Main Steps of Building a New Septic System for a New House

I'm building a New House and I'm too far from a city sewer system so I can't connect.
How can I build a septic system?

SUBMIT A SITE EVALUATION REQUEST TO THE DIVISION Of ENV. HEALTH (DEH)

A site evaluation includes: site assessment and soil profile.

CONDUCT A SITE EVALUATION WITH A HIRED QUALIFIED PROFESSIONAL AND DEH AND SUBMIT A REPORT

Info collected during this step will determine the type of system.

YOUR QUALIFIED PROFESSIONAL WILL DESIGN A SEPTIC SYSTEM – IF SITE EVAL SHOWS THAT A STANDARD SYS CAN BE INSTALLED, THEN SYSTEM CAN BE DESIGNED BY THE CONTRACTOR.

A properly designed system will ensure proper disposal while protecting California's water and environment.

SUBMIT A PERMIT APPLICATION

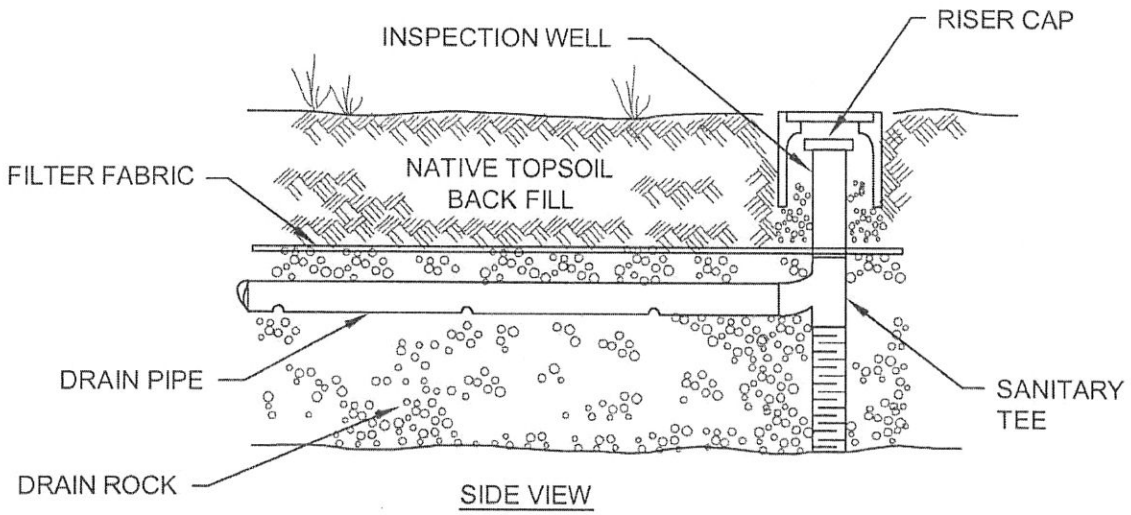
Permit type is determined from design considerations collected at the site evaluation.

SEPTIC SYSTEM IS INSTALLED AND INSPECTED PER APPROVED APPLICATION

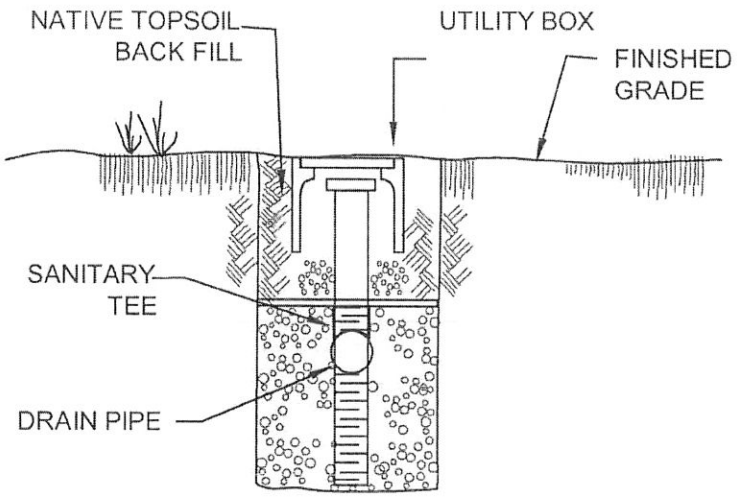
Pre-construction, Open Trench and Final Inspections by DEH help to eliminate future problems.

SEPTIC SYSTEM PERMIT IS FINALED

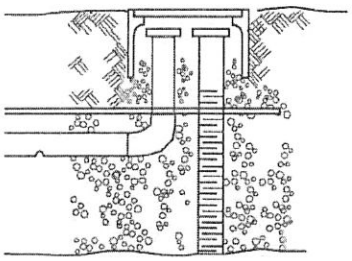
V. An "as built" is submitted by your contractor and signed by your qualified professional.
V. Operating permit is submitted if needed
V. Operational, Maintenance and Monitoring Manual is submitted



