APPLICANT: _____

ADDRESS: _____

DESIGN FLOW: _____ gpd

REVIEWED BY: _____ **DATE:** _____

	N/A	OK	NO
GENERAL			
Legal boundaries denoted [310 CMR 15.220(4)(a)]			
Street, Lot, tax parcel number and lot number noted on plan [310 CMR 15.220(4)(u)]			
Locus Provided [310 CMR 15.2204(t)]			
Plan proper scale? (1"=40' for plot plans, 1"= 20' or fewer for components) [310 CMR 15.220(4)]			
Easements shown [310 CMR 15.220(4)(b)]			
System located totally on lot served [310 CMR 15.405(1)(a) for upgrades]- *if not, a variance is required* [310 CMR 15.412(4)]			
Location of impervious surfaces (driveways, parking areas etc.) [310 CMR 15.220(4)(d)]			
Location all buildings existing and proposed 310 CMR 15.220(4)(c)]			
Location and dimensions of system components and reserve areas. [310 CMR 15.220(4)(e)]			
System Calculations [310 CMR 15.220(4)(f)]			
daily flow			
septic tank capacity (required and provided)			
soil absorption system (required and provided)			
whether system designed for garbage grinder			
North arrow [310 CMR 15.220(4)(g)]			
Existing *and proposed* contours [310 CMR 15.220(4)(g)]			
Location and log of deep observation holes (existing grade el. on each test) [310 CMR 15.220(4)(h)]			
Names of soil evaluator and BOH representative [310 CMR 15.220(4)(h) and (i)]			
Location and date of percolation tests (performed at proper elevation?) [310 CMR 15.220(4)(i)]			
Percolation test results match loading rate? [310 CMR 15.242]			
Certification statement by Soil Evaluator [310 CMR 15.220(4)(j)]			
Observed and Adjusted groundwater (method for adjustment given or indicated) [310 CMR 15.103(3) and 310 CMR 15.220(4)(n)]			
Location of every water supply, public and private, [310 CMR 15.220(4)(k)]			

	N/A	OK	NO
within 400 feet of the proposed system location in the case of surface water supplies and gravel packed public water supply			
within 250 feet of the proposed system location in the case			
within 150 feet of the proposed system location in the case of private water supply wells			
Location of all surface waters and wetlands located up to 100 ft. beyond setbacks listed in 310 CMR 15.211 and any catch basins located within 50 ft. [310 CMR 15.220(4)(l)]			
Water lines and other subsurface utilities located [310 CMR 15.220(4)(m)] (if water line cross see 310 CMR 15.211(1)[1])			
Profile of system showing invert elevations of all system components and the bottom of the SAS [310 CMR15.220(4)(o)]			
Stamp of designer [310 CMR 15.220(1) and 310 CMR 15.220(2)]			
Stamp of Registered Land Surveyor (required if construction activities within 5 ft. of lot line) [310 CMR 15.220(3)]			
Test Holes adequate (two in each of the primary and reserve unless trenches as permitted in 310 CMR 15.102(2) or as approved for an upgrade under LUA at 310 CMR 15.405(1)(k)]			
Test hole adequate to demonstrate four feet of suitable material? [310 CMR 15.103(4)]			
Test Holes adequate to confirm adequate groundwater separation? [310 CMR 15.103(3)]			
Benchmark within 50-75' of system [310 CMR 15.220(4)(q)]			
Materials specifications noted? [various sections of 310 CMR 15.000]			
System components not > 36" deep (unless Local Upgrade Approval or LUA requested) [310 CMR 15.405(1(b)]			

Address_____

	N/A	OK	NO
SEPTIC TANK			
Size OK? [310 CMR 15.223(1)]			
Inlet tee located ten inches below flow line [310 CMR 15.227(6)]			
Outlet tee 14" or 14" + 5" per foot for increase ft depth [310 CMR 15.227(6)]			
Outlet tee with gas baffle or approved filter [310 CMR 15.227(4)]			
Note regarding installation on stable compacted base [310 CMR 15.228(1)]			
Separation between inlet and outlet tees (no less than liquid depth) [310 CMR 15.227(2)]			
Inlet/Outlet elevations at least 12" above high groundwater (except as described 310 CMR 15.227(5)) or permitted for upgrades under LUA [310 CMR 15.405(1)(k)]			
Minimum cover 9" (Tanks buried more than 9" must have risers on all openings and on the d-box) [310 CMR 15.2228(1) and 310 CMR 15.232(3)(f)]			
Three access covers (inlet and outlet must be 20" or greater) - middle access at least 8" (by 7/07) [310 CMR 15.228(2)]			
Access to within 6 " of grade - one port for systems<1000gpd, two for systems >1000 gpd [310 CMR 15.228(2)]			
All at-grade covers secured to unauthorized access? [310 CMR 15.228(2)]			
> 10 ft from building foundation [310 CMR 15.211(1)]			
Buoyancy calculation Required/Done [310 CMR 15.221(8)]			
H-20 Where appropriate? [310 CMR 15.226(3)]			
Setbacks from resources [310 CMR 15.211]			
Multi-Compartment Tanks			
Required when other than single-family dwelling or flow>1000 gpd [310 CMR 15.223(1)(b)]			
First compartment 200% daily flow; Second compartment 100% daily flow [310 CMR 15.224(2) and (3)]			
"U" pipe through or over baffle, outlet of each compartment with gas baffle or approved filter [310 CMR 15.224(4)]			

