

Humboldt County Department of Health and Human Services

DIVISION OF ENVIRONMENTAL HEALTH

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TO: Applicants Requiring Individual Sewage Disposal System Permits

FROM: Division of Environmental Health

SUBJECT: Procedures and Requirements

This handout is prepared to assist any applicant so that his/her application can be processed by the Division of Environmental Health in the most expeditious manner possible. If there are any questions, please contact the Division of Environmental Health at the above listed number. Please have your Assessor's Parcel Number (APN) available so the file can be retrieved.

New Construction

1. Sewage Disposal Permit applications must be submitted to Humboldt County Building Division at 3015 H Street, Eureka, for processing. The Building Department will forward the application to the Division of Environmental Health for review and evaluation. If the permit is approved by the Division of Environmental Health it will be returned to the Building Division to be issued. The Building Division cannot issue the permit until all appropriate County agencies have made the determination that the project will comply with all applicable requirements.

If the permit is recommended for denial by the Division of Environmental Health, the applicant will be notified in writing of the reason for the recommendation.

2. Plot plans must be drawn to scale with all of the required information supplied to facilitate rapid processing (see Typical Plot Plan – Page 7, and the Plot Plan Information – Page 6).
3. Applications for new or expanded uses utilizing existing sewage disposal systems must be re-permitted on the basis of the new or expanded use according to the Division of Environmental Health's "Existing System Policy." Information indicating the old permit number and/or the name of the person who owned the property and the year the septic tank was installed must be included with the application.
4. All applications will be field inspected. If any problems arise, the applicant will be notified by the Division of Environmental Health.

PLEASE READ CAREFULLY

Site Evaluation General Procedures for the Installation of a New Sewage Disposal System.

Installation: In order to make the determination that a particular site is suitable for the installation of a sewage disposal system, certain sequential steps must be followed. This could include, but is not limited to, the following:

1. General survey of the parcel to locate a suitable site for the proposed development. Specific floor plans are not required for the purpose of evaluating a sewage disposal system permit.
2. Locate a site for possible installation of the sewage disposal system. This would include sufficient area to accommodate primary and reserve leachfields based on the proposed number of bedrooms. The site must also meet all the setback requirements (property lines, water sources, steep slopes, streams, and the structure) (see page 5).
3. Sewage disposal systems may not be installed on slopes that exceed thirty (30) percent. Leach trenches may only be installed in native soils.
4. Once a site has been located that appears to meet the above-listed criteria, soils testing can proceed. A backhoe test pit in each of the primary field and reserve field areas must be excavated and soils samples taken. Only an Environmental Health Specialist (EHS) from the Division of Environmental Health or a qualified consultant are qualified to collect the samples and read the profiles. If percolation testing is required, it must be done by an EHS or a qualified consultant (see additional soils testing information on page 4).

Plot plans for sewage disposal systems may be prepared by the applicant, engineer, or other qualified person. Please follow the information contained in the Plot Plan Information Sheet included in this handout on page 6.

Any person applying for a sewage disposal system permit has two options as to how to proceed:

1. Obtain the services of a qualified consultant. Sites with seasonal high ground water and/or clay soils will require a consultant. The consultant will prepare the plot plan, complete the soils testing, and then present the application and the soils information to the Humboldt County Building Department. (The application will then be sent to the Division of Environmental Health).

2. Obtain the services of the Division of Environmental Health. Only sites with deep, well-drained soils may be sampled and evaluated by DEH. Applicant will prepare the plot plan and present the application to the Humboldt County Building Department, which will then be sent to the Division of Environmental Health. Arrangements must be made by the applicant to have a backhoe and the Environmental Health Specialist on site for the soils work. The applicant is responsible for transporting the soil samples to an approved laboratory and the results to the Division of Environmental Health. A list of approved laboratories is available at the Division of Environmental Health.

NOTE: The Division of Environmental Health is unable to conduct an inspection of the site until the application is received.