SIDE VIEW

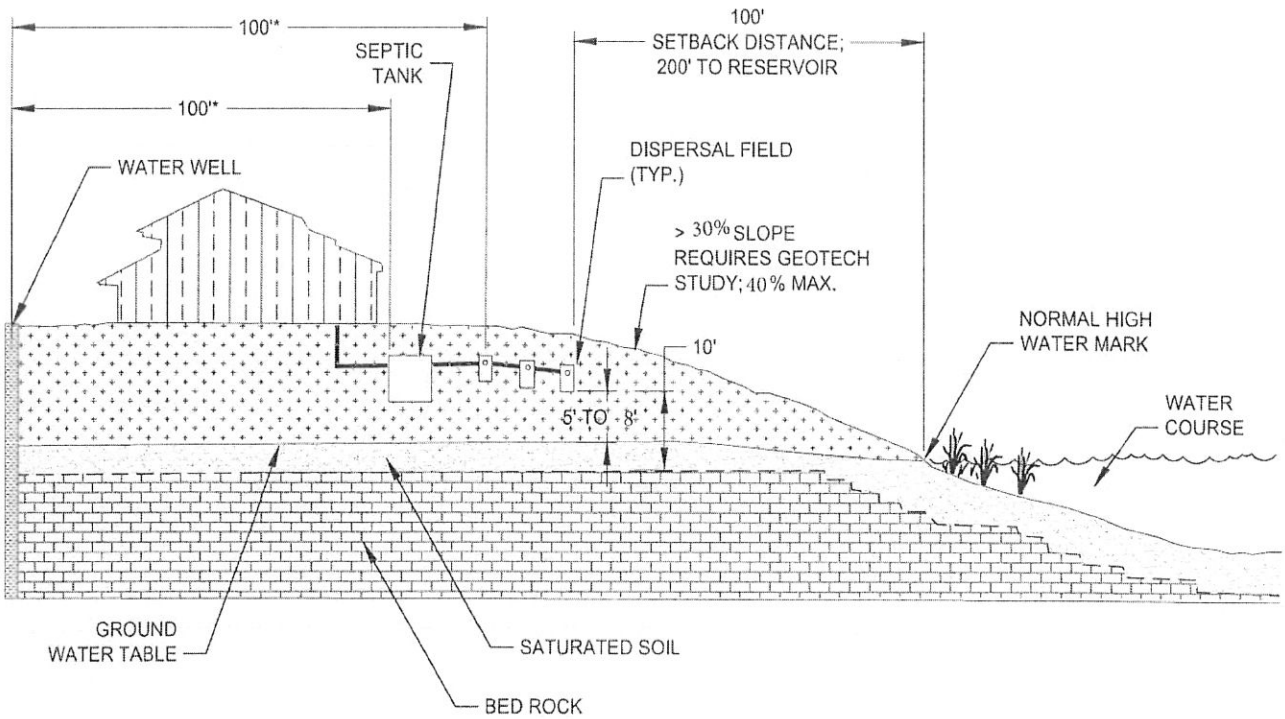


END VIEW



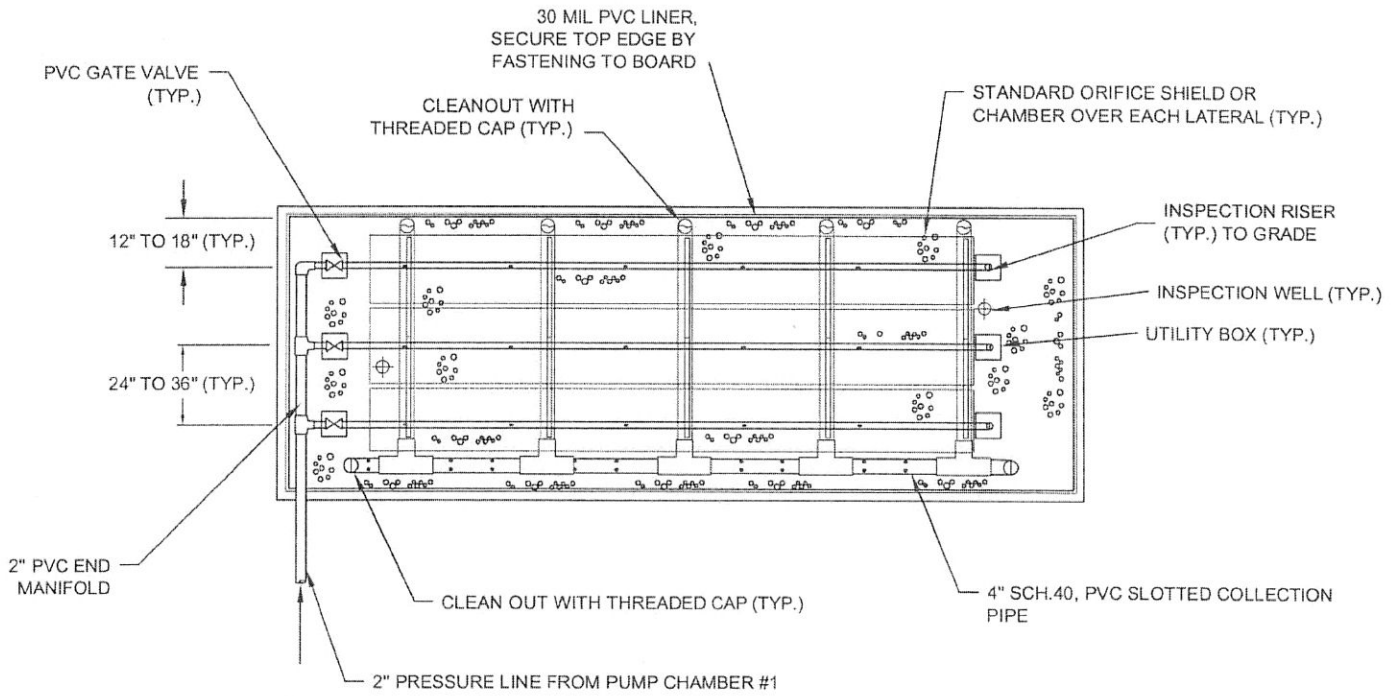
ALTERNATE END DETAIL

TYPICAL DISPERSAL TRENCH



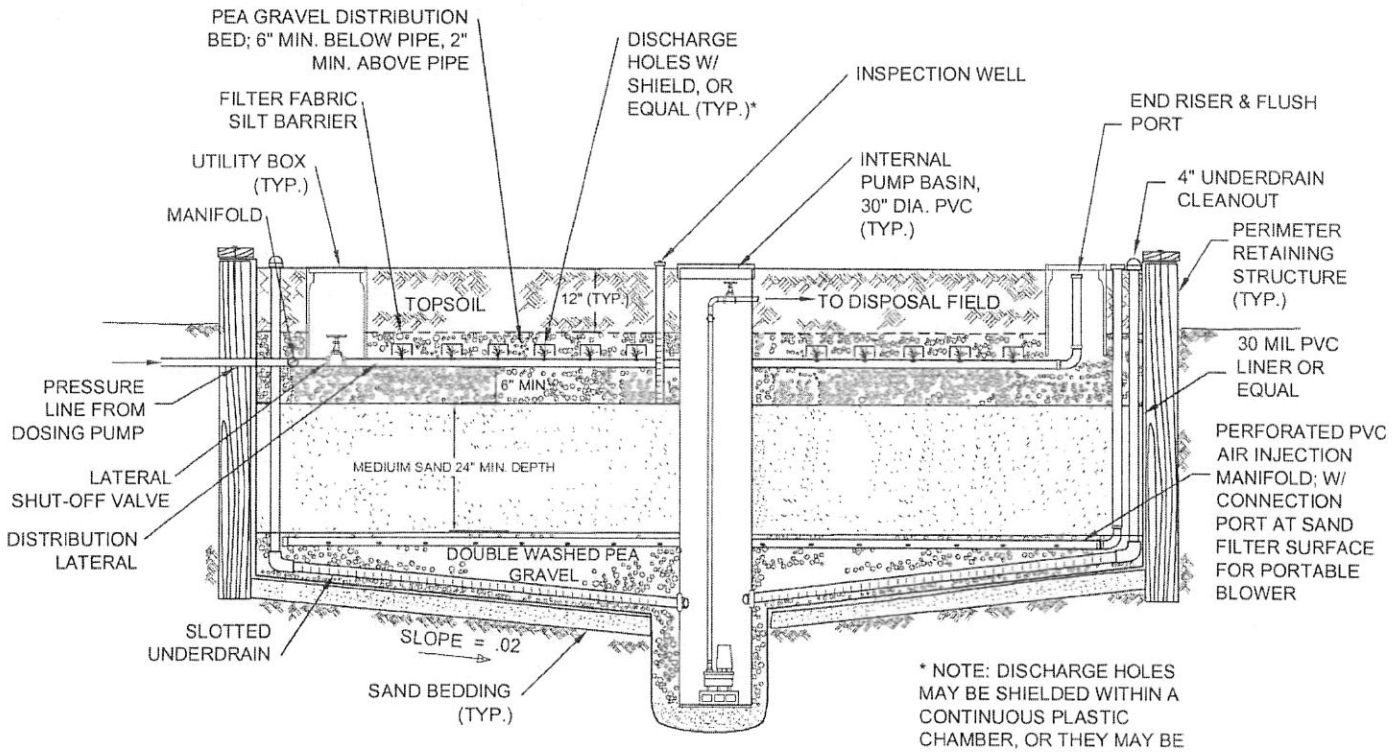
*150' TO PUBLIC SUPPLY WELL
**BASED ON PERCOLATION RATE

TYPICAL SITING CONSIDERATION FOR ONSITE WASTEWATER TREATMENT SYSTEMS

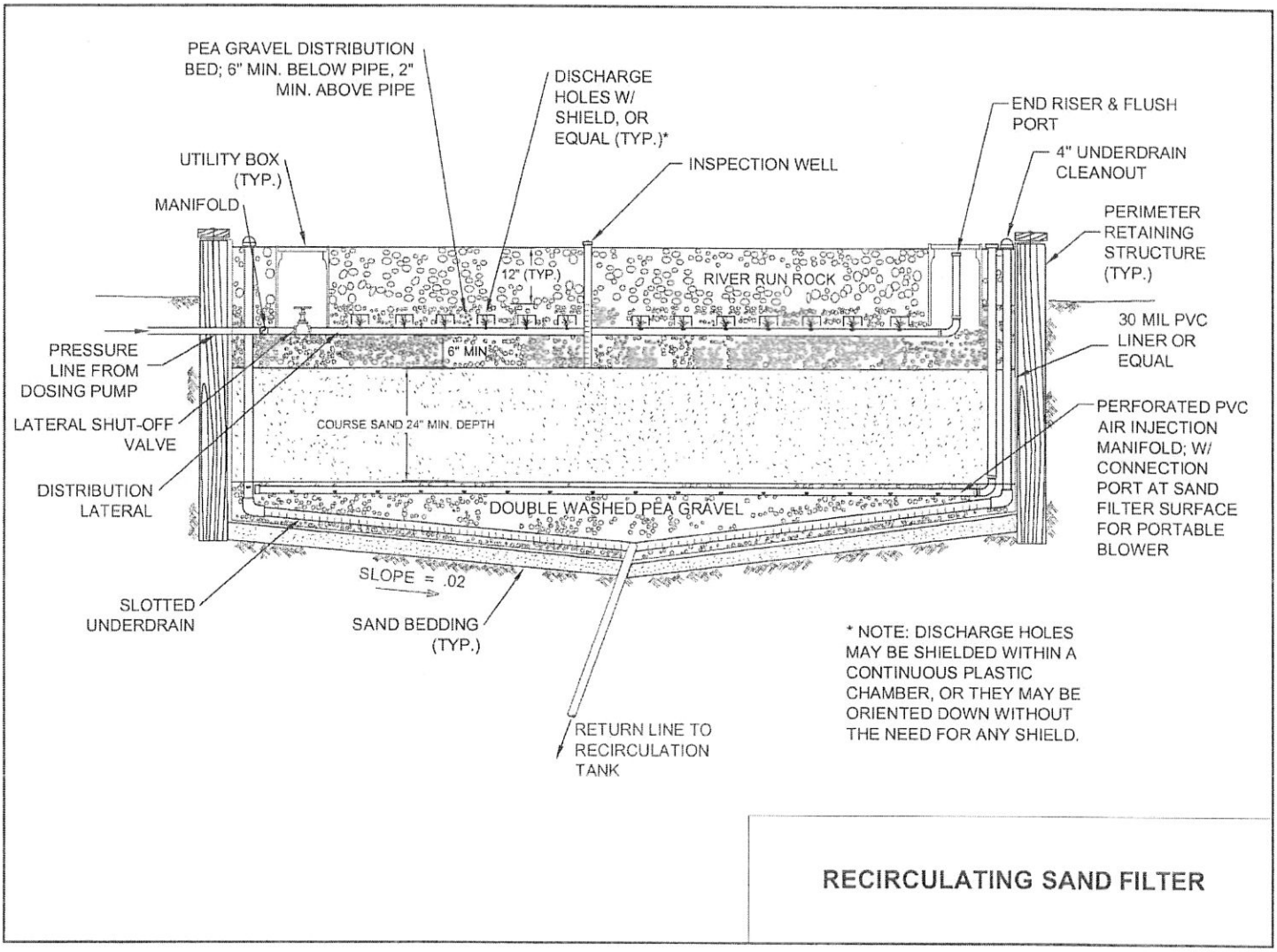


PLAN VIEW

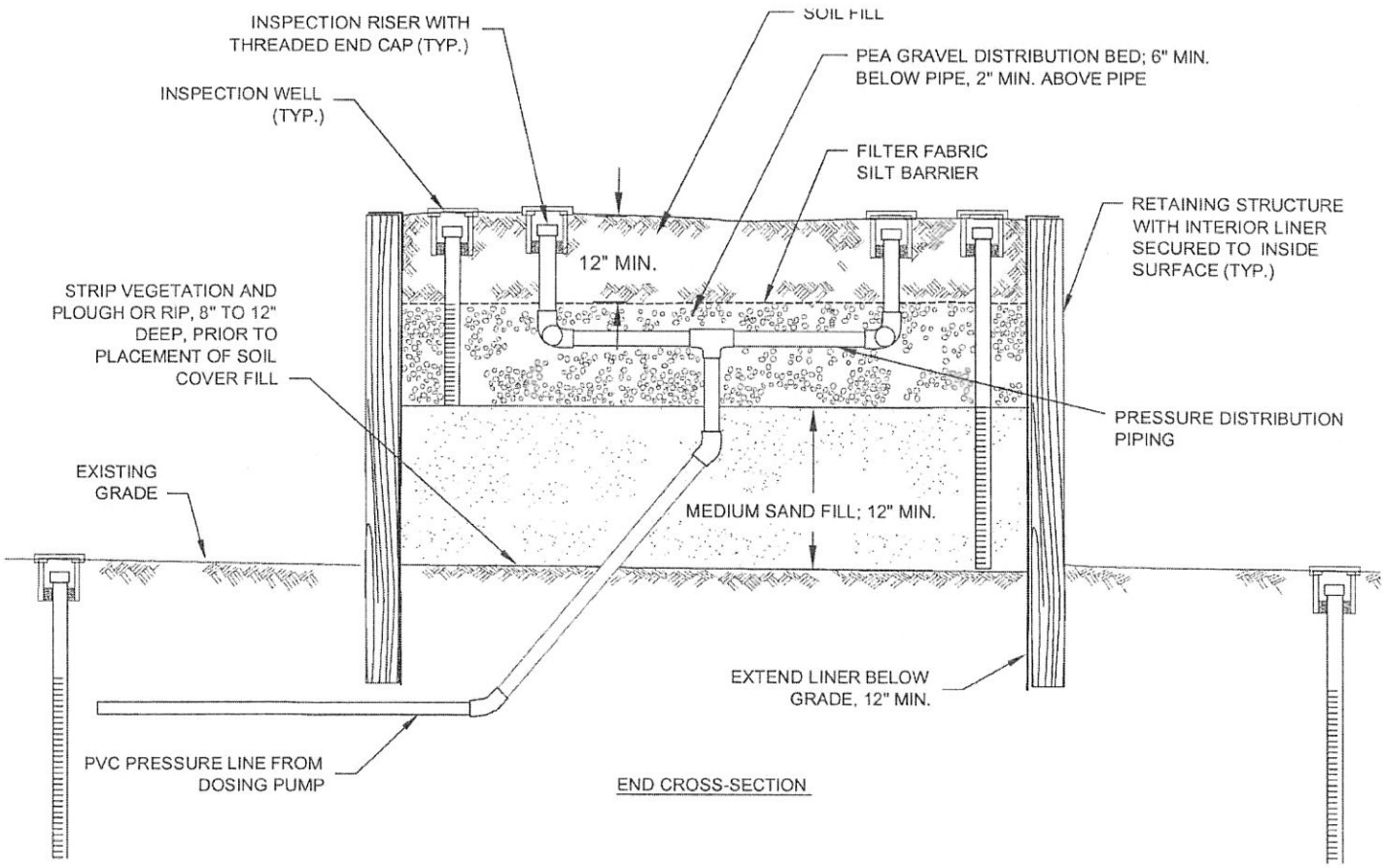
INTERMITTENT SAND FILTER
PLAN VIEW



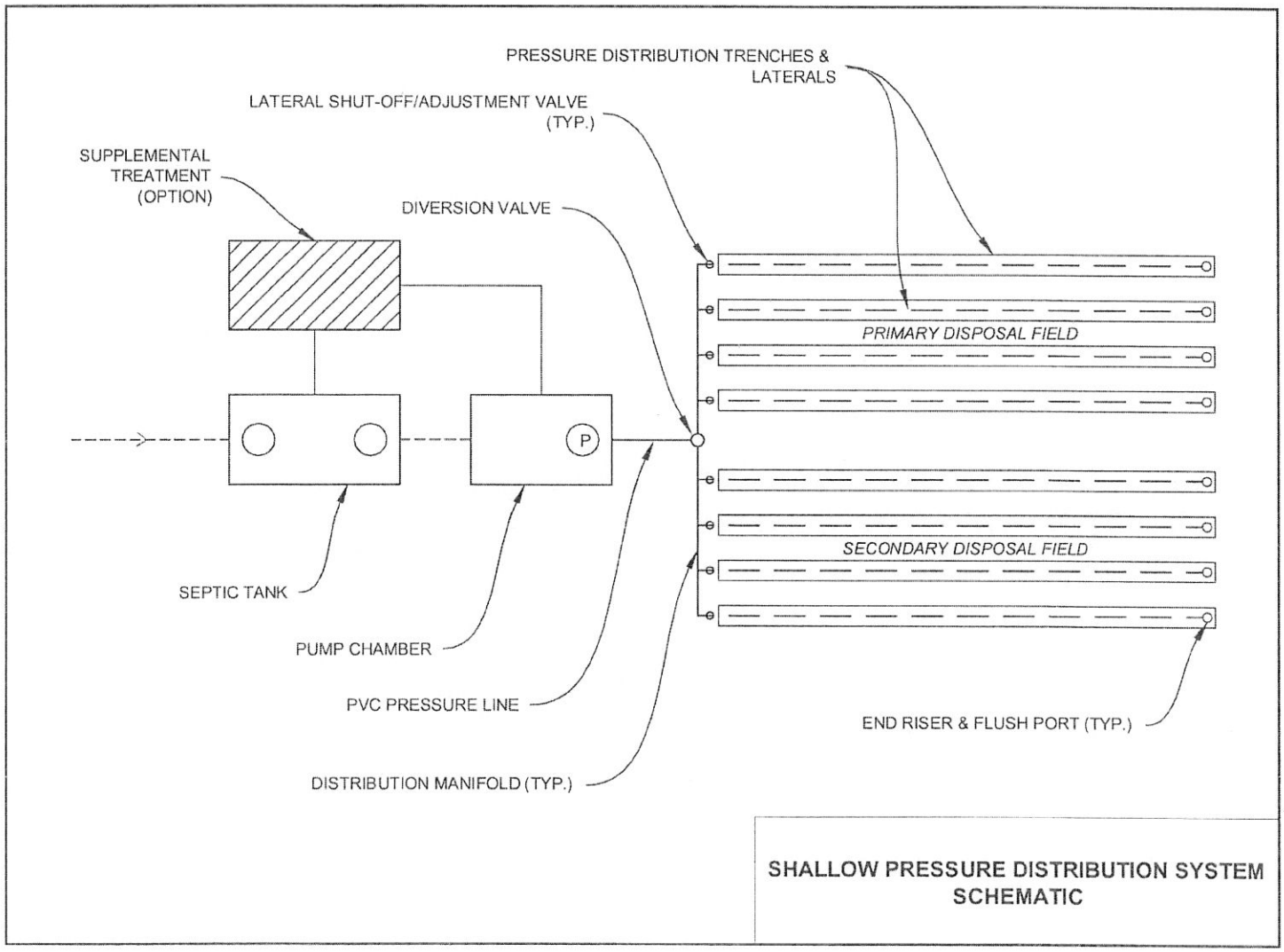
INTERMITTENT SAND FILTER
WITH INTERNAL PUMP BASIN



