1. Information is to be prepared by a Licensed Soil Scientist, Professional Geologist, Professional Land Surveyor, Professional Engineer or Registered Sanitarian if required by NCGS 89C, 89E, 89F or 90A, Article 4. Maps and reports are to bear the name, signature, and seal, as appropriate, of the licensed or registered professional.

2. Demonstration is to include the following:
   a. Survey of the lot or tract (if not available in WCES files).
   b. Accurate site plan drawn to a scale of 1”=30’, 1” = 40’, 1”=50’ or 1”=60’ (Scale must be indicated and be large enough to clearly depict all necessary information). Site plan is to include the following:
      1) Application information including: Date, name, address phone numbers and e-mail addresses of owner/applicant and designer; Property Identification Number (PIN); Permit Number; and Address of property.
      2) North arrow.
      3) Vicinity map.
      4) Location of existing wells sites and/or sewage disposal systems on adjacent properties which would reasonably be expected to impact installation of an on-site sewage disposal system, and well location, if applicable.
      5) Location of streams, drainageways, drainage/soil/erosion control structures, easements, right-of-ways, and/or utilities which would impact installation of an on-site sewage disposal system.
      6) Clear depiction of any other known horizontal setback requirements and buffers (i.e. setbacks from Class I reservoir, streams, public water supply source, drainageway / watershed/ Neuse Basin buffers, etc.) which would impact installation of an on-site sewage disposal system.
      7) Clear depiction and field location of proposed nitrification lines (initial installation and repair), benchmark for field elevations (must be a fixed point not readily subject to destruction), proposed location of tankage, supply lines, manifolds, distribution devices, connecting lines, etc.
      8) Proposed well location, if applicable.
      9) Clear depiction of location and classification of soil units when site evaluation is required.
      10) If site alterations are proposed, a grading plan with existing and proposed contours.
   c. A site report shall include the following information.
      1) Date when the evaluation/demonstration was conducted and status of site improvements (i.e. street construction, utility installation, any other site modification activities).
2) When required, written evaluation of the site including:
   a. Methodology utilized to evaluate soil/site (i.e. auger, pits, etc.) and soil moisture conditions at time of evaluation.
   b. Evaluation and classification of soil/site factors for each unit delineated in accordance with the Regulations Governing Sewage Treatment and Disposal in Wake County.
   c. Long Term Acceptance Rate and written justification
   d. Inclusion of lab data, conductivity information, etc., if applicable.
1) Design unit volume and system type(s).
4) Design calculations for all system components:
   a. Tanks
   b. Pumps
   c. Controls
   d. Pretreatment devices
   e. Proprietary product calculations and information
   f. Any other system components
5) Specifications for system components:
   a. Tanks - Approved by N. C. Div. Of Health Services
   b. Pumps - Manufacturer’s specifications (TDH, horsepower rating, capacity, impeller size, etc.)
   c. Piping - Sizes of piping and appurtenances, material strength
   d. Gravel - Specify size
   e. Controls - Manufacturer’s specifications on floats, control panels, etc.
   Electrical supply needed (phase, voltage)
   f. LPP Drainfield Design / Pressure Manifold or other
6) Plans
   a. Show system components
   b. Specify dimensions
   c. Show elevation for components such as tanks, inlets, on/off positions for floats, hydraulic profile, etc.
7) Installation Procedure
   a. Specify installation procedures for all major components (i.e. tanks, supply manifold, laterals, etc.)
   b. Specify procedure for inspecting and testing components as needed.
8) Operating Instructions
   a. Provide operating and maintenance procedures.
   b. A maintenance schedule, if applicable, must be recorded with the Wake County Register of Deeds office and copy of the recorded from returned to WCDES prior to issuance the Operation Permit.
   c. Executed contract with Certified Subsurface Operator (if applicable) submitted to WCDES prior to issuance of the Operation Permit.
9) The preceding “Standards for Private Sector Submissions” should be viewed as guidelines for preparation of proposals submitted for review by the Department and may not be totally inclusive for all proposals. Specific site constraints, wastewater quality and/or quantity, system types, etc., may require the submission of additional substantiating information.