

2740 Allen Street



**BRIAN L. HEWITT ENGINEERING L.L.C.**

**Site Evaluation Report**

April 21, 2007

Job # 07-087

Property Address: near 2728 Allen Street, Kelso, **East Lot**

Client: Gary Swanson 2728 Allen St. Kelso, Washington 98626

Parcel Number: part of W12515005

Bedroom #4

Acres: 3.06

**Site Characteristics**

General Topographic Characteristics: Dissected terrace side slopes.

Restrictive Layer: Soil mottling starts 21 to greater than 60 inches.

Drainage characteristics: Soil mottling indicating a perched water table.

General Slopes: 8 to 15 percent

Slope of proposed drainfield location: 7 percent north (south set) and south (north set)

General geology: Volcanic ash over residuum and old alluvium

Vegetation: pasture

Surface water: greater than 100 feet south.

Distance to nearby wells: Greater than 100 feet northeast and northwest (two wells)(from north set).

Distance to public sewers: N.A.

Structures on Property: none on property

Other concerns: none

**Site evaluator's statement regarding type of system required:**

Based upon the soil analysis performed April 21, 2007, it is my determination that the primary on-site sewage system is approved for a Pressure Distribution Drainfield.

The primary Drainfield area will require 1,200 sq. ft. (of Drainfield) minimum and 3,180 sq. ft. (land area) or 64 ft. by 50 ft.

The reserve area is approved for a Intermittent Sand Filter to a Pressure Distribution system and will require 1,200 sq. ft. (of Drainfield) minimum and 3,180 sq. ft. (land area) or 64 ft. by 50 ft.

Submitted by: Brian L. Hewitt P.E. # 29393

Expires 5/1/09

Date: July 19, 2007



7/15/07

EXPIRES 5/1/09



# BRIAN L. HEWITT ENGINEERING L.L.C.

## Soil Evaluation Report

April 21, 2007

Job # 07-087

Property Address: near 2728 Allen Street, Kelso, East Lot

Client: Gary Swanson 2728 Allen St. Kelso, Washington 98626

Parcel Number: part of WI2515005

Location: SE/4 of Sec. 25 Township 8N Range 2W

### Soil Information

**Natural Resource Conservation Service Soil Survey of Cowlitz County, 1988.**

Test pits are located in NRCS soil survey mapping unit, 101 Kelso silt loam, 8 to 15 percent slopes.

Kelso soil characteristics:

0 to 11 inches silt loam, moderate structure

11 to 18 inches silt loam, weak structure

18 to 34 inches silty clay loam, moderate structure

34 to 60 inches silt clay loam or silt loam, mottled, moderate structure?

### Summary of soils found

Soils observed are similar to Kelso soil mapping unit. The soils pits observed have silt loam moderate structure soil surface. The subsoil is silt loam with moderate structure. The substratum is a silt loam, mottled, weak structure starting at 21 to greater than 60 inches.

### Observed Soil Profiles used for initial and reserve:

<u>Depth</u> Inches	<u>Description</u>
<b>Test Hole #1</b>	
0-10	silt loam, moderate subangular blocky structure.
10-31	silt loam, moderate prismatic structure
31-60	silt loam, mottled, weak structure
<b>Test Hole #2</b>	
0-10	silt loam, moderate subangular blocky structure
10-60	silt loam, moderate prismatic structure
<b>Test Hole #3</b>	
0-10	silt loam, moderate subangular blocky structure
10-60	silt loam, moderate prismatic structure
<b>Test Hole #4</b>	
0-10	silt loam, moderate subangular blocky structure
10-24	silt loam, moderate prismatic structure
24-33	silt loam, mottled, weak structure
33-60	silt loam, massive
<b>Test Hole #5</b>	
0-10	silt loam, moderate subangular blocky structure
10-21	silt loam, moderate prismatic structure
21-37	silt loam, mottled, weak prismatic structure
37-60	silt loam, massive
<b>Test Hole #6</b>	
0-10	silt loam, moderate subangular blocky structure
10-40	silt loam, moderate prismatic structure
40-60	silt loam, mottled, weak prismatic structure

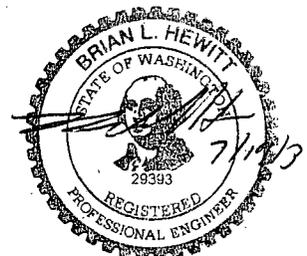
**Parent Material:** Volcanic ash over old alluvium