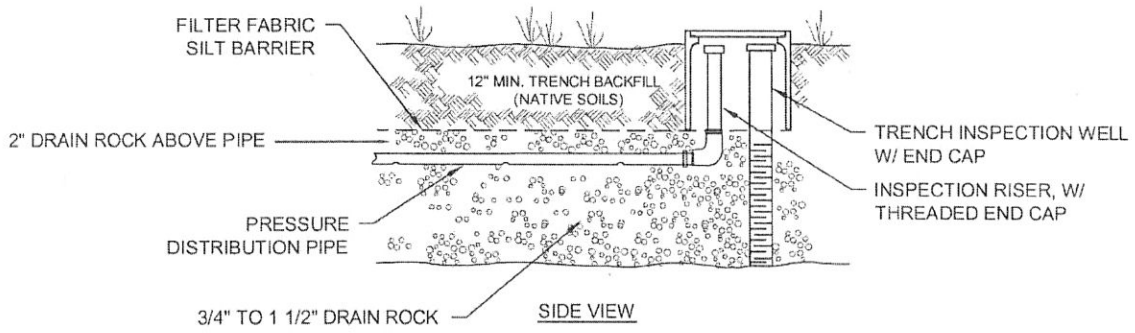
RECIRCULATING SAND FILTER

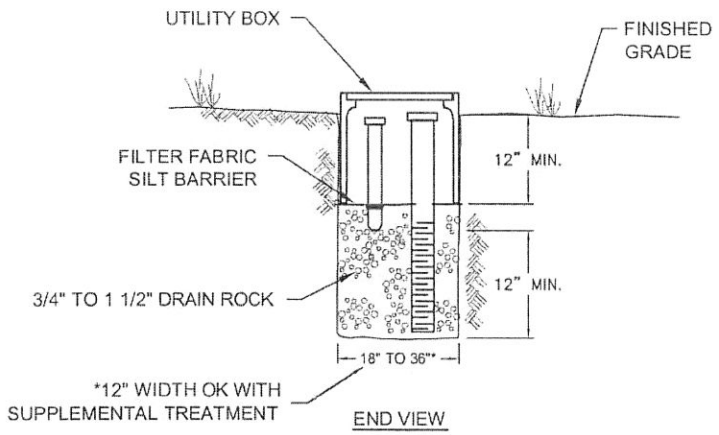


RAISED SAND FILTER BED

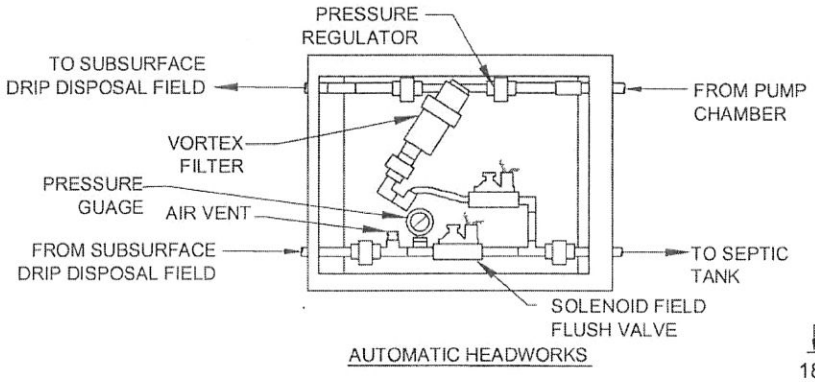


SHALLOW PRESSURE DISTRIBUTION SYSTEM SCHEMATIC

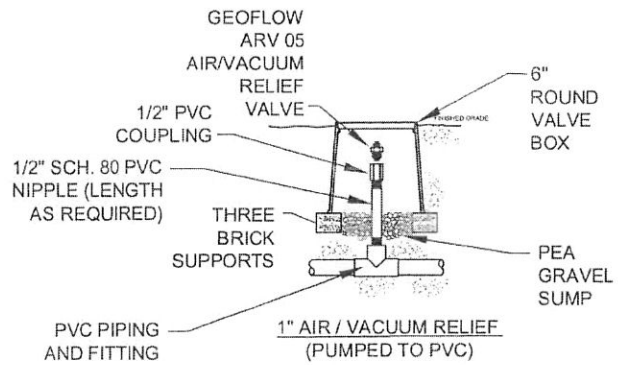




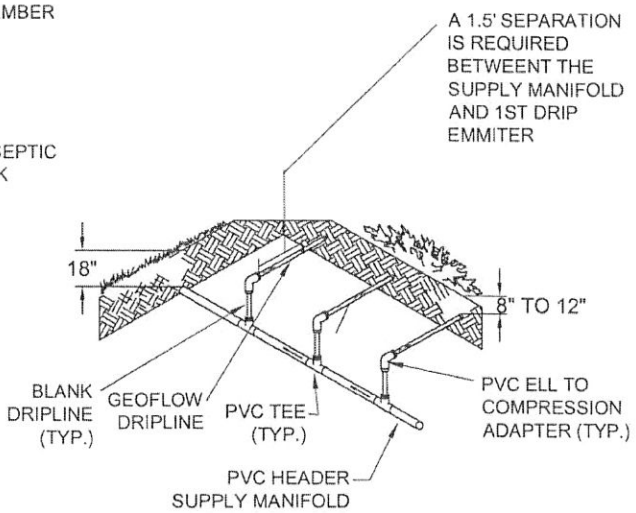
SHALLOW PRESSURE-DISTRIBUTION SYSTEM



AUTOMATIC HEADWORKS

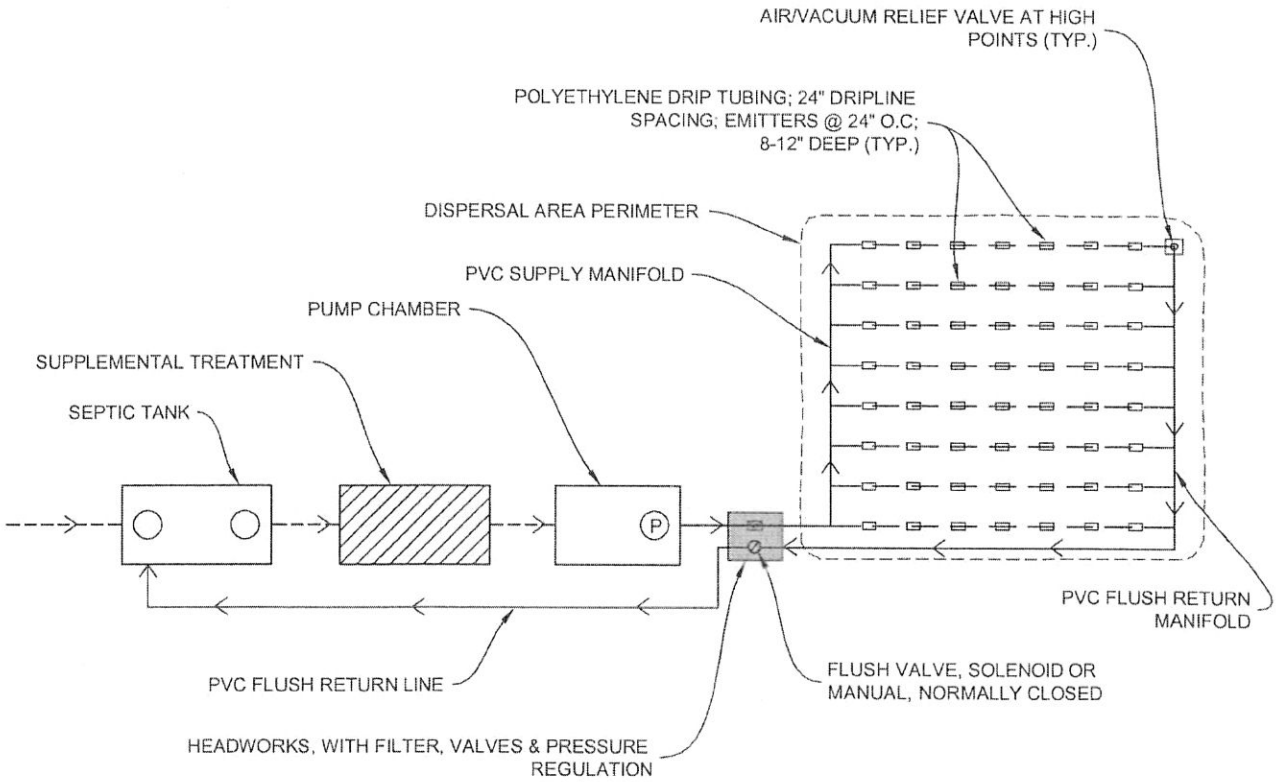


1" AIR / VACUUM RELIEF (PUMPED TO PVC)



