NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

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ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) PLAN REVIEW CHECKLIST

OWTS Location: (C,V,T)_____ County _____	Applicant (owner):
Type of review: ☐ Alternative System:_____ ☐ Realty Subdivision: _____ ☐ NYSDOH Permit:_____	Prepared by (professional engineer or registered architect): Reviewed by:_____Date:_____ EHIPS facility #:_____ Plan log:_____

Item	Yes	No	N/A	Comments
General				
Plans submitted by design professional (PE, RA or exempt LLS)				
Other agency review (NYCDEP, APA , watersheds, etc.), if necessary				
Local codes applied, if necessary				
Site location details (buildings, roads, property lines, etc.)				
Topography details shown				
Within a 10-year floodplain or area subject to flooding				
Test pit(s) – observations/locations shown				
Percolation tests – results/locations shown				
Contours shown at no more than 5-feet intervals				
Slope is ≤ 15% (e.g., 15 feet vertical to 100 feet horizontal)				
Separation distances (well(s), streams, wetlands, etc.) shown				
At least 50% expansion/reserve area shown				
Daily design flow rates (e.g., 110 gpd/bedroom)				
Septic Tank design (material, size, dimensions, baffles, etc.)				
Distribution				
Distribution box (materials, dimensions, baffle, levelers, etc)				
Drop Box (on >10% slopes) (materials, dimensions, baffles, levelers, etc)				
Gravity				
Distribution pipe up to 60-feet long each line				
Distribution pipes sloped at 1/16 to 1/32 per foot				
Dosing				
Note: Siphons preferred over pumps, if possible				
Pipe length (up to 100 feet per line)				
75-85% of the perforated pipe volume per dose				
Siphon chamber (size, alarm, vent, overflow connection)				
Pump chamber (size, alarm, 1-day storage above alarm, vent)				
Pump (gpm, head calculations, weep hole, etc.)				
Pressure Distribution				
Pipe length (up to 100 feet per line)				
Pipe diameter (1-3 inches)				
Maintains 1-psi (2.3 feet of head) a end of each distribution pipe				
Pump (gpm, head calculations, weep hole, etc.)				
Plans for cleaning distribution lines				
Serial Distribution (least desirable distribution method)				
Used for sloped sites only				

Must be dosed (75-85% of perforated pipe volume)				
Connections between lines are offset and non-perforated				
Maximize distance between distribution lines				
Distribution lines run parallel to contours				
Absorption Area				
Trench Systems				
Correct total trench length (Design Handbook-Table 5 or Table 6)				
Trench and/or pipe lengths are equal				
Equal distribution to all lines				
Trench bottoms are at least 2-feet above limiting condition				
At least 4-feet of soil between trenches (pipes 6-feet on centers)				
Trench depth, 18-30-inches w/ pipe at no more than 24-inches bgs				
Distribution lines installed parallel to contours				
Acceptable washed aggregate (e.g., NYSDOT #2 stone)				
Gravelless product approved by NYSDOH				
Shallow trenches				
At least 2-feet of existing useable soil above limiting condition				
Fill has similar perc rate as natural soils				
Surface water diversion ditch/berm on sloped site				
Cut and Fill				
Trench bottoms are at least 2-feet above limiting condition				
Excavation extends to at least 5-feet from outer trench wall				
Fill has similar perc rate as natural soils or extends to at least 2-feet below trench bottoms				
Absorption Bed				
Soil perc rate is 1-30 min/inch				
Slope of up to 8%				
Must be dosed or use pressure distribution				
Installed parallel to contours				
Bottom area (Appendix 75-A,Table 5)				
Max width of 20-feet				
Laterals no more than 5-feet on centers				
Max length w/ dosing of 155-feet (w/center manifold)				
Max length w/ pressure distribution of 205-feet (w/center manifold)				
Max length w/ dosing of 15-feet (w/ end manifold)				
Max length w/ pressure distribution of 205-feet (w/ end manifold)				
Aerobic Treatment Unit s (ATU) /Secondary Treatment Units (STU)				
Rated capacity is ≥ daily flow design				
NSF Class I Standard 40 Certified				
Aerobic Treatment Unit (ATU)				
Rated capacity is ≥ daily flow design				
NSF Standard 40 Certified				
Equipped with an alarm				
Equipped with an outlet filter				
Proof of Service contract provided				
Within Management District or other entity, if applicable				
Raised System				
At least 1-foot of useable soil				
Perc rate of the fill between 5-30min/inch				
Basal area of 0.2 gpd/sf				
Minimum of 20-feet tapers at no more than a 3:1 slope				
Fill stabilized through freeze-thaw or compaction of "sandy" type fill				
Fill to maintain 2-feet between trench bottom and limiting factor				

Must be dosed or have pressure distribution. * Exception: Gravity feed can be used if: design/construction/inspection is by LHD and 2-feet of fill is placed between the trench bottom and existing ground surface				
Mound (Refer to Design Handbook for detailed review and calculations)				
Slope is less than 12% w/o site modification				
High groundwater is at least 1-foot below ground surface				
Bedrock is at least 2-feet below surface				
Soil perc rate is faster than 120min/in				
Basal area calculation for 1-60min/in soil perc rates: see Table 4B				
Basal area calculation for for 61-120min/in soil perc rates: 0.2 gpd/sf				
Sandy fill material with perc rate between 5-30min/in				
Absorption area sizing : Table 4B (using fill perc rate)				
Must have pressure distribution				
Silty/clay cover over distribution lines				
Dual-chamber septic tank with gas deflection baffle and/or filter				
Intermittent Sand Filter (Refer to Design Handbook for detailed review)				
Note: Large lots only w/ increased separation distances due to weeping				
Pressure distribution or dosing required (Gravity feed is allowed if <900-sf of surface area or <300-feet of piping)				
Dual-chamber septic tank with gas deflection baffle and/or filter				
Collection pipes at least 2-feet above high groundwater				
Application rate to the Sand Filter of 1.15gpd/sf (Application rate of 1.0 gpd/sf if gravity fed)				
Absorption mound or shallow trench design application rate: 1.2gpd/sf				
Other Systems				
Holding Tanks: not permitted unless public sewer is being constructed				
Composters: NSF Standard 41 Certification				
Chemical and Recirculating toilets: no discharge - must be pumped				
Incinerator toilets: ash disposal plan				
Greywater: 1,000-gal septic tank and 75-gpd/bedroom design flow				
Engineered Systems				
Specific Waiver				
Designed, supervised and certified by design professional				
No adverse environmental impacts possible				
Comments:				