

**Public Health – Seattle & King County
Environmental Health Division**

**DESIGN CHECKLIST
ON-SITE SEWAGE SYSTEM (OSS)**

The following checklist is a guide to assist the designer in submitting a complete site design application. It should not be included with the site application. A properly prepared site application must include the items listed below along with any additional details and specifications required by applicable provisions of The Code of the King County Board of Health – Title 13. **The designer must insure that all materials and documents submitted are legible and properly collated. A minimum of four complete design applications/sets must be submitted.**

SITE ADDRESS: _____

PARCEL NUMBER:

| | | Yes | No |
|-------------------------------------|---|-----|----|
| SITE DESIGN APPLICATION FORM | | | |
| <input type="checkbox"/> | The form is completely filled out, submitted in quadruplicate, and accompanied by the appropriate fee. <ul style="list-style-type: none"> • Signature of designer or PE in blue ink • Stamp of designer or PE on drawings and calculation page <i>Data on all copies must be legible (failure to provide legible documents is cause for rejection).</i> | | |
| <input type="checkbox"/> | Cover letter if you need to explain any unusual circumstances | | |
| <input type="checkbox"/> | Label the top of site application form if any of the following apply; revision, resubmission or repair due to a failing OSS (Note: include a copy of the site application denial letter if connected to a previous submission). | | |
| VICINITY MAP AND SITE PREP | | | |
| <input type="checkbox"/> | Reference maps are provided (vicinity, location and routing to site) <ul style="list-style-type: none"> • Written directions provided to site from last labeled street. • Lot labeled with designers sign and clients name at entry point • Route to soil log holes and well site flagged and trail cleared | | |
| SOIL AND SITE EVALUATION | | | |
| <input type="checkbox"/> | Soil logs (minimum of 5 per site) – properly located, sized, constructed and maintained (i.e. to preclude safety hazards, see Title 13, section 13.28.050) - are installed. <ul style="list-style-type: none"> • One soil log hole located by wastewater tanks and treatment device. • At least four soil logs define the primary and reserve areas | | |
| <input type="checkbox"/> | An accurate description of soil conditions is provided | | |
| <input type="checkbox"/> | Texture, structure, compaction and affect on treatment and water movement potential is indicated | | |
| <input type="checkbox"/> | The USDA (SCS) soil classification is used | | |
| <input type="checkbox"/> | Description of structurally deficient soils (if present) is included | | |
| <input type="checkbox"/> | Description and location of sensitive areas (if present) is included | | |
| <input type="checkbox"/> | All encumbrances affecting OSS placement have been identified | | |
| <input type="checkbox"/> | wells, other water sources, water supply lines | | |
| <input type="checkbox"/> | seasonal water | | |
| <input type="checkbox"/> | surface water | | |
| <input type="checkbox"/> | abandoned wells | | |
| <input type="checkbox"/> | restrictive layer and/or bedrock outcrops | | |