END FEED/ FLUSH MANIFOLD

DRIP DISPERSAL DETAILS



DRIP DISPERSAL SYSTEM SCHEMATIC

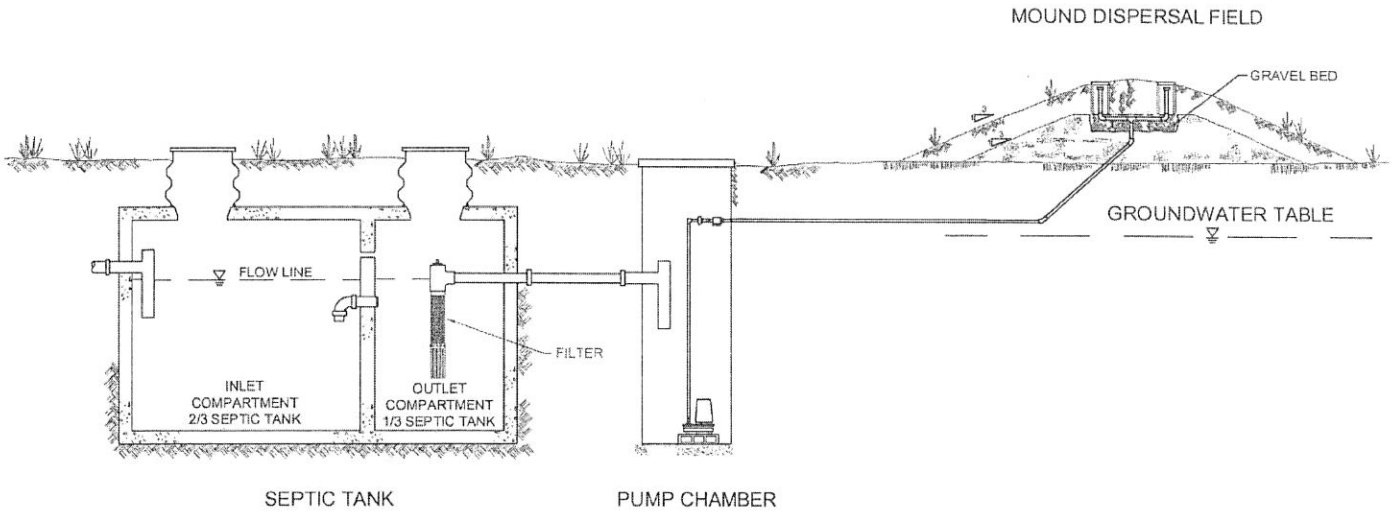
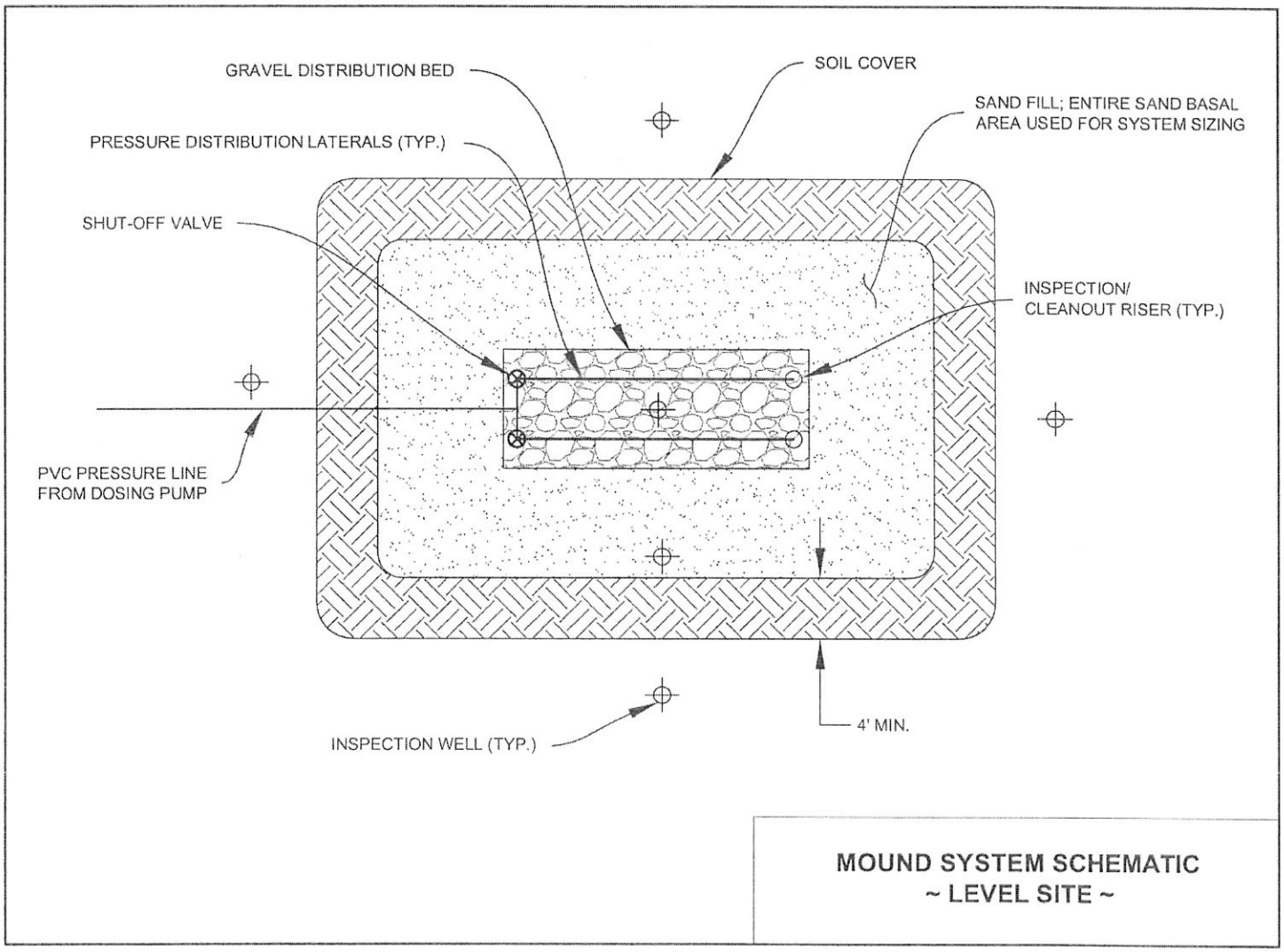
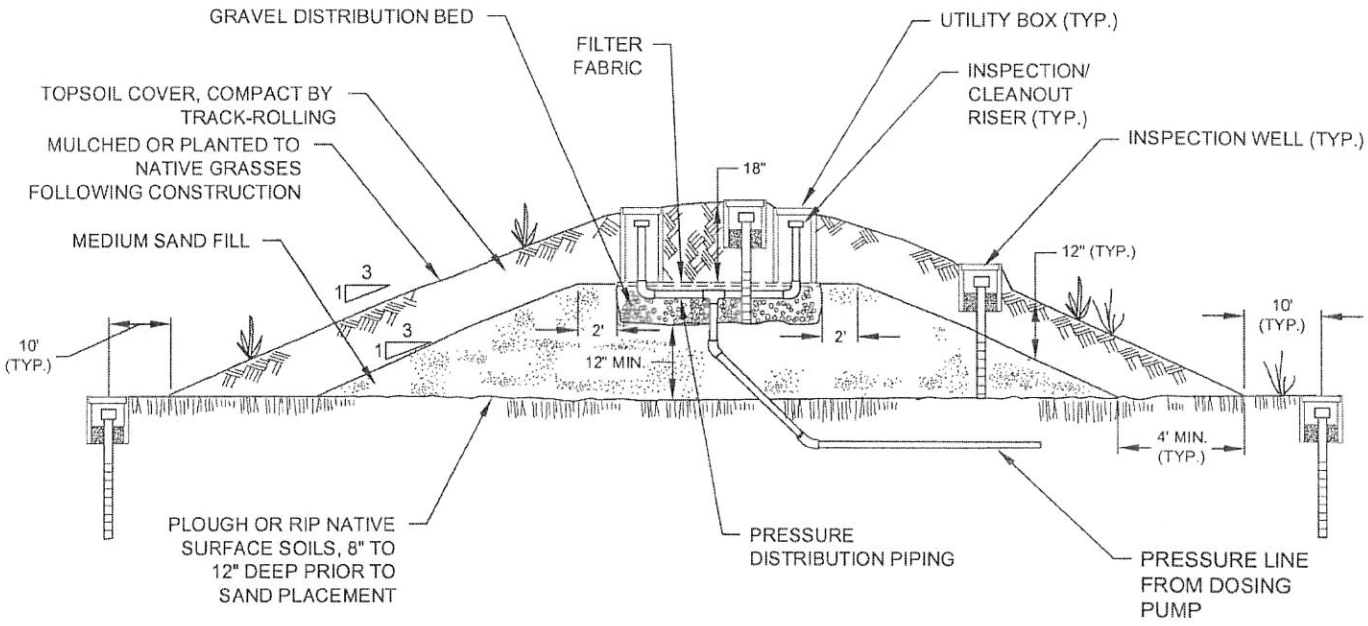