When the application is approved by the Division of Environmental Health, it will be sent to the Building Division which will release the permit to the applicant when all other County Regulations have been met. In case of a recommendation for denial of an application, the applicant will be notified in writing of the reasons for the negative declaration.

Approval of an application is good for one year from the date of the release of the permit. If an extension is needed, the applicant must make this request in writing to DEH prior to the expiration date on the permit. Such request must include the information that the construction is expected to be completed within the year and that the project has not changed.

REPAIRS TO EXISTING SEWAGE DISPOSAL SYSTEMS

1. Applications must be presented to the Division of Environmental Health.
2. Applications for repairs must conform as close as possible to current regulations.
3. Approved repair applications will be sent directly to the applicant.
4. The nature of the repair needed and any soils testing required, will be determined as a result of a joint on-site inspection by the area Environmental Health Specialist, the applicant, and if appropriate, the septic system installer.

SOILS INFORMATION FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM APPLICATIONS

On August 16, 1979, the California Water Resources Control Board adopted the North Coast Regional Water Quality Control Board "Policy on the Control of Water Quality With Respect to Individual Waste Treatment and Disposal Practices."

This policy has established requirements for evaluating the suitability of soils for individual sewage disposal systems. These include backhoe excavations for soil observation, and soils analysis for bulk density and texture.

THE BACKHOE EXCAVATION: The backhoe excavation for soil profile observation consists of one (1) backhoe excavation in the area of the primary leachfield area and one (1) backhoe excavation in the replacement area. The depth of the excavation should extend at least five (5) feet below the bottom of the proposed leachline depth. If the leachline trench depth is five (5) feet, then the excavation should be ten (10) feet deep. The following factors will be observed from the ground surface to a depth of at least five (5) feet below the proposed leachfield system.

- a. Thickness and coloring of soil layers and apparent United States Department of Agriculture Classification.
- b. Depth to and type of bedrock, hardpan, or impermeable soil layer.
- c. Depth to observed ground water.
- d. Depth to soil mottling.
- e. Other prominent soil features such as structures, cobbles, roots, pores, and dampness.

If there is a problem getting a backhoe to the site, please discuss this with the Division of Environmental Health.

Unless you have a consulting engineer or other professional handling your project, please do not proceed with any excavations or analysis until your Environmental Health Specialist has notified you to do so.

SETBACKS FOR SEPTIC TANKS AND DISPOSAL FIELDS

	Property on Public Water System		Property on Individual Water System	
	Septic Tank (ft.)	Disposal Field (ft.)	Septic Tank (ft.)	Disposal Field (ft.)
Property Line	5	10	25	50
Foundation of Building or outside wall of Mobile Home	5	10	5	10
Wells, Springs, Ocean, Lake or Reservoir	100	100	100	100
Perennial stream (1)	100	100	100	100
Ephemeral stream (2)	50	50	50	50
Fill area, top of cuts, or edge of steep slopes (3)	25	25	25	25
Unstable Land Forms	50	50	50	50
Swimming Pools	25	50	25	50

(1) As measured from the line which defines the limit of a 10-year Frequency Flood.

(2) Measured from the edge of the water source.

(3) Where soil depth or depth to groundwater below the leaching trench is less than five (5) feet, a minimum set-back distance of fifty (50) feet shall be required.