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| | existing buildings, property lines | | |
| | drainage structures (e.g. footing drains, curtain drains, drainage ditches) | | |
| | cuts, banks, and fills | | |
| | driveways and parking areas | | |
| | existing OSS | | |
| | underground utilities | | |
| | others not listed above | | |
| PARCEL PLOT PLAN | | | |
| | A 1"=20' scale or larger scale is used. The parcel plot plan is presented on paper that is 11" x 17" or smaller. | | |
| | A North arrow is indicated on the plan | | |
| | The location and description of design control point(s) are indicated | | |
| | Property and easement lines are shown, (specific lengths are indicated) | | |
| | Topographical contours at 2' intervals are shown | | |
| | Direction of surface drainage is shown | | |
| | Size of building is indicated | | |
| | The maximum building footprint area(s) is/are shown | | |
| | The plans shows existing structures present (on site) | | |
| | Plan shows the location of wastewater tank(s) | | |
| | Primary and reserve SAS are shown on the plot plan | | |
| | The boundaries of the SAS detail drawing are indicated | | |
| | All installed soil logs are shown on plan | | |
| | The plan shows the location of existing or proposed potable water source | | |
| | Critical areas are incorporated into drawing along with associated buffers and setbacks | | |
| | If present, neighboring wells within 100 feet; and other sources within 200 feet are shown | | |
| CONSTRUCTION PLANS AND SPECIFICATIONS | | | |
| | The plumbing stub elevation is indicated | | |
| | Vertical section detail drawings are provided | | |
| | The Dimensions of wastewater tank details are provided | | |
| | Minimum and maximum elevation of installation is specified | | |
| | Maximum depth of cover to be placed over tank(s) is indicated | | |
| | The seasonal groundwater table elevation at the tank located acceptable (below the inverts) | | |
| | The depth of required bedding material is specified | | |
| | Minimum and maximum drainfield width specified | | |
| | Minimum and maximum drainfield depth specified | | |
| | Vertical separation is indicated | | |
| | The amount of cover material and details for placement is indicated | | |
| | Other OSS components to be constructed at the site are included | | |
| | Construction plans show pre-installation protection of areas designated for OSS components and any down slope effluent absorption area | | |
| | Construction specifications are included for sand-based treatment system on non-level/restricted site | | |
| SOIL ABSORPTION SYSTEM (SAS) DETAIL DRAWING | | | |
| | The drawing uses/represents a 1"=20' scale. Maximum paper size is 11"x17" | | |
| | Design control point(s) located within the designated drainfield area | | |
| | The drawing shows the location and dimensions of all components of the primary and reserve systems | | |

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| | Trench widths are shown | | |
| | Trench lengths are shown | | |
| | Horizontal separations are indicated | | |
| | Slopes in primary and reserve areas and of location proposed for sand-based treatment component (e.g. sand filter) are indicated | | |
| | The design includes specifications for reserve components (i.e. when the proposed elevation of the reserve area is above the septic outlet) | | |
| | The drawing specifies setbacks to proposed or existing water lines | | |
| PROPOSED NON-WASTEWATER DRAINS | | | |
| | Application includes construction details for and location of: | | |
| | Footing drains | | |
| | Curtain drains | | |
| | Interceptor drains | | |
| DOSING SYSTEM SPECIFICATIONS | | | |
| | Primary pump chamber specifications are indicated | | |
| | Secondary pump chamber/pumpwell dosing specifications are indicated | | |
| | Control Panel location shown in line of sight to pump tank | | |
| | Control panel for pressure systems specified in design | | |
| WATER SUPPLY | | | |
| | A valid water availability letter (if applicable) is included | | |
| | The water supply is sited in an approved location | | |
| | Source protection covenant(s) is/are recorded | | |
| | The quality of the water is in compliance | | |
| | The quantity produced by the source is in compliance | | |
| OTHER | | | |
| | The design meets applicable guidelines and/or Health Department policy and procedure (check the wastewater web site for updates http://www.kingcounty.gov/healthServices/health/ehs/wastewater.aspx) | | |
| | Applicable covenant(s) are recorded per code | | |
| | Non-single family proposals: Covenant filed stating that owner(s) are responsible for O&M | | |
| | The sewage entering the OSS meets the criteria as non-industrial Wastewater | | |
| | The OSS effluent contacting the infiltrative surface will have typical residential characteristics (see Title 13, 13.08.372) | | |
| | If a repair design for a failing OSS, included information on why the system failed and why the proposed repair meets the appropriate requirements for repairs according to Title 13. | | |
| | Operational Parameters Established: <ul style="list-style-type: none"> Operational capacity indicated (see 13.28.030 V) Residential waste strength range the system is designed to operate under continuously (see Table 13.08-1 & 13.28.030, X) | | |
| | Watertight testing procedure for wastewater tanks identified | | |
| | Plans for system operation monitoring and maintenance are included(Title 13, Chapter 13.60) | | |