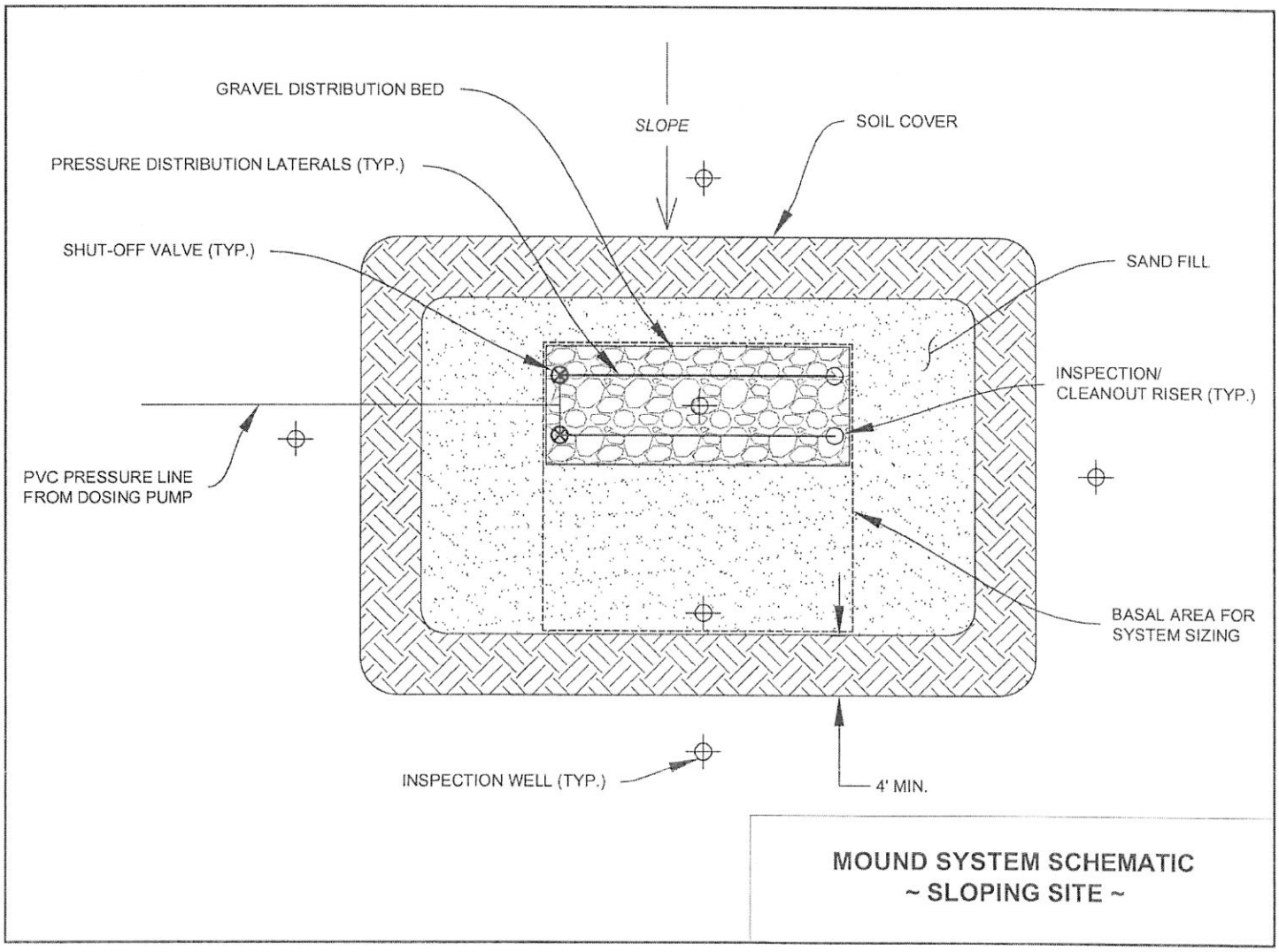
DIAGRAM OF A MOUND SYSTEM



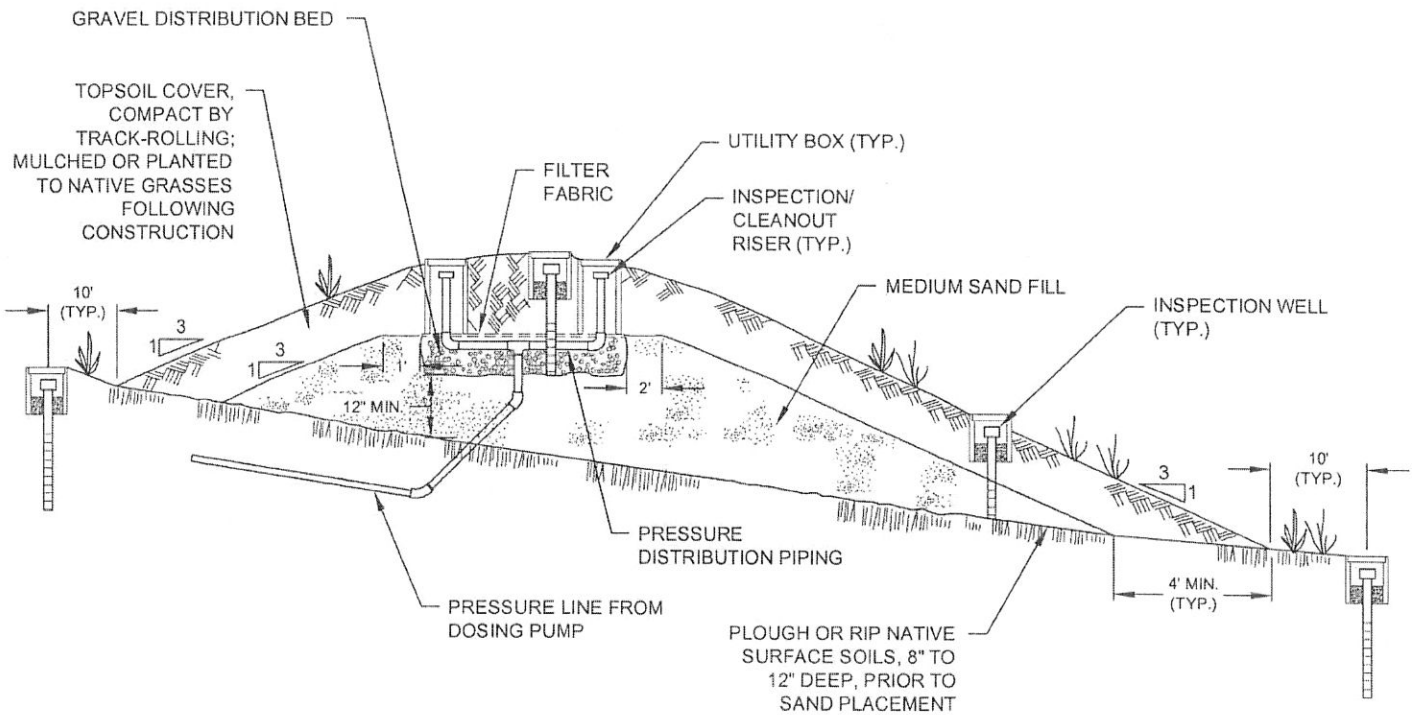
MOUND SYSTEM SCHEMATIC
~ LEVEL SITE ~



MOUND SYSTEM CROSS-SECTION
~ LEVEL SITE ~



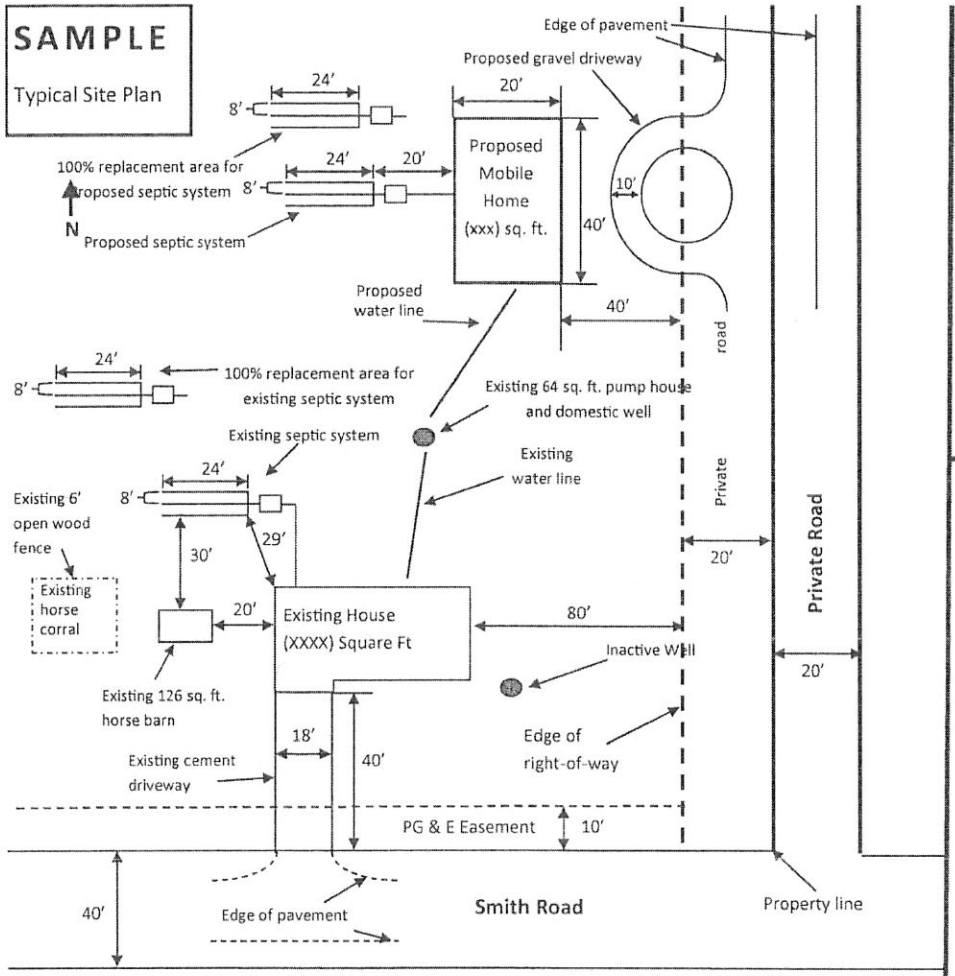
MOUND SYSTEM SCHEMATIC
~ SLOPING SITE ~



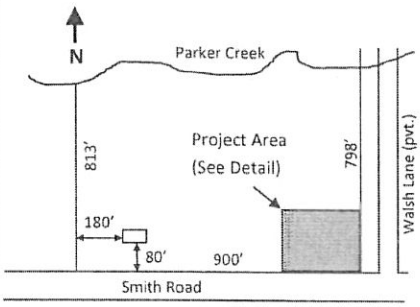
MOUND SYSTEM CROSS-SECTION
~ SLOPING SITE ~

SAMPLE

Typical Site Plan



Site Plan Detail (1"= 40')



Site Plan (1"= 400')

Owner:	Name Address Phone
Applicant:	Name Address Phone
Site Address:	Street Address
APN:	xxx-xxx-xxx
Parcel Size:	XX.XX Acres
Date:	Month Day, Year

FOR OFFICE USE ONLY	
DATE RECEIVED: _____	RECEIVED BY: _____
FEES PAID: _____	STAFF ASSIGNED: _____
RECEIPT #: _____	CHECK # or CC: _____
FACILITY ID: _____	SR # / PE: _____ /4201

COUNTY OF YOLO

Department of Community Services
Environmental Health Division

292 W. Beamer Street, Woodland CA 95695
Phone: (530) 666-8646 Fax: (530) 669-1448

Site Evaluation/Soil Profile Request for Development

Site Address:		
APN:	Parcel Size:	
Property Owner(s):		
Phone Number:	Email:	
Mailing Address:	City:	Zip Code:

Person Requesting Service:		
Agency/Title:		
Phone Number:	Email:	
Mailing Address:	City:	Zip Code:

Evaluation type: ☐ Residential Use ☐ Commercial Use ☐ Unknown

Name of Qualified Professional who will conduct site evaluation:_____

Project description:_____

Drinking Water Supply: ☐ Private domestic well ☐ *Public water system

Well permit #:_____ Year drilled:_____ Well depth:_____ Seal depth:_____

Was the cement pad constructed? ☐ Yes ☐ No Was the well finalized? ☐ Yes ☐ No

*Name of public water system:_____

Public Sewer System Main Line:

Is the Public Sewer System within 200 feet of the building to be served? ☐ Yes ☐ No

If yes, have you contacted the public sewer system for connection? ☐ Yes ☐ No

Supplemental Documents for Evaluation:

The following items must be checked off before a site evaluation can take place:

☐ Completed Site Evaluation Request Form and fees paid

☐ Vicinity map and directions to the site

☐ Copy of current assessor's parcel map

☐ Plot plan (see below)

****A Plot Plan is required with the application. It must be drawn to scale and include parcel number, site address, and all existing features and proposed improvements. Include all well locations on neighboring parcels.****

By signing this agreement, I understand that a fee, authorized by the current Yolo County Fee Resolution, will be charged. I certify that I am the owner or owner's authorized agent and that the information I have provided is correct to the best of my knowledge.

Signature:_____ Date:_____

YOLO COUNTY ON-SITE SEPTIC SYSTEM SITE EVALUATION

(ALL QUESTIONS SHALL BE ANSWERED - BLANKS MUST BE FILLED IN AND/OR ITEMS CIRCLED. IF NOT APPLICABLE, WRITE "N/A" IN THE BLANK.)

Service Request No.: _____ Facility Number: _____ APN: _____

Date Completed: _____/_____/_____ Onsite Qualified Professional:_____

Property Owner: _____ Site Address:_____

Existing/Proposed (circle one) Structure to be served: _____ Parcel Size: _____

Proposed Project: _____

_____

If applicable:

Subdivision Name_____ *(plat attached)* Section: _____ Lot: _____ Block: _____

WATER AND SEWER SUPPLY

Water Supply: (circle one) PUBLIC WATER SYSTEM / PRIVATE WELL

· If supply is Public Water System, provide the name of the water supplier: _____

Public Sewer System main line: (circle one) IS / IS NOT within 200 feet of building to be serviced with septic system.

· If it is within 200 feet, why is a site evaluation necessary: _____

(provide attached information if necessary)

SETBACKS

(Note: All setbacks shall be indicated on an attatched site evaluation map and be shown on the design site plan.)

Onsite Well: (circle one) YES* / NO · If yes: Year Drilled: _____ · Well drilled under permit: (circle one) YES / NO / UNKNOWN
· Cement Pad present: (circle one) YES / NO · Annular Seal present: (circle one) YES / NO / UNKNOWN

Neighboring wells within 100 feet of property line: (circle one) YES* / NO (*All wells must be shown on the septic design.)

Rivers, Streams, Ponds, Lakes: (circle one) YES / NO · Slopes or Breaks: (circle one) YES / NO

Wet or Dry Ditches or Swales: (circle one) YES / NO · Cut or Fill Bank: (circle one) YES / NO · Roads/Driveways: (circle one) YES / NO

Comments: _____

_____

TOPOGRAPHY

(Note: If slope is severe, a topography survey with half-foot contours must be provided on the design. If the site drainage is poor or the slope is flat, then a detailed drainage plan must be provided on the design if a subsurface disposal system is proposed.)

SLOPE: Flat (under 2%) [ ] Slight (under 6%) [ ] Severe (over 30%) [ ]

VEGETATION: Grass/Brush [ ] Lightly Wooded [ ] Heavily Wooded [ ]

Vegetation indicating high groundwater: (circle one) YES / NO _____
(e.g.: reeds, cattails, etc.)

Vegetation with aggressive root systems: (circle one) YES / NO _____
(e.g.: bamboo, weeping willows, walnut trees, eucalyptus, poplars, etc.)

YOLO COUNTY SEPTIC SITE EVALUATION (continued): Service Request No. _____

SOIL PROFILES

(Note: All soil pit locations shall be indicated on an attached site evaluation map and be shown on the design site plan.)

A minimum of two (2) soil profiles must be performed: One (1) in the proposed area, one (1) in the repair/replacement area. The depth of the soil pits shall be at minimum twenty-four (24) inches below the proposed disposal depth or to a restrictive horizon. Soil pit locations must be shown on the site plan. Describe soils using standard USDA Textural Descriptions.

SOIL PIT ONE

HORIZON DEPTH	BOUNDRY	COLOR	CLASS/TEXTURE	STRUCTURE	CONSISTENCY D	CONSISTENCY M	CONSISTENCY W	PORES	ROOTS	MOTTLING
0"										

Groundwater observed: (circle one) YES / NO · If yes, depth observed:_____
Limiting Layer (not groundwater): (circle one) YES / NO · If yes, depth observed:_____

SOIL PIT TWO

HORIZON DEPTH	BOUNDRY	COLOR	CLASS/TEXTURE	STRUCTURE	CONSISTENCY D	CONSISTENCY M	CONSISTENCY W	PORES	ROOTS	MOTTLING
0"										

Groundwater observed: (circle one) YES / NO · If yes, depth observed:_____
Limiting Layer (not groundwater): (circle one) YES / NO · If yes, depth observed:_____

SOIL PIT THREE

HORIZON DEPTH	BOUNDRY	COLOR	CLASS/TEXTURE	STRUCTURE	CONSISTENCY D	CONSISTENCY M	CONSISTENCY W	PORES	ROOTS	MOTTLING
0"										

Groundwater observed: (circle one) YES / NO · If yes, depth observed:_____
Limiting Layer (not groundwater): (circle one) YES / NO · If yes, depth observed:_____

BOUNDRY: Abrupt <1"; Clear 1-2.5"; Gradual 2.5 – 5"; Diffuse >5"
TEXTURES: Course sand/gravel, sand, loamy sand, sandy loam, loam, sandy clay loam, sandy clay, clay loam, silty clay loam, silty loam, silt silty clay, or clay.
STRUCTURES: Strong, moderate, weak, granular; Platy; Prismatic; Columnar Blocky; Angular blocky; sub-angular blocky; Structureless; Massive; Cemented.
CONSISTENCY: Dry: loose, soft, slightly hard, hard, very hard, extremely hard; Moist: loose, very friable, friable, firm, very firm, extremely firm; Wet: non-sticky, slightly sticky, sticky, very sticky, non-plastic, slightly plastic, plastic, very plastic
PORES/ROOTS: Quantity: few, common, many; Size: very fine, fine, medium, coarse
MOTTLING: Quantity: few, common, many; Size: very fine, fine, medium, coarse; Contrast: faint, distinct, prominent

YOLO COUNTY SEPTIC SITE EVALUATION (continued): Service Request No. _____

EFFLUENT APPLICATION / SYSTEM TYPE DETERMINATION

Note: The site soil condition must be evaluated to a minimum of two (2) feet below the application area disposal depth or to limiting layer, whichever is shallower.

