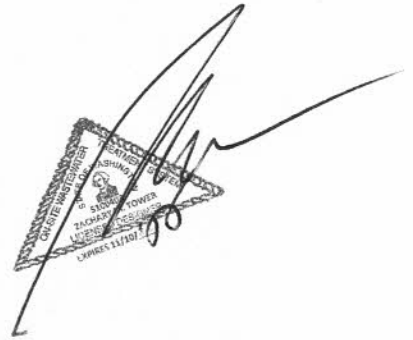


TOWER DESIGNS, INC.
509-548-4496

November 8, 2021

Justin Stobb
9131 Evergreen Way
Everett, WA 98204



Re: SITE EVALUATION OF Lot 9, Beach at Corral Creek, Parcel #45800000900, Douglas County, WA, 13 Fredrick Ct.

Mr. Stobb,

At your request we have made an evaluation of the above property for suitability for placement of a single-family residence utilizing an on-site sewage disposal system. The type of septic system required on a property is based on the type and depth of the soil on the property in the area of the proposed septic system. To determine the soil profile on the property one or more test holes were dug. The following are the results of the soil observations.

Test Hole #1: 0-72" – brown, blocky, loamy fine sand (Type 4)

Test Hole #2: 0-30" – brown, blocky, loamy fine sand (Type 4)
30-72" – grey, single-grained, very to extremely gravelly/stony, medium sand with fine sand lenses (Type 1)

slope = see site plan

The property was evaluated as shown on the attached map. The site plan is approximate and does not constitute a survey.

In an on-site sewage disposal system, the soil is used to provide treatment of the effluent from the septic tank. The regulations (WAC 246-272A) require that 3 feet of a suitable soil be present between the bottom of a drainfield trench and any restrictive layer or unsuitable soil. The soil observed in test hole 2 is not a suitable soil for a conventional gravity system because it does not provide adequate treatment of the septic tank effluent. The soil observed in test hole 1 is suitable however since any system will need to be placed between the test holes the most restrictive soil condition must be used. In order to meet the current regulations, a system placed on this site must meet treatment level "B".

An appropriate septic system for this site would be to utilize a pressurized, sand-lined drainfield system. This system uses 2 feet of ASTM-C33 sand under the drainfield to treat the effluent prior to its discharge to the surrounding soil. The effluent is applied evenly to the trench or bed

with a pump. The system must conform to the Washington Technical Review Committee guidelines for sand-lined trenches and pressure distribution.

The following parameters are to be used for the design.

Native soil loading rate = 1.0 gallons/day/square foot in test hole 2, 0.6 gallons/day/square foot in test hole 1 (can be increased to 1.0 gallons/day/square foot with treatment level "B")

Doses/day = 4 minimum

Maximum depth of sand original soil interface = 60"

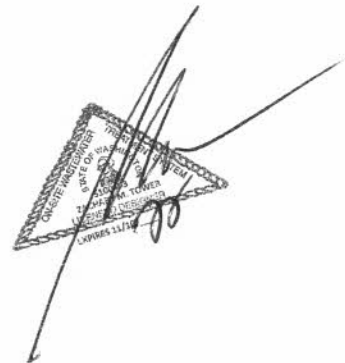
This system could be placed in a narrow bed configuration with a standard waiver from state regulations. Since this lot is served by a public water source and is over 1 acre this waiver would be allowed.

I have attached a sketch of a 4-bedroom initial and reserve drainfield in the area of the test holes. This area would need to be barricaded or otherwise protected from vehicular traffic.

When you are ready to have this system designed, please send over a site plan of the house location and dimensions so that the septic system components can be sited accurately. If you have any questions, please feel free to contact me.