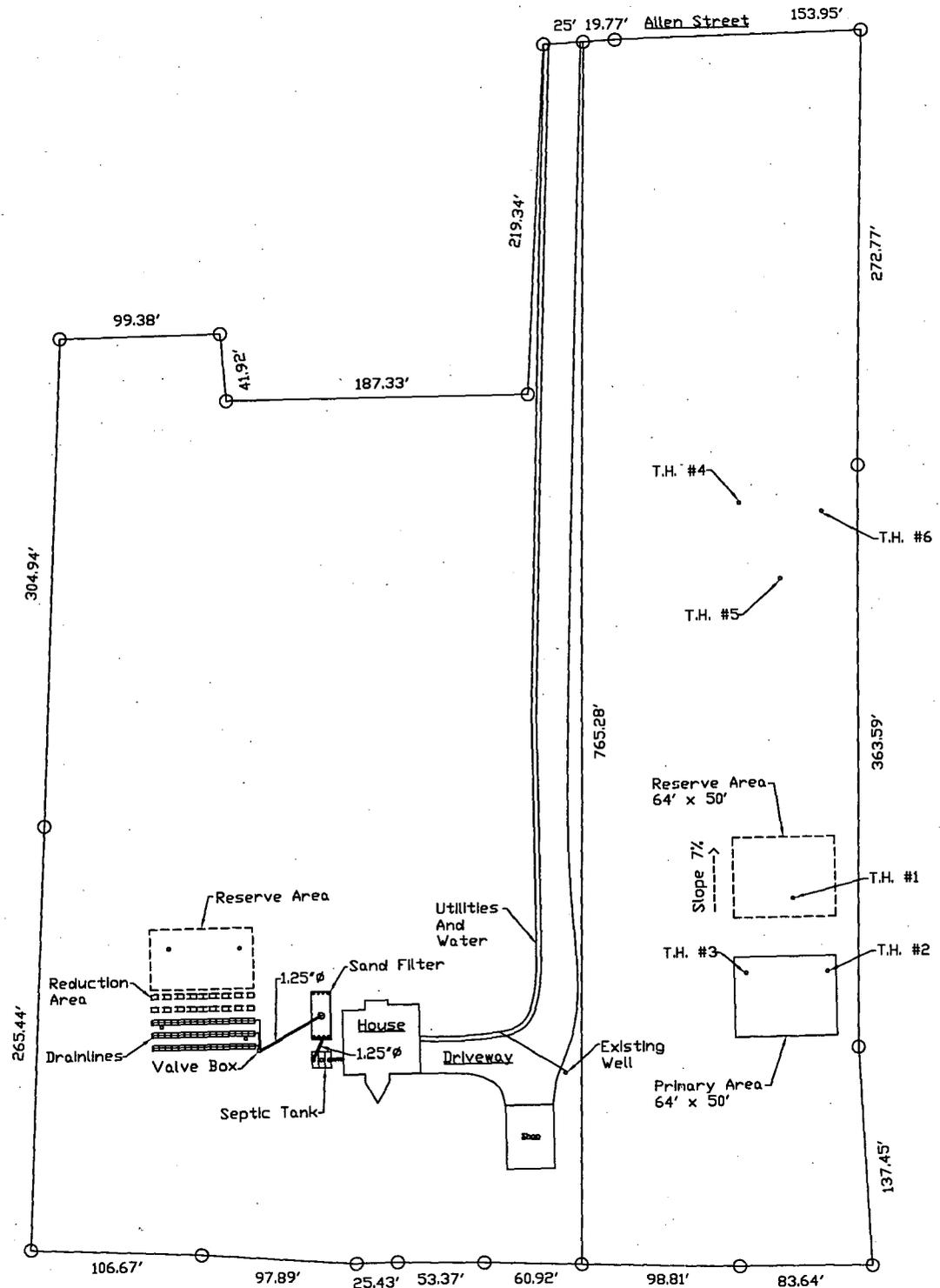
**Restrictive Layer:** 21 to greater than 60 inches, seasonal water table.

**Proposed infiltrative surface rate for a moderate structured silt loam:**

USEPA, silt loam 0.4 gal/ft<sup>2</sup>-day (BOD>150), WAC 246-272A (July 05, 2005) silt loam 0.4 gal/ft<sup>2</sup>-day

Consultant recommends: 0.4 gal/ft<sup>2</sup>/day.





**SITE PLAN**



EXPIRES MAY 1, 2009

Gary Swanson  
 near 2728 Allen Street  
 Kelso, Washington 98626  
 Brian L. Hewitt Engineering L.L.C.  
 3029 Maple St.  
 Longview, Washington 98632  
 Cell: 360.751.3751 Fax: 360.425.2255  
 e-mail: Hewitt.Engineering@comcast.net

Date: 07/19/07 Job #07-087

Scale: 1"=80'-0"

Sheet M-9