Manual Table 3-1: Minimum Vertical Setback for Standard Systems

USDA TEXTURAL CLASSIFICATION[3]	PERC RATE (MPI)	MINIMUM VERTICAL DISTANCE TO GROUNDWATER or LIMITING LAYER	
		SEPTIC TANK TO STANDARD TRENCH	*SEPTIC TANK TO* PRESSURE DISTRIBUTION
Coarse to medium sand	<1-5	Prohibited for Standard Systems. See Section 5 for Alternative System requirements	
Fine sand, loamy sand[2]	>5-15	8 feet	5 feet
Sandy loam, loam, sandy clay loam, silt loam	>15-60	5 feet	3 feet
Clay loam, silty clay loam, sandy clay[1]	>60-120[4]	5 feet	2.5 feet
Clay	>120	Prohibited	2 feet

[1] *Clays must be non-expansive; maximum Clay content is 60%.*
[2] *Subject to Percolation Test in addition to Soil textural determination if 35 % or more (by volume) coarse fragments (defined as > 2 mm in size)*
[3] *Least permeable Soil Horizon below the point of dispersal and within the minimum separation to Limiting Layer or Groundwater*
[4] *Pressure Distribution is recommended and may be required where percolation rates are slower than 90 mpi.*

Manual Table 3-2: Application Rates (gallons/square foot/day) Based on Soil Profile

USDA Soil Texture Class	Single Grain	Granular	Strong: Angular, Subangular Blocky	Moderate: Angular, Subangular Blocky	Weak: Angular, Subangular Blocky	Structureless, Massive, Friable, Very Friable	Structureless, Massive, Compact, Firm, Very Firm
Sand	1.2	N/A	N/A	N/A	N/A	N/A	N/A
Loamy Sand	1.2	0.90	N/A	N/A	0.90	N/A	N/A
Sandy Loam	N/A	0.90	N/A	0.64	0.64	0.64	N/A
Sandy Clay Loam	N/A	0.55	0.55	0.49	0.49	0.49	0.0
Loam	N/A	0.55	0.55	0.49	0.45	0.45	
Silt Loam	N/A	0.49	0.49	0.45	0.32	0.32	0.0
Silty Clay Loam, Clay Loam	N/A	0.45	0.45	0.45	0.32	0.32	0.0
Sandy Clay, Silty Clay	N/A	0.32	0.32	0.32	0.32	0.0	0.0
Clay	N/A	0.26	0.26	0.26	0.26	0.0	0.0

Indication of Seasonal Water Table in the Proposed Primary area: (circle one) YES / NO · If yes, depth:_____

Indication of Seasonal Water Table in the Repair/Replacement area: (circle one) YES / NO · If yes, depth:_____

Is the Soil Suitable for a Standard System: (circle one) YES / NO · If yes, application rate:_____
· If no, Qualified Professional's proposed alternative system w/ application rate:_____

Additional Comments: _____
_____
_____
_____

SITE EVALUATION MAP

Not drawn to scale

Completed Site Evaluations have no expiration date, except for when there is a change in site conditions adversely affecting the proposed system area, including but not limited to: lot line adjustments affecting setbacks, soil changes (e.g., soil compaction, grading or fill activities, etc.), location change of the proposed primary or replacement areas, change in regulatory requirements, etc.

Site evaluations will not be complete until a Site Evaluation report is also received from the Qualified Professional.

Yolo County Environmental Health Site Evaluation Report Completed by:

_____ _____

Environmental Health Specialist Date

DEPARTMENT OF COMMUNITY SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
292 West Beamer Street, Woodland, Ca 95695
Telephone: 530-666-8646 • Fax 530-669-1448
Environmental.health@yolocounty.org

System Design Form for Standard Gravity System

To be submitted with System Design, septic system installation permit application and the proper permit fee.

I. Parcel Identification

APN:	FA:
Applicant name:	Designer name:
Applicant mailing address:	Designer mailing address:
Applicant phone number/email:	Designer phone number/email:

II. Design Parameter

Dispersal type: ☐ Drainrock ☐ Chamber ☐ Polystyrene	
Number of bedroom:	Drainfield square footage:
Daily flow (gpd):	Trench width (inches):
Septic tank capacity (gal):	Total lineal trench length (ft):
Application rate (gpd/ft^2):	Trench depth (inches)
Design vertical separation (inches):	Depth of fill over drainrock (if applicable) (inches):
Ground slope in drain field (%):	Curtain drain depth (if applicable) (f):

III. Certification of Design

The undersigned Designer or Installer (circle one) has submitted this system design based on site evaluation report and the drawings attached hereto.

System designer or installer Date

The undersigned has reviewed this design on behalf of Yolo County Environmental Health and has determined it to be in compliance with the county code.

Environmental Health Specialist Date

Caution: This design approval is only valid when all the following conditions are met:

√ The design is stamped "Approved" by Yolo County Environmental Health
√ The septic system installation permit has not expired. The permit expiration date is 2 years from the date of issuance
√ The system is installed by a qualified installer or homeowner authorized by the Yolo County Environmental Health
√ Drainfield site conditions have not been altered to adversely affect conditions of design approval.

SEPTIC SYSTEM DESIGN CHECKLIST

This Checklist shall be completed and signed by system designer or installer

- ☐ Owner's name
- ☐ Assessor's Parcel Number
- ☐ North arrow
- ☐ Property lines
- ☐ Any relevant site features such as cliffs, cut banks, irrigation canals, springs, rock outcrop, landslide areas, drainage ways, etc. within 200 ft of the primary and repair dispersal areas
- ☐ Any existing and/or proposed site improvements, such as buildings, pools, driveways, parking areas, easements, waterlines, etc. (please specify whether existing or proposed)
- ☐ Existing wastewater dispersal areas, if present
- ☐ Location and dimensions of designated primary and repair wastewater dispersal areas
- ☐ Test hole locations from Site Evaluation
- ☐ Existing and proposed wells within 200 ft of the primary and repair dispersal areas and neighboring wells within 100 ft of property lines
- ☐ Location and orientation of curtain drain
- ☐ Direction of slope in primary and repair dispersal areas
- ☐ Dispersal field orientation and layout
- ☐ Trench/bed dimensions and critical distances within layout
- ☐ D-Box/"T"/"L" locations
- ☐ Septic tank/pump chamber location
- ☐ Observation port location
- ☐ Scale of drawing shown on scale bar
- ☐ Cross Section Drawings:
  - Dispersal trench
  - Observation port
  - Capping fill, if applicable
  - Curtain drain, if applicable
- ☐ Building pad
- ☐ Invasive tress or bushes
- ☐ System dispersal field and replacement area are staked and taped on property

Note: Designer may use form attached for design drawing or may attached drawing on separate page, provided the elements identified in this checklist are included.

_____

System Designer or Installer (circle one) **Date**

SITE PLAN Assessor's Parcel Number: ☐☐☐-☐☐☐-☐☐☐ Permit #:_____

I certify that the information in this site plan is accurate and complete to the best of my knowledge.

_____

Signature Date

Owner Name: _____ Scale 1" = _____

Address / Phone: _____

Site Location: _____

Contact Name: _____ Phone: _____

DEPARTMENT OF COMMUNITY SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
292 West Beamer Street, Woodland, Ca 95695
Telephone: 530-666-8646 • Fax 530-669-1448
Environmental.health@yolocounty.org

Pressure Distribution or Supplemental Treatment System Design

A system design will be reviewed when the following items are submitted:

√A completed designed that has been signed and dated; √Scaled layout sketch, inclusing all applicable items on checklist;

√ Scaled plot plan, including all applicable items on checklist; √ cross-section sketch, including all applicable items on checklist

I. Parcel Identification

APN:	FA:
Applicant name:	Designer name:
Applicant mailing address:	Designer mailing address:
Applicant phone number/email:	Designer phone number/email:

II. Design Parameters

Treatment Type

Vertical Separation (inches): _____ ☐ Closed bottom sandfilter ☐ Open bottom sandfilter ☐ Mound
☐ ATU (Make/Model)
☐ Textile filter (Make/Model)
☐ Disinfection unit (Make/Model):

Dispersal Type (check off one)

☐ Gravity ☐ Trench ☐ Drain rock ☐ Subsurface drip ☐ Pressure ☐ Bed ☐ Gravelless chamber

Dispersal System Sizing

Number of bedrooms: _____; Daily flow (gpd): _____; Septic tank capacity (gal): _____;
Receiving soil type: _____ Receiving soil Application rate (gpd/ft^2): _____;
Required square footage: _____; Designed square footage: _____ Percent reduction taken: _____

Elevation Measurements

Original drainfield area slope _____% New slope if altered _____ %
Depth of trench bed for upslope: _____ Depth of trench bed for down slope: _____

Pump Specifications

Difference in elevation between pump shutoff and uppermost orifice (ft): _____
Uppermost orifice is (check off one) ☐ Higher ☐ Lower than pump shutoff
Capacity at total pressure head (gpm): _____ Calculated total pressure head (ft) (Attach pump curve): _____

Dosing and Pump Chamber

Number of doses/day: _____ Dose quantity (gal): _____ Chamber capacity (gal): _____
Pump control (check off one): ☐ Timer ☐ Elapse time meter
If timer, Pump on _____; Pump off _____
Check the following components if they drain between doses: ☐ laterals ☐ Manifold ☐ Transport

III. Pressure Distribution System Parameters

Laterals	Manifold
Schedule/class (feet) :	Schedule/class :
Diameter (inches) :	Length (feet) :
Number :	Preferred Manifold Configuration used?
Separation (feet) :	☐ Yes ☐ No
Orifices	Transport pipe
Total number of Orifices:	Schedule/class:
Diameter (inches):	Length (feet):
Spacing (inches):	Diameter (inches):

IV. Certification of Design

The undersigned Designer has submitted this system design based on site evaluation report and has designed the system as shown on this design form and the drawings attached thereto.

System designer Date

The undersigned has reviewed this design on behalf of Yolo County Environmental Health and has determined it to be in compliance with the county code.

Environmental Health Specialist Date

Caution: This design approval is only valid when all the following conditions are met:

√ The design is stamped "Approved" by Yolo County Environmental Health
√ The septic system installation permit has not expired. The permit expiration date is 2 years from the date of issuance
√ The system is installed by a qualified installer or homeowner authorized by the Yolo County Environmental Health
√ Drainfield site conditions have not been altered to adversely affect conditions of design approval.

Checklists for Required Drawings

Scaled Plot Plan

- ☐ Test hole locations
- ☐ Property lines
- ☐ Existing and proposed wells within 100 ft of property lines
- ☐ Critical distance measurements to cuts, banks, and surface water
- ☐ Location and orientation of curtain drain and all absorption components
- ☐ Location and dimension of primary system and replacement area
- ☐ Buildings
- ☐ Direction of slope indicator
- ☐ Waterlines
- ☐ Roads/easements/driveways/parking
- ☐ Critical resource lands (if applicable)
- ☐ North arrow and scale of drawing shown on scale bar.

Scaled Layout Sketch

- ☐ Drainfield orientation and layout
- ☐ Trench/bed dimensions and critical distances within layout
- ☐ D-box/"T"/"L" locations
- ☐ Septic tank/pump chamber location
- ☐ Observation port location
- ☐ Clean-out location
- ☐ Manifold placement
- ☐ Orifice placement
- ☐ Lateral placement, with distances to edge of bed
- ☐ Audible/visual alarm referenced
- ☐ Scale of drawing shown on scale bar

Mound System Only

- ☐ Overall fill dimensions
- ☐ Up-scale, downslope, and endslope fill width

Additional cross-section information for mound system

- ☐ Settled cap depth at center and edge of bed
- ☐ Sidewall slope
- ☐ Up-slope and downslope bed elevation

Cross-Section Sketch

Reference depth from original grade:

- ☐ Septic tank lid and drainfield cover depth

Reference depth from original grade and restrictive strate:

- ☐ Laterals, trench/bed top and bottom
- ☐ Curtain drain collector
- ☐ Sand augmentation

Other cross-section detail:

- ☐ Monitoring wells and clean-outs

FOR OFFICE USE ONLY	
PERMIT NUMBER:_____	ON #:_____
DATE ISSUED: _____	FEES PAID: _____
RECEIPT #: _____	CC or CHECK #: _____
FACILITY ID: _____	SITE EVAL/SR #: _____

SEPTIC INSTALLATION PERMIT APPLICATION FORM

YOLO COUNTY
Department of Community Services
Environmental Health Division

292 W. Beamer Street, Woodland CA 95695
Phone: (530) 666-8646 Fax: (530) 669-1448

PROPERTY OWNER INFORMATION		
Site Address:	APN:	Parcel Size:
Property Owner(s):	Email:	
Phone Number:	Building Permit (if applicable):	
Mailing Address:	Previous Septic Permit No. (if applicable):	