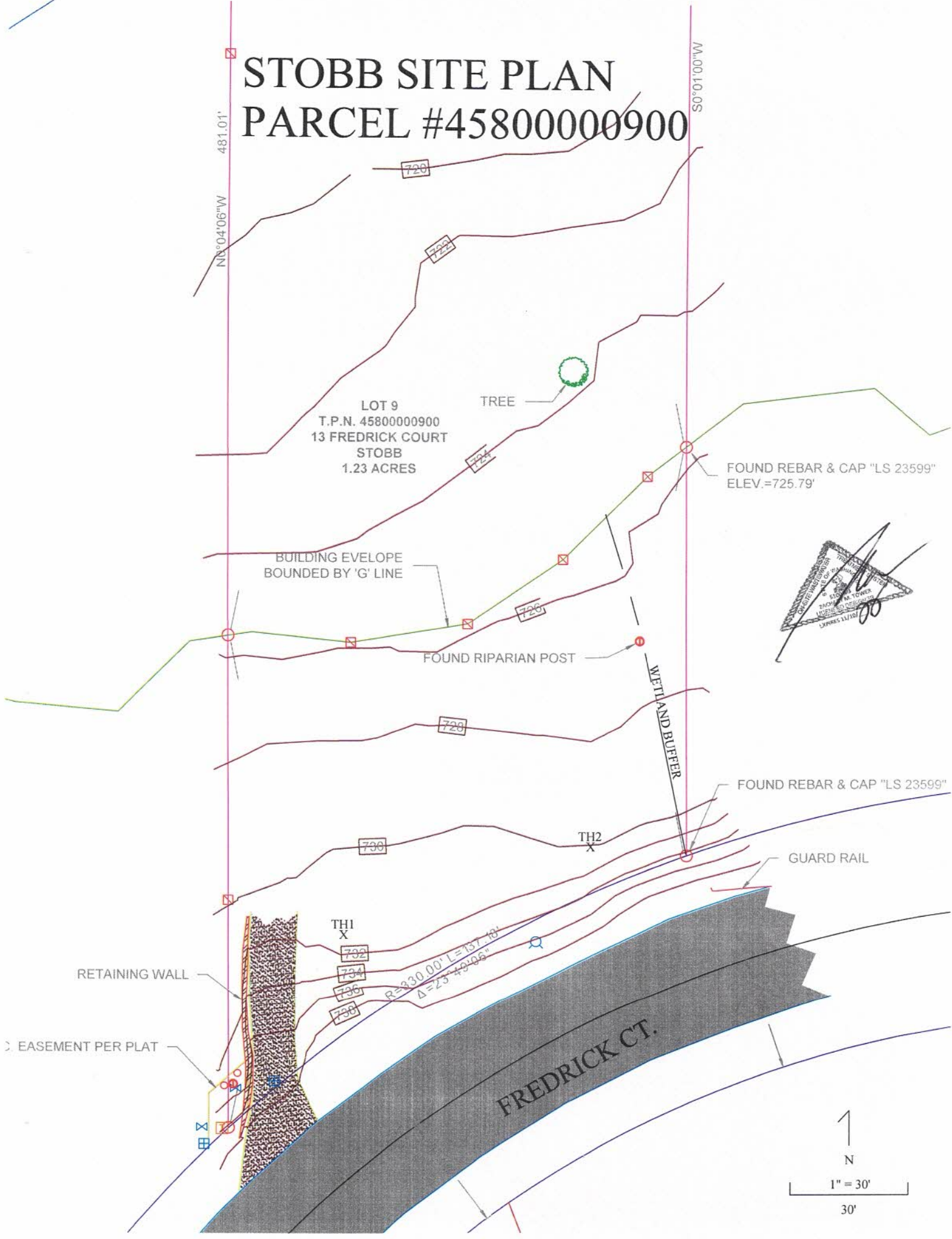
Sincerely,

Zachary Tower
Tower Designs, Inc.
P.O. Box 2022
Leavenworth, WA 98826





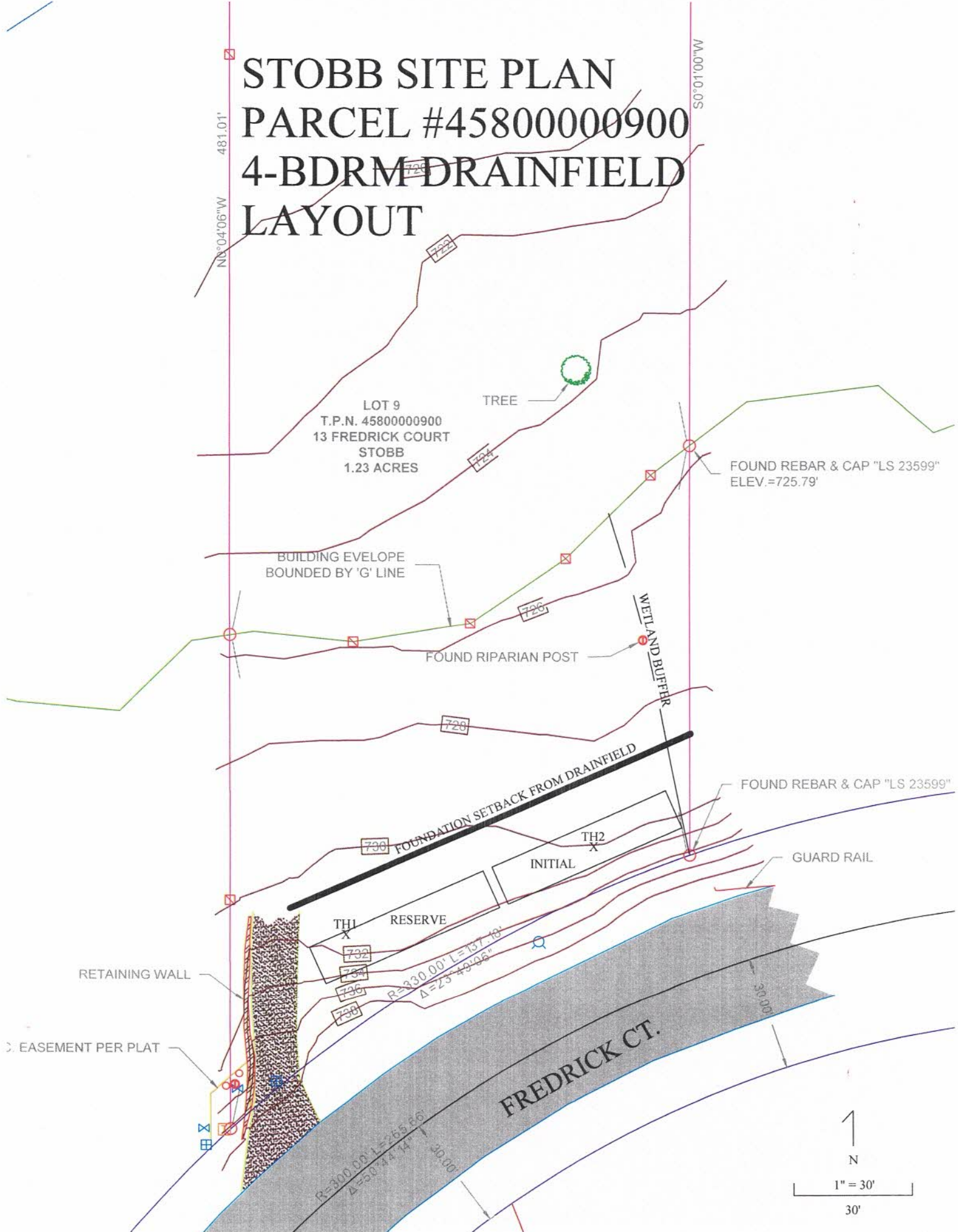
STOBB SITE PLAN PARCEL #45800000900



STOBB SITE PLAN

PARCEL #45800000900

4-BDRM DRAINFIELD LAYOUT



N 0° 04' 06" W 481.01'

TREE

BUILDING EVELOPE
BOUNDED BY 'G' LINE

FOUND RIPARIAN POST

FOUNDATION SETBACK FROM DRAINFIELD

FOUND REBAR & CAP "LS 23599"

GUARD RAIL

RETAINING WALL

C. EASEMENT PER PLAT

FREDRICK CT.

1

$$1'' = 30'$$

30'

STOBB SITE PLAN PARCEL #45800000900 4-BDRM DRAINFIELD LAYOUT

