

WASTEWATER TREATMENT SYSTEM OPERATIONAL OVERVIEW

The proposed non-discharge / subsurface effluent dispersal wastewater treatment system consists of the following elements:

- 1) Primary treatemnt via 1,500 gallon two-compartment septic tanks at each residential building;
- 2) Small diameter gravity effluent sewer lines draining to common locations for subsequent treatment. In the most downhill area of the tract a small lift station will be used to deliver primary treated effluent to the secondary treatment unit;
- 3) Secondary treatment by a fixed-film / packed media treatment process in contained / enclosed treatment housings. These treatment units are manufactured by Orenco Systems, Inc. in Sutherlin, Oregon, and have been used very successfully, including multiple projects of varying sizes in the U.S. Virgin Islands. Those projects include a system serving the Mountaintop Condos on St. Thomas.
- 4) For effluent to be recycled / reused for toilet flushing or outdoor surface watering / wash-down needs, sand polishing will be provided through the intermittent / timed dosing of sand filters. Effluent will be disinfected via UV irradiation prior to reuse, with a low residual chloride concentration for effluent being used for toilet flushing.
- 5) Effluent not used for recycle / reuse will be low-pressure dosed to subsurface dispersal field areas.

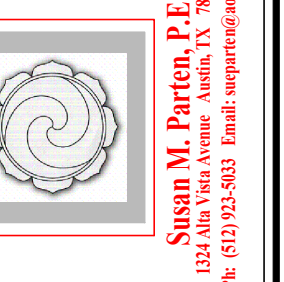
LEGEND

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|--|-------------------------------|
| | SEPTIC DRAINAGE AREAS |
| | PARK / GREEN SPACE |
| | BUILDING PAD |
| | RETAINING WALL |
| | PROPERTY LINE |
| | SURROUNDING PARCEL BOUNDARIES |
| | ROADWAY CENTERLINE |
| | EDGE OF 28' ROAD ROW |



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ST THOMAS TOWNHOME DEVELOPMENT
A.C. DEVELOPMENT
ST. THOMAS U.S. VIRGIN ISLANDS



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