SEPTIC INSTALLATION CONTRACTOR INFORMATION		
Business Name:	License Type:	
Address:	License #:	Exp. Date:
Onsite Contractor's Name:	Phone Number:	

APPLICANT INFORMATION	
Contact Name/Title:	Email:
Address:	Phone Number:

TYPE OF WORK:
☐ New construction ☐ Tank replacement ☐ Abandonment ☐ Modification
☐ Minor repair ☐ System addition ☐ Major repair ☐ Other: _____

WASTE WATER FLOW / GALLONS PER DAY (GPD)
☐ Residential Number of bedrooms: _____ Max proposed GPD: _____
☐ Commercial/Multi-Residential Type of business: _____ Max proposed GPD (*attach calcs*): _____

TYPE OF SYSTEM: ☐ Standard ☐ Alternative type: _____

SOILS: Receiving soil type: _____ Application rate: _____ (gpd/ft2)

TANK SPECIFICATIONS:
Septic tank size:_____(gal) Number of compartments: _____ Manufacturer:_____
Pump tank size:_____ (gal) Number of compartments: _____ Manufacturer:_____

LEACH FIELD SPECIFICATIONS:
Type of leach field: ☐ Gravity-fed ☐ Pressure-dose ☐ Other:_____
Distribution (gravity-fed only): ☐ Serial ☐ Parallel Distribution type: ☐ Concrete box ☐ Poly box ☐ Pop-over ☐ Other: _____
Pipe size:_____ Pipe type:_____ Drain rock size:_____ Rock/soil barrier material: _____
No. of lines: _____ Length:_____ Width: _____ Depth: _____ Total linear feet : _____
Dosing (PD only): ☐ Timed dose ☐ On-demand

I will comply with all Codes, Rules, and Regulations of the State and County pertaining to installation of septic systems including the conditions and required inspections indicated on this application. I understand I am responsible for providing a homeowners maintenance manual and accurate as-built to the owner. As owner or owner's authorized representative, I confirm that the information provided is correct to the best of my knowledge.

Print Name & Title: _____ Signature: _____ Date: _____

Application cannot be revised without prior approval from the Environmental Health Division.
PERMIT EXPIRES ONE (1) YEAR AFTER DATE OF ISSUANCE (UNLESS EXTENDED)

FOR OFFICE USE ONLY **Installation Permit Issuance**

☐ Approved ☐ Approved with Conditions:_____

_____

Date: EHS Signature:

A site map drawn to scale with the following information shall be submitted with this application. Additional pages may be required.

1. Scale of drawing shown on scale bar
2. Owner's name
3. Assessor's Parcel Number (APN)
4. North arrow
5. Property lines
6. Any relevant site features such as cliffs, cut banks, irrigation canals, springs, rock outcrop, landslide areas, drainage ways, etc. within 200 feet of the primary and repair dispersal areas
7. Any existing and/or proposed site improvements, such as buildings, building pad, imported soils, pools, driveways, parking areas, easements, waterlines, etc. *(please specify whether existing or proposed)*
8. Existing wastewater dispersal areas *(if present)*
9. Location and dimensions of designated primary and repair wastewater dispersal areas
10. Test hole locations from site evaluation
11. Existing and proposed wells within 200 feet of the primary and repair dispersal areas and neighboring wells within 100 feet of property lines
12. Location and orientation of curtain drain
13. Direction of slope in primary and repair dispersal areas
14. Dispersal field orientation and layout
    - If alternative, include system type/make/model and specifications
15. Trench/bed dimensions including depth and critical distances within layout
16. D-Box/"T"/"L" locations
17. Septic tank/pump chamber location
    - Pump specifications including pump curve *(required if applicable)*
18. Monitoring/observation port location
19. System dispersal field and replacement area are staked and taped on property
20. Cross Section Drawings:
    - Dispersal trench
    - Observation port
    - Depth of building sewer to tank and fall from tank to d-box
    - Capping fill *(if applicable)*
    - Curtain drain *(if applicable)*
21. Building pad
22. Invasive vegetation (e.g. Eucalyptus trees, etc.)
23. Animal enclosures
24. Hazardous materials storage including fuel tank(s)

Checked inspection(s) are required. Call the office a minimum of 48 hours in advance to schedule inspection(s).

☐ Pre-Construction ☐ Open trench ☐ Tank(s) ☐ Pump Test ☐ Qualified professional inspection

☐ Alarm inspection ☐ Squirt Test ☐ Final inspection ☐ Rock and Pipe Inspection ☐ Other:

SEPTIC FINAL APPROVAL

☐ As-built provided to YCEH
☐ Homeowners manual and as-built provided to owner
☐ System installation certification signed by qualified professional ☐ Applicable ☐ Not applicable
☐ Operating permit ☐ Applicable ☐ Not applicable
☐ Recorded on property deed ☐ Applicable ☐ Not applicable
☐ Other: _____

_____

Environmental Health Specialist (print and sign) Date

FOR OFFICE USE ONLY	
PERMIT #:	ON #:
DATE RECEIVED:	FEES PAID:
RECEIPT #:	CC or CHECK #:
FACILITY ID:	PE #:

SEPTIC ABANDONMENT PERMIT APPLICATION FORM

YOLO COUNTY
Department of Community Services
Environmental Health Division

292 W. Beamer Street, Woodland CA 95695
Phone: (530) 666-8646 Fax: (530) 669-1448

PROPERTY OWNER INFORMATION		
Site Address:	City:	Zip Code:
Assessor's Parcel Number:	Parcel Size (acres):	
Property Owner(s):		
Phone Number:	Email:	
Mailing Address (if different than above):	City/State:	Zip Code:
Building Permit No. (if applicable):	Previous Septic Permit No. (if applicable):	

SEPTIC ABANDONMENT CONTRACTOR INFORMATION			
Business Name:	License Type:	License #:	Exp. Date:
Mailing Address:	City/State:		Zip Code:
Onsite Contractor's Name:	Phone Number:		

APPLICANT INFORMATION ☐ Same as Property Owner Info ☐ Same as Contractor Info	
Contact Name/Title:	Email:
Address:	Phone Number:

Reason for abandonment: ☐ New septic system ☐ City connection ☐ Failed system ☐ Demo of building served

How tank will be destroyed: ☐ Removal ☐ Buried ☐ Other: _____ **Type of tank:** _____

Proposed date tank will be pumped? (*mm/date/year*) _____ **(provide receipt at time of inspection)**

A site map drawn to scale (include scale legend) with the septic tank and leach field locations shall be submitted with this application. Please include the following: APN, owner's name, north arrow, and property lines.

Please call the office 24 hours in advance during business hours to schedule an inspection. Inspection shall be made after the tank is pumped and prior to backfill or removal.

I will comply with all Codes, Rules, and Regulations of the State and County pertaining to the abandonment of septic systems including the conditions and required inspections indicated on this application. As owner or owner's authorized representative, I confirm that the information provided is correct to the best of my knowledge.

Print Name & Title: _____ Signature: _____ Date: _____

Application cannot be revised without prior approval from the Environmental Health Division.
PERMIT EXPIRES ONE (1) YEAR AFTER DATE OF ISSUANCE (UNLESS EXTENDED)

FOR OFFICE USE ONLY **ABANDONMENT PERMIT ISSUANCE**

☐ Approved ☐ Approved with Conditions: _____

EHS Signature: Date:

FOR OFFICE USE ONLY **ABANDONMENT FINAL APPROVAL**

☐ Approved ☐ Approved with Conditions: _____

EHS Signature: Date:

DEPARTMENT OF COMMUNITY SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
292 West Beamer Street, Woodland, Ca 95695
Telephone: 530-666-8646 • Fax 530-669-1448
Environmental.health@yolocounty.org

SEPTIC SYSTEM OPERATING PERMIT

I. APPLICATION

This is to be completed by the applicant

APN:	Septic Permit:
Applicant Name	Property Owner Name
Applicant Mailing Address	Property Address
Applicant Phone Number and email:	Certified OM&M Specialist

II. OPERATING PERMIT

This is to be completed by Environmental Health Specialist

General Information

Renewal frequency: _____ year(s) System Type:

Comments/Conditions:

☐ **Initial Issuance Checklist**

☐ Final approval by EH ☐ Completed As-Built ☐ OM&M Manual ☐ Deed Recorded

☐ **Renewal Information**

OM&M Specialist: _____ Inspection Date: _____

☐ No problem noted
☐ Problem noted and corrected:

It has been determined that this permit meets the requirements of Yolo County Code chapter 18. Renewal is based on the information in the attached OM&M Report.

_____ _____ _____
Environmental Health Specialist Date Next Renewal Date

Operation, Monitoring and Maintenance (OM&M) Report Checklist (per Section 10 of the Manual):

1. System inspection and findings: include but not limited the following components (attach inspection reports)
   - Septic tank
   - Pump and dosing chamber
   - Control panel
   - Drainfield

2. Monitoring report for supplemental treatment effluent:
   - Annual monitoring of treated effluent and untreated effluent, if applicable:
     - Total coliform
     - Fecal coliform
     - BOD
     - TSS
     - Total nitrogen, if required
   - Additional monitoring data if the initial monitoring results fail the standards

3. Wastewater flow for the year

DEPARTMENT OF COMMUNITY SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
292 West Beamer Street, Woodland, Ca 95695
Telephone: 530-666-8646 • Fax 530-669-1448
Environmental.health@yolocounty.org

CONTRACTOR'S AS-BUILT REPORT

This is required for new system and major repair

Property Owner: _____
Mailing Address: _____
Property Address: _____ ☐ Same as mailing address
APN: _____, FA _____
Designer name/phone: _____

All items below must be completed by the installer

		N/A	Yes	No
I.	**SEPTIC TANK**			
	A) >5 ft. from foundation?	☐	☐	☐
	B) >50 ft from wells and surface water?	☐	☐	☐
	C) Bldg stub-out to septic tank: clean-out if not 1-2%?	☐	☐	☐
	D) Sanitary Ts in tank intact and clean?	☐	☐	☐
	E) Risers installed for access?	☐	☐	☐
	F) Leak test performed ?	☐	☐	☐
	G) Tank Size: _____ gal.; Manufacturer_____			
II.	**DISPERSAL FIELD**			
	A) >5 ft from foundation and >5 ft from property lines?	☐	☐	☐
	B) >100 ft from wells and surface water?	☐	☐	☐
	C) >10 ft from potable water lines?	☐	☐	☐
	D) Distribution box leveled with water?	☐	☐	☐
	E) Laterals level to +/- 1 inch & end caps present if not looped?	☐	☐	☐
	F) Gravelless chambers utilized?	☐	☐	☐
	G) System dimensions the same as shown on the design?	☐	☐	☐
	H) Gravel clean, properly sized, and proper depth?	☐	☐	☐
	I) Observation ports present?	☐	☐	☐
III.	**ADDITIONAL ITEMS FOR PRESSURE SYSTEMS**			
	A) Sand quality as specified on design?	☐	☐	☐
	B) Head height uniform and 24 inches? Actual head height _____	☐	☐	☐
	C) Clean-outs and observation ports present?	☐	☐	☐
	D) Mound: Side Slope 3:1?	☐	☐	☐
IV.	**PUMP/PUMP CHAMBER**			
	A) Screen basket or effluent filter (circle one) installed?	☐	☐	☐
	B) Riser installed for access?	☐	☐	☐
	C) Alarm installed?	☐	☐	☐
	D) Pump make _____; Pump model _____			
	E) Chamber size ___ gal; ___ gal/inch; Chamber Manufacture _____			
	F) Pump chamber draw-down _____ inches per minute; Height of pump off bottom of pump chamber _____ inches			
	G) Pump controls: Timer (or) Elapsed Time Meter (circle if installed); If timer is used: Pump on _____, Pump off _____			

Certification of Installation

☐ I certify that I installed the septic system without any deviation from the system design stamped "Approved" by Yolo county Environmental Health.

_____
Installer Date

APN: _____ FA: _____ Septic Permit: _____

As-Built Drawing

Minimum requirements: a scaled plot plan identifying the location of the installed system and components in relation to structures on the property

Checklist

- ☐ Drainfield & manifold orientation & layout
- ☐ Two corners (labeled as A and B) of a permanent structure closest to the septic tank. Triangulate measurements shall be taken from A and B to septic tank, D-boxes, ends of drainfield laterals, wells, curtain drains and roof drainage.
- ☐ Trench/bed dimensions and critical distances within layout
- ☐ Pump tank placement.
- ☐ Location of buildings
- ☐ Observation port & clean-out location
- ☐ Roads
- ☐ Septic replacement area
- ☐ Undisturbed native soil between trenches
- ☐ GIS coordinates for the septic tank
- ☐ North arrow

Installer Certification

☐ I certify that the system was installed per system design stamped "Approved" by Yolo County Environmental Health. I certify that if there any deviation made from the system design stamped "Approved" by Yolo County Environmental Health, they are shown above, and (applicable for supplemental treatment system only) I further certify that I contacted the designer and left the system open for inspection prior to cover.