PLOT PLAN INFORMATION

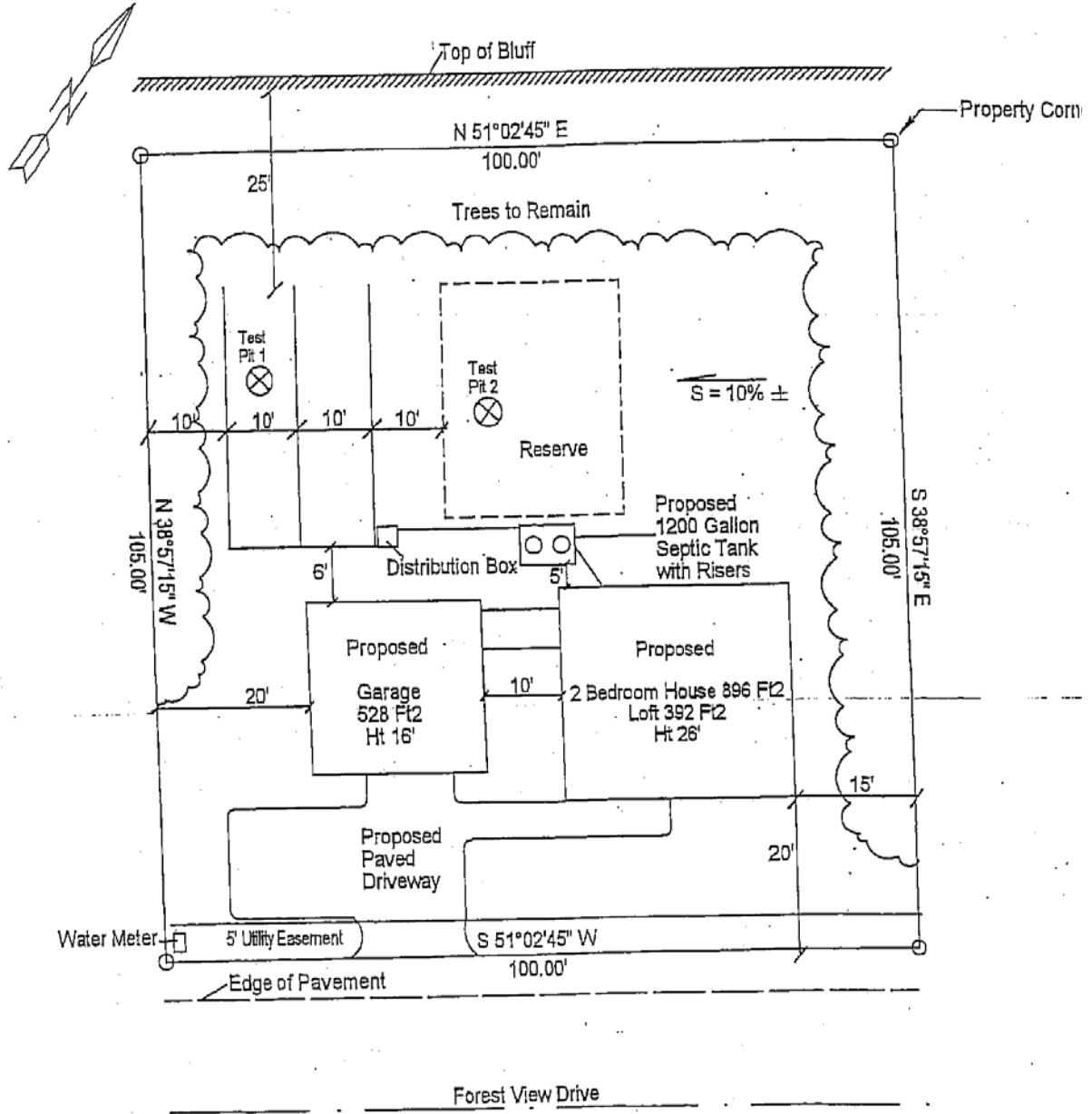
In order for the Division of Environmental Health to evaluate your application for an individual sewage disposal system permit, the following information is required by Humboldt County Code.

1. A site map including:
 - a. Appropriate scale
 - b. Landmarks
 - c. Steep slopes (in excess of 30%)
 - d. Roads
 - e. Surveyors' landmarks
 - f. Lot dimensions
 - g. Existing or proposed road and utility easements
 - h. Proposed or abandoned sewage disposal systems
2. The proposed sewage disposal system must be accurately depicted in relation to:
 - a. All structures
 - b. Wells and water courses
 - c. Property lines
 - d. Septic tank system replacement area
3. Average cross slope (%) of area considered for sewage disposal system and replacement area.
4. If the project is non-residential (office or commercial), the estimated daily flow must be presented and the method used for estimation. This information is available in the Division of Environmental Health Sewage Disposal Regulations.

