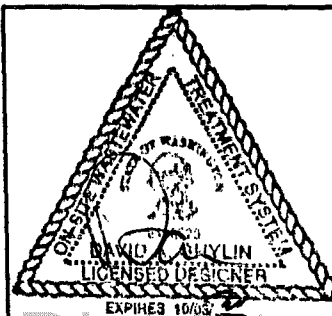
1. OBSERVATION PORT 4" TO 6" WITH 6" PIT BOX
2. BACKFILL SEE DESIGN FOR DEPTH OF COVER
3. THREADED REMOVABLE SCREW CAP
4. NATIVE SOIL



APPLICANTS NAME:

Ross Sygulla
TAX ID #

4253-000-022-0109



DAVE'S SEPTIC SERVICES INC.
P.O. Box 826
Seabeck, WA 98380
(360) 830-9699

Kitsap Public Health District

Permit Number: 20-00976

1-2018

Pump Selection for a Pressurized System - Single Family Residence Project

Parameters

Discharge Assembly Size	200	inches
Transport Length	70	feet
Transport Pipe Class	40	
Transport Line Size	200	inches
Distributing Valve Model	None	
Max Elevation Lift	20	feet
Manifold Length	10	feet
Manifold Pipe Class	40	
Manifold Pipe Size	200	inches
Number of Laterals per Cell	6	
Lateral Length	45	feet
Lateral Pipe Class	40	
Lateral Pipe Size	1.00	inches
Orifice Size	1.8	inches
Orifice Spacing	4	feet
Residual Head	5	feet
Flow Meter	None	inches
'Add-on' Friction Losses	0	feet

Calculations

Minimum Flow Rate per Orifice	0.43	gpm
Number of Orifices per Zone	72	
Total Flow Rate per Zone	31.4	gpm
Number of Laterals per Zone	6	
% Flow Differential 1st/Last Orifice	24	%
Transport Velocity	3.0	fps

Frictional Head Losses

Loss through Discharge	1.9	feet
Loss in Transport	12	feet
Loss through Valve	0.0	feet
Loss in Manifold	0.0	feet
Loss in Laterals	0.3	feet
Loss through Flowmeter	0.0	feet
'Add-on' Friction Losses	0.0	feet

Pipe Volumes

Vol of Transport Line	122	gals
Vol of Manifold	1.7	gals
Vol of Laterals per Zone	12.1	gals
Total Volume	26.1	gals

Minimum Pump Requirements

Design Flow Rate	31.4	gpm
Total Dynamic Head	28.5	feet

Pump Data

PF3005 High Head Effluent Pump
30 GPM, 1/2 HP
115/230V 1Ø 60Hz, 200/460V 3Ø 60Hz

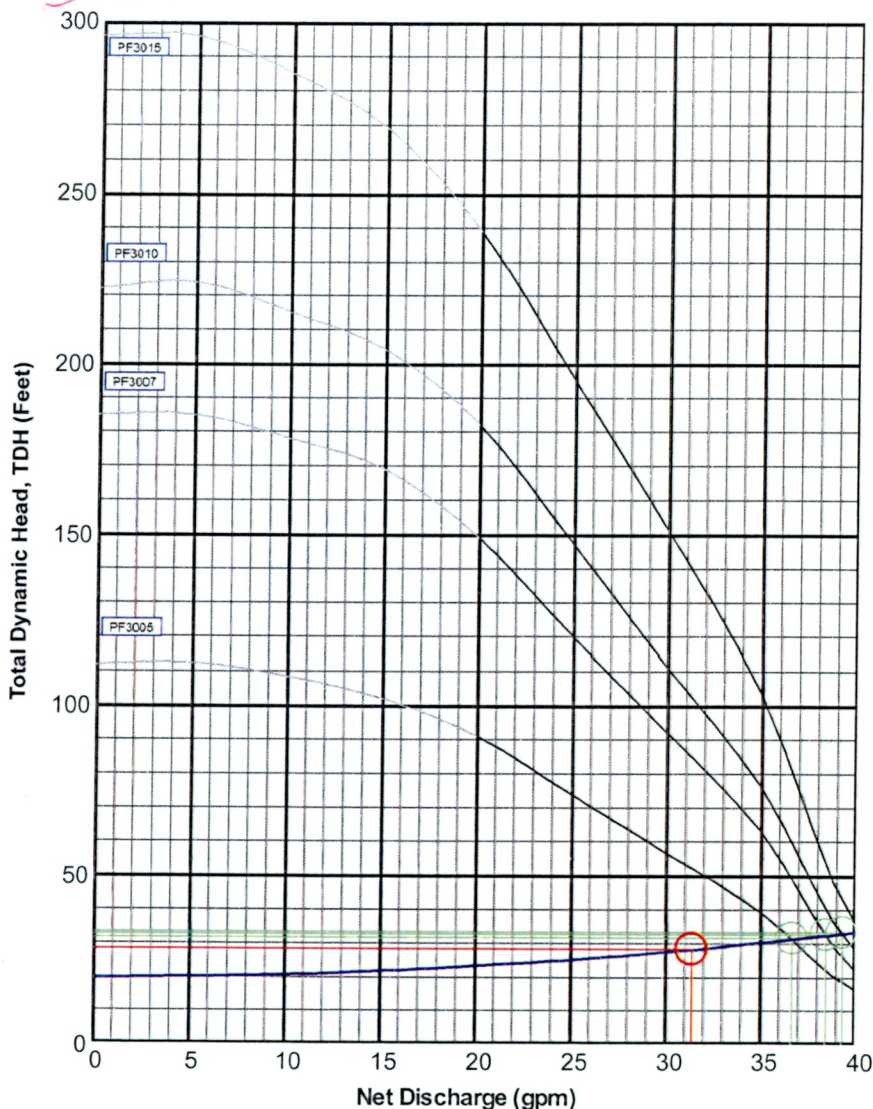
PF3007 High Head Effluent Pump
30 GPM, 3/4 HP
230V 1Ø 60Hz, 200/460V 3Ø 60Hz

PF3010 High Head Effluent Pump
30 GPM, 1 HP
230V 1Ø 60Hz, 200/460V 3Ø 60Hz

PF3015 High Head Effluent Pump
30 GPM, 1-1/2 HP
230V 1Ø 60Hz, 200/230/460V 3Ø 60Hz

Legend

System Curve	—
Pump Curve	—
Pump Optimal Range	—
Operating Point	○
Design Point	○



Kitsap Public Health District

Permit Number: 20-00976

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KITSAP PUBLIC
HEALTH DISTRICT

CHRONOLOGICAL CONTROL SHEET

Building Site Application - Residential

Contractor: Dave's Septic Services

Permit Number: 20-00976