Address_____

	NA	OK	NO
BUILDING SEWER AND OTHER PIPING			
Located at least ten feet from any water line? [310 CMR 15.222(2)]			
Disposal piping at least 18" below water line (when water and sewer cross, see 310 CMR 15.211(1)[1])			
Cleanouts required/provided ? [310 CMR 15.222(8)]			
Thrust blocks specified in force mains? 310 CMR 15.221(6)(c)]			
Slope of sewer line not less than 0.01 (1/8"/ft) 0.02 preferable [310 CMR 15.222(6)]			
Proper pitch on all runs? (.005 within gravity-distributed trenches and beds) [310 CMR 15.251(9) and 310 CMR 15.252(2)(c)]			
Siphon problem/ (leachfield below pump chamber)			
Endcaps or vent manifold specified?			
Size and orientation of discharge holes specified? (not smaller than 3/8" not larger than 5/8") [310 CMR 15.251(8) and 310 CMR 15.252(2)(h)]			
Materials specified (310 CMR 15.251(5) specifies various pipe types allowed)			
DISTRIBUTION BOX			
Stable compacted base [310 CMR 15.221(2) and 310 CMR 15.232(2)(a)]			
Splash plate or baffle tee required on inlet/ provided? (when pressure sewer to d-box or steep pitch of gravity sewer) [310 CMR 15.323(3)(a)]			
Riser if deeper than 9" [310 CMR 15.232(3)(f)]			
Inside minimum dimension 12" [310 CMR 15.232(2)(b)]			
Minimum sump 6" [310 CMR15.232(3)(e)]			
Watertight cover if <2000gpd); waterproof manhole if >2000gpd [310 CMR 15.232(3)(d)]			
PUMP CHAMBERS			
Capacity (emergency storage above working=design flow)? [310 CMR 231(2)]			
Proper setbacks [310 CMR 15.211 (same as septic tanks)]			
Watertight 20-in minium access manhole at least 20" MUST BE TO GRADE [310 CMR 15.231(5)] + secured (310 CMR 15.228.2)			
Service components accessible (not too deep with piping, disconnects accessible)			
Alarm floats - alarm on circuit separate from pumps specified?			
Exceeds two units must have two pumps operating in lead-lag mode. [310 CMR 15.231(6) and (8)]			
Stable Compacted Base [310 CMR 15.221(2)]			
Buoyancy calculations needed ? Provided? [310 CMR 15.221(8)]			
Effluent filter ? - in septic tank			