If you need assistance in preparing this information, we suggest that you contact a qualified consultant.

TYPICAL PLOT PLAN

The size and layout of your plan may be different than the illustration.



Scale: 1" = 20'

Notes:

1. No Drainage Courses
2. Water: Willow Creek Community Services District
3. Propane Tank to be Located
4. Minor Grading Less than 50cy

PLOT PLAN CHECKLIST

Plot plans shall be drawn in ink on 8 ½" x 11" paper and shall include as appropriate, the information outlined on this checklist. Under unusual circumstances (i.e. odd shaped lots, industrial or commercial developments, etc.) additional information may be required. Submit 7 copies of finished plot plan.

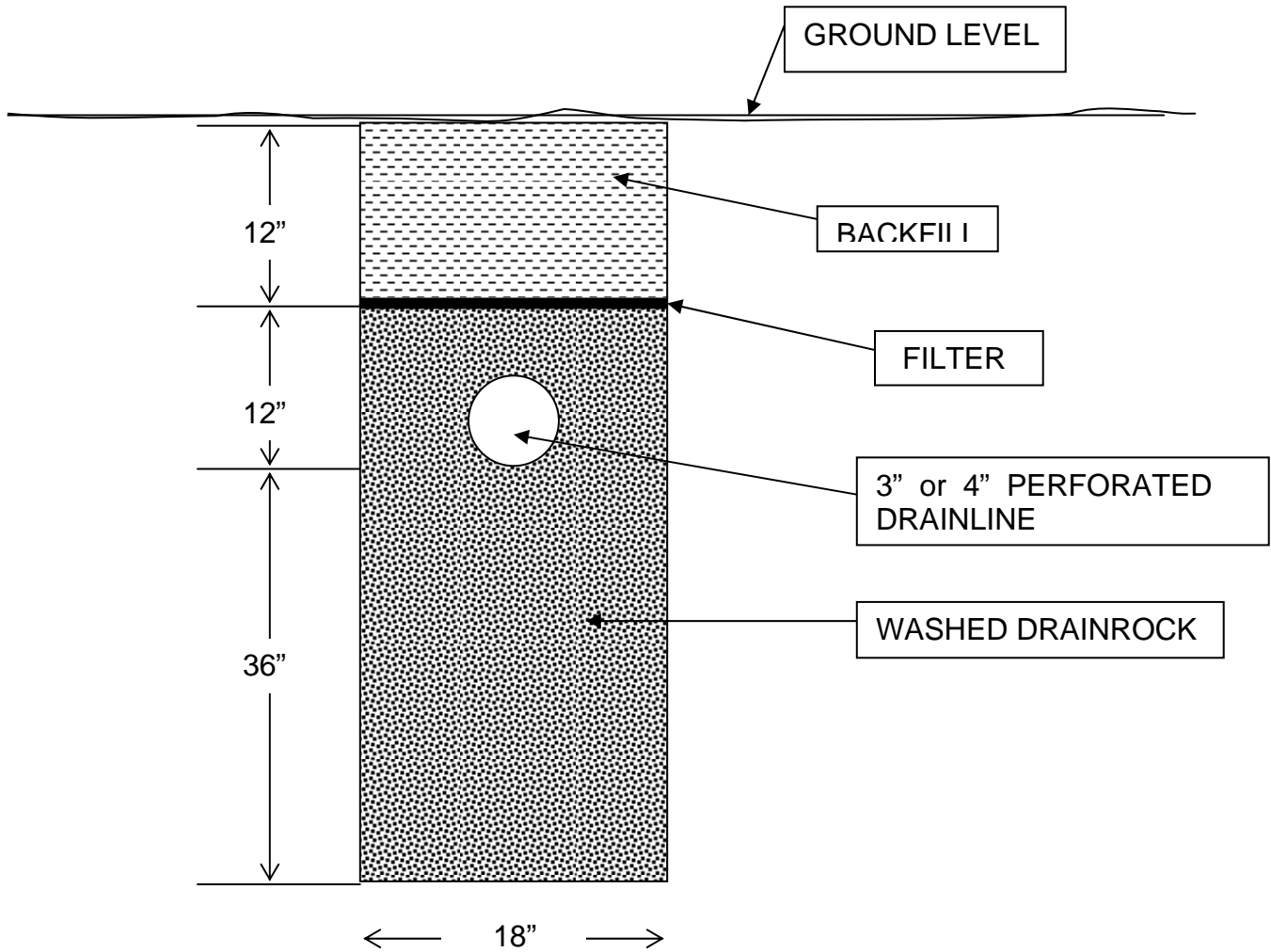
KEY INFORMATION

_____ ASSESSOR'S PARCEL NUMBER, OWNERS NAME, ADDRESS AND
PHONE NUMBER
_____ NORTH ARROWS AND SCALE OF DRAWING

PLOT PLAN INFORMATION

_____ PROPERTY LINES AND DIMENSIONS OF PROPERTY
_____ LOCATION OF KNOWN SURVEY MONUMENTS
_____ LOCATION, SIZE AND DISTANCE BETWEEN ALL EXISTING AND
PROPOSED BUILDINGS
_____ LABEL USE OF ALL BUILDINGS AND INDICATE WHETHER THEY ARE
EXISTING OR PROPOSED
_____ DISTANCE FROM PROPERTY LINES TO ALL IMPROVEMENTS
SHOWN ON PLOT PLAN
_____ WIDTHS AND NAMES OF ABUTTING STREETS AND ACCESS
RIGHTS-OF-WAY
_____ LOCATION OF ALL KNOWN EASEMENTS
_____ LOCATION OF DRAINAGE COURSES, CREEKS, AND DIRECTION OF
SURFACE RUNOFF