_____

Installer Date

Designer Certification

(Required only for Supplemental Treatment System)

☐ I certify that I inspected the system installation and that is in substantial conformity with the approved system design.

_____

Designer Date

WHEN RECORDED RETURN TO:

COUNTY OF YOLO
ENVIRONMENTAL HEALTH DIVISION
DEPARTMENT OF COMMUNITY SERVICES
292 WEST BEAMER STREET,
WOODLAND, CA 95695

SPACE ABOVE FOR RECORDER'S USE

ONSITE WASTEWATER SYSTEM
ACCESS, INSPECTION, AND PERMITTING NOTIFICATION

Referenced in Onsite Wastewater Treatment System Ordinance and Manual as "Notice on Property Deed"

Property Identification:

Property Owner(s): _____

_____

Property (Site) Address: _____

_____
City State Zip

Assessor Parcel Number (APN): _____

EnvisionConnect Facility Number: _____

Real Property Description (See Attachment A):

System Type:

- ☐ Septic tank to pressure distribution dispersal;
- ☐ Supplemental treatment to pressure distribution dispersal;
- ☐ Other:

Purpose of the Notification

The purpose of this Notification is to meet the requirements specified In the Yolo County Onsite Wastewater System Treatment Ordinance and Manual for recordation of an agreement, and to protect water quality and public health by assuring:

1. Compliance with Chapter 18 of the Yolo County Ordinance,
2. Construction and installation of an adequate onsite wastewater treatment system, hereafter called "System", as a condition to the issuance of a building permit for the erection of any residential/commercial structure thereon,
3. Maintenance and renewal of the System's Operating Permit,
4. Assess to the System as required for monitoring and maintenance,
5. Operation, maintenance and monitoring (OM&M) of the System in a manner consistent with the Yolo County Onsite Wastewater Treatment System Manual, and
6. Information is provided to the System's owner wanting more information about the requirements for ongoing permitting, operation, monitoring and maintenance, and estimated cost for replacement of the System.

General Provisions

1. The provisions of this Notification shall bind and insure to the benefit of the heirs, assigns, and successors in interest of the parties hereto in the same manner as if they have herein been expressed named. This Notification shall remain in full force and effect until such time as the County shall execute a release or until such time as the State of California and the County no longer requires monitoring, inspection, and/or testing of a System in Yolo County.
2. In consideration of the approval of the System by County on the Property, the Owner hereby agrees to defend, indemnity, and hold County, its employees, officers and agents, free and harmless from any and all claims, damages, and causes of action of every kind, including but not limited to, the amounts of judgments, interest, court costs, legal fees, and all other expenses incurred by County arising in favor of any party, including personal injuries, death or damages to property (including employees or property of County) and without limitation by enumeration, all other claims or demands of every character occurring or in any way incident to, in connection with or arising directly or indirectly out of, the approval, inspection, testing, monitoring or other actions by the County pertaining to System, except to the extent County activities are grossly negligent or constitute willful misconduct. This provision is not intended solely to provide for indemnification of County as specified above.

Operating Permit Requirement

1. The Owner agrees to maintain a valid Operating Permit for the System, and renew the Operating Permit at the frequency established in the Onsite wastewater Treatment System Manual for the type of System maintained.
2. The Owner agrees to utilize a qualified OM&M Specialist to inspect, and service the System as a condition for Operating Permit renewal and at a frequency specified in the Onsite wastewater Treatment System Manual.

Access

1. The Owner grants to the County and its agents, employees, officers and contract persons access to all portions of the Property upon which the System and appurtenances thereto are located.
2. The access shall be for the purpose of inspecting, testing, sampling, placing and removing test devices for the purpose of evaluating and monitoring the System, and to investigate the effect of the System or failure thereof.
3. County personnel or designate contract persons shall utilize due care and caution when entering upon the Property and shall not hold Owner responsible for any injuries or damages that may occur while on the Property that could have been avoided with the exercise of due care and caution.
4. Except in the event of an emergency requiring immediate action to protect the public health and safety, the County shall provide Owner reasonable advance notice (generally, a minimum of 24 hours) of its intent to enter upon the property. Entry shall be limited to normal business hours unless otherwise arranged with owner.

Operating, Monitoring, and Maintenance

1. Treatment, dispersal, and designated replacement areas on the Property shall be protected for the System in accordance with Chapter 18 of the Yolo County Code and the On-Site Wastewater Treatment System Manual. Generally, the areas shall not be used for corrals, pasturing of large animals, building sites or any other use that would impair the System's operation. Replacement areas are shown on approved System design prepared by the Designer and approved by County.
2. For non-compliant systems, additional fees may be charged for administration and enforcement.
3. Costs associated with County abatement action in the event the System fails and Owner does not remedy the failure shall be the responsibility of the Owner. Costs of repair or remediation shall be paid by Owner separate from the costs associated with maintenance of the System's Operating Permit.

4. Nothing in this Notification shall be construed as requiring County to make any of the improvements described, nor shall any provisions of this Notification be deemed to preclude any other relief provided by law.

Additional Information

The Owner may obtain additional information from Yolo County Environmental Health regarding the System's operation, monitoring, and maintenance and estimated costs of System maintenance and replacement.
I understand that this License is for the limited purpose of monitoring as required by the State of California and/or County of Yolo.

I understand that this License is for the limited purpose of monitoring as required by the State of California and/or County of Yolo.

IN WITNESS WHEREOF, the parties have executed this Notification this ___ day of _____ _____, 201 __.

Approved as to Form

I have reviewed this Deed Restriction, set forth above, and it is hereby approved for recordation by the property owner.

_____

Environmental Health Specialist (signature and printed name) Date

Property Owner

I certify that I am the owner of record of the Property and agree to be bound by the provisions set forth herein.

_____ _____

Signature Date Printed Name

ACKNOWLEDGEMENT

State of California
County of Yolo

On _____ before me,

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

_____ Notary Public,

Name and Title of Officer

Personally appeared

_____

_____

who proved to me on the basis of satisfactory evidence to be the person (s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand & official seal

_____ Signature of Notary Public NOTARY SEAL

Attachment A

Parcel Legal Description

(Note: Parcel Legal Description Attached as Page 4)

DEPARTMENT OF COMMUNITY SERVICES
DIVISION OF ENVIRONMENTAL HEALTH
292 West Beamer Street, Woodland, Ca 95695
Telephone: 530-666-8646 • Fax 530-669-1448
Environmental.health@yolocounty.org

FOR OFFICE USE ONLY: FA #: _____ SR #: _____

APPLICATION FOR SEPTIC SYSTEM DESIGN VARIANCE

APPLICANT: Name: _____ Phone: _____ email: _____

Mailing address: _____

OWNER: Name: _____ Phone: _____ email: _____

Mailing address: _____

CONTRACTOR: Name: _____ Phone: _____ email: _____

Mailing address: _____

PROPERTY:

Assessor Parcel Number (APN): _____

Address: _____

SYSTEM DESIGN:

Please attach a design for the proposed septic system. Include lot size, all existing structures, wells, proposed setbacks and limiting factors (i.e. slopes, high groundwater, wetlands, trees, and vegetation etc.)

Variance(s)Requested:	**Applicable County Code:**	**Reason(s) for Variance:**	**Alternatives if Variance is Denied:** *(No variance shall be granted where there is an alternative that meets adopted standards)*

The Variance (s) Process:

On a case by case basis, the Director of Environmental Health may grant a variance to certain provisions of the Yolo County Code. Such requests shall be made in writing by the applicant and include an appropriate fee. No variance will be granted that constitutes a grant of a special privilege inconsistent with limitations placed upon other properties in the same or similar circumstances.

The applicant must provide written evidence that ALL eight (8) of the following criteria for granting the variance(s) are being met. The detailed statements answering each of the following criteria shall be attached to this application.

(1) The variance would not present a public health hazard, have an adverse environmental effect, or result in pollution or degradation of ground water or surface water.

(2) Special circumstance(s) exist(s) for the subject property and for which strict application of the requirements of County Code create(s) an undue hardship.

(3) The hardship is due to unique conditions affecting the property.

(4) The hardship was not intentionally caused by the action of the applicant.

(5) The requested variance will not have an adverse effect on the surrounding properties.

(6) The requested variance will not confer on the applicant any special privilege that is denied to other property owners with similar circumstance.

(7) The strict interpretation of the provisions of the County Code would deprive the applicant of rights commonly enjoyed by other properties in the same or similar circumstances.

(8) The requested variance is the minimum variance which would alleviate the hardship.

I certify that the above information and the attached information is correct, and that I am authorized to file an application for a Variance Request to a Septic System Design affecting said property on behalf of the owner.

_____ _____

Applicant Signature/Title Date

_____ _____

Property Owner Signature Date

Office Use Only:

- **REHS Findings/Remarks:**

  _____

  _____

  Reviewed by: _____**, REHS** **Date:** _____

- **EH Supervisor Findings/Recommendation:**

  _____

  _____

  Reviewed by: _____ **Date:** _____

- **Director of Environmental Health Findings/Recommendation:**

  _____

  _____

  ☐ **Variance Granted with the following conditions:**

  _____

  ☐ **Variance Denied for the following reason(s):**

  _____

  Director of EH: _____ **Date:** _____

County of Yolo

DEPARTMENT OF COMMUNITY SERVICES
Division of Environmental Health

292 WEST BEAMER STREET, WOODLAND, CA 95695
PHONE: (530) 666-8646 ~ (916) 375-6475 FAX: (530) 669-1448

Septic Pumper Truck Spill Kit Requirements

Sewage spills are an infrequent occurrence, but are an important public health issue that should always be considered. Raw sewage contains biological agents such as bacteria, viruses, fungi, and parasites that can cause serious illness and even death. If you have a sewage spill, proper cleaning and disinfecting procedures should be followed to prevent illness. Basic procedures for clean-up are listed on the other side of this handout.

The following items shall be included on the truck at all times:

1. **Personal protection equipment:**
   Gloves, Rubber boots, Eye protection

2. **Pigs** – a containment tool to prevent the movement of wastewater liquids to unwanted areas and to stop the spill from entering storm drains or other natural surface waters.

3. **Absorbent material** – to absorb wastewater liquid (kitty litter works well).

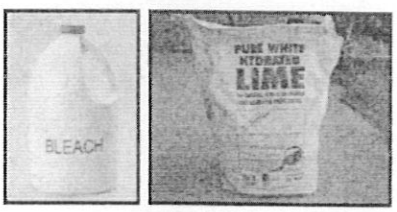
4. **Shovel** – to pick up contaminated absorbent material and solids.

5. **Garbage bags** – to throw away solids and absorbent pigs.

6. **5-gallon bucket** – to contain solids and/or tools needing disinfection after spill.

7. **Bleach** – ¾ cup to 1 gallon water will disinfect area after solids are removed.

8. **Lime** – to be used if near surface water or other waterways to disinfect area after solids are removed. Always follow container label.



Standard Procedures for Cleaning Up Domestic Wastewater/Sewage Spills

- If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.

- Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a sewage spill. (Dispose of gloves and wash rubber boots when leaving spill site).

- Lime may be applied to the affected area but should only be used or applied by people experienced in using this material and excess lime must be removed after the sewage has been removed. Please note that hydrated lime is a caustic material and is dangerous to handle and apply. Follow directions on the label.

- Do not mix cleaning / disinfecting products or chemicals. Cleaning products can react with one another to produce toxic vapor or liquid substances.

- If the spilled material can't be recovered using hand tools, a commercial vacuum/pump truck should be called to remove all visible liquid and solid material.

- When the area is visibly clean, either a chlorine / water solution (using Clorox or a bleach that has "sanitizes" or "kills germs" on the label) or hydrated lime should be applied to the spill area to disinfect. To make a 5% chlorine solution, add 3/4 cup Clorox bleach to one (1) gallon of water.

- If the spill occurred in a heavily populated area and odor may be an issue or is within 100 feet of surface water, hydrated lime should be applied to the area in place of chlorine bleach. Enough hydrated lime should be applied to raise the pH to at least 12. By raising the pH to 12 for at least 1 hour, the area will be disinfected. Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period. If using lime, any residual must also be cleaned up. Lime is also highly corrosive to aluminum, so don't use where aluminum is present – use chlorine.

- After the spill area has been cleansed (24 hours after the chlorine solution or hydrated lime has been applied) and any residual lime removed, the barriers may be removed and access to the area restored.