Site evaluation takes the information gathered by the soil evaluation and puts it into the context of the site in question. It should consider not only the single site but the entire landscape or watershed as sewage does not respect legal property boundaries.

Information has also been provided by Dr. Paul Trotta who has developed similar materials for the University Curriculum.
Information collected prior to site visit

1. Rules (subdivision, local, county, state, federal)
2. Wastewater characteristics
   • Type of system appropriate for the general area
3. Preliminary site information
   • General soils information about area
   • Specific site information