_____ LOCATION OF ALL TREES TO BE REMOVED OR AFFECTED BY
PREPARATION OF PROJECT SITE
_____ LOCATION AND SETBACKS OF SEPTIC TANKS, LEACHFIELDS AND
RESERVE FIELDS
_____ LOCATION OF ON-SITE WATER SOURCE(S), SUPPLY, AND
STORAGE FACILITIES
_____ LOCATION OF DRIVEWAY AND IMPROVED OFF-STREET PARKING
SPACES, INCLUDING GARAGE
_____ DIRECTION AND DEGREE OF SLOPE, IF KNOWN, IN PROPOSED
LEACHFIELD, BUILDING AND GRADING AREAS

TYPICAL CROSS SECTION OF TRENCH (Free Scale)



SLOPE = 30% MAX.

RESIDENTIAL REQUIREMENTS FOR CODE SYSTEMS

Approx. Specifications of Trenches

Number of Bedrooms	Per Day (gallons)	Tank Size (gallons)	Square Feet Sidewall Area Area Below Pipe	Total Number of Lines	Trench Length (ft)	Depth Below Pipe (ft)
1 to 2 bedroom house	300gal	1200gal	600sf	4	50'	3'
3 bedroom house	450gal	1500gal or 1800gal	900sf	6	50'	3'
4 bedroom house	525gal	1500gal or 1800gal	1080sf	8	45'	3'
Each additional bedroom	75gal per bedroom	200gal per bedroom	150sf per bedroom		25' per bedroom	3'

The basic factor is the number of rooms usable as bedrooms.

With the exception of the one bedroom specifications, this table has been calculated using:

- Bedroom occupancy factor of 2.
- Per capita consumption of 75 gallons per day.
- 72-hour retention factor and allowances for garbage disposal.
- Maximum loading rate of 0.5 gallons per square foot per day, which is the equivalent of a Ryon Standardized Percolation Test result of 30 minutes.