Address_____

	N/A	OK	NO
SOIL ABSORPTION SYSTEMS (SAS) GENERAL			
Calculations correct?			
4 feet of naturally occurring material demonstrated? [310 CMR 15.240(1)] "Repair Only" → Need a State Waiver in <4' Nat. occur.		New-Required	
Required separation to groundwater? [310 CMR 15.212)]			
Aggregate specified as double washed [310 CMR 15.247(2)]			
System Venting required/provided? (system under driveway or >36" deep) [310 CMR 15.241]			
Inspection ports specified and within 3"final grade? [310 CMR 15.240(13)]			
Breakout requirements met? (No violation of breakout elevation within 15 ft of SAS unless barrier) [310 CMR 15.211(1)[4] and Guidance Document]			
GALLERIES,PITS,CHAMBERS 310 CMR 15.253			
Chambers and Gal. in trench configuration supplied with inlet every 20 ft. [310 CMR 15.253(6)]			
Each structure with one inspection manhole (if >2000 gpd must be to grade) [310 CMR 15.253(2)]			
Aggregate 1' minimum- 4' maximum. [310 CMR 15.253(1)(b)]			
2' sidewall credit maximum [310 CMR 15.253(1)(a)]			
In bed configuration, inlet every 40 sq. ft. [310 CMR 15.253(6)]			
TRENCHES 310 CMR 15.251			
Width 2' minimum 3' maximum [310 CMR 15.251(1)(b)]			
100 feet - maximum length [310 CMR 15.251(1)(a)]			
Minimum separation 2x effective depth or width whichever greater (3x if reserve between trenches) [310 CMR 251(1)(d)]			
Situated along contours [310 CMR 15.251(2)]			
Breakout OK? [310 CMR 15.211(1)[4] and Guidance Document]			
BED SAS (Maximum size of bed or field 5000 gpd)			
minimum 2 distribution lines [310 CMR 15.252(2)(a)]			
Maximum separation between lines 6' [310 CM R15.252(2)(d)]			
Maximum separation between lines and outside of bed 4' [310 CMR 15.252(2)(e)]			
Aggregate depth below discharge pipes 6" minimum, 12" maximum. [310 CMR 15.252(2)(g)]			
Separation between beds 10' minimum. [310 CMR 15.252(2)(f)]			
Bottom area used in calculations only [310 CMR 15.252(2)(i)]			
SAS All - NEW CONSTRUCTION → Gravelless → Show full sized conventional			
→ Evenly Distributed (Soil Tests per State + Local) Through-out SAS area. New-Reserve			
Double washed Stone			
Seive analysis - in place material to be tested - noted on plan.			
Metal Tape over all System Components (310 CMR 221.12)			

Address_____

	N/A	OK	NO
DID THE PLAN INVOLVE			
Pressure Dosed System ? Provided pump and piping calculations as required [310 CMR 15.220(4)(r)]			
Pressure dosing required on all systems >2000gpd or alternative systems under remedial approval [310 CMR 15.254(2) and I/A Remedial Use Approvals]			
If used in gravelless system - make sure jet is directed as not to scour soil interface [Guidance Document]			
Inspections once per year (systems< 2000 gpd) or quarterly (>2000gpd) good to note on plan [310 CMR 15.254(2)(d)]			
Construction in fill - Did the plan specify that the fill shall meet the specification of 310 CMR 15.255(3)?			
Impervious barrier and/or retaining wall ? [Guidance Document]			
Impervious barrier installation must be supervised by designer [310 CMR 15.255(2)(b)]			
Retaining wall must be designed by Registered Professional Engineer [310 CMR 15.255(2)(a)]			
Side slope not exceed 3:1 ? [310 CMR 15.255(2)]			
Breakout requirements met? [310 CMR 15.252(2) and Guidance Document]			
At least 5 ft. from impervious barrier to edge of SAS (10 ft. recommended) [310 CMR 15.255 (2)(e)]			
Gravelless System [I/A Approval Letters]			
Check DEP Approval letters for credits and design conditions			
If used with pressure dosing do not allow pressure discharge to scour soil interface			
Alternative Septic System [I/A Approval Letters]			
Was DEP Approval Letter provided and/or have you reviewed the letter for conditions?			
Is the technology being properly applied and does it meet all DEP Approval Conditions?			
Is there a note on the plan regarding the requirement for perpetual maintenance agreement?			
Any alarms involved on separate circuits			
Did the applicant submit an operation and maintenance manual? / Draft deed notice (is required	Maint / Deed	Maint / Deed	Maint / Deed
Has applicant submitted a copy of a maintenance draft agreement			
Variances			
Are the variances listed on the plan ? [310 CMR 15.220 (4)(q)]			
RLS Stamp necessary on plan if a component is within five feet of property line [310 CMR 15.412(4)]			
New construction or increased flow proposed - [Refer to 310 CMR 15.414]			

Address_____

	N/A	OK	NO
Nitrogen Sensitive Areas			
Is the system in a Designated Nitrogen Sensitive Area (Zone II for a public supply well)? [310 CMR 15.214, 310 CMR 15.215 and 310 CMR 15.216 - also refer to Policy regarding upgrades of such existing systems]			
Is the system proposed on the same lot as served by private well ? [310 CMR 15.214(2)]			
Are the nitrogen loads proposed in compliance? [310 CMR 15.216(1)]			
Miscellaneous			
Pumping to septic tank ? [310 CMR 15.229]			
Shared System [310 CMR 15.290]			

OTHER DEPARTMENT OVERVIEW/PERMITS	N/A	YES	NO
- Electrical	☐	☐	☐
- Plumbing	☐	☐	☐
- Conservation	☐	☐	☐

Address_____

REC 01-21-09 ~ Conference on Onsite Wastewater Review by Local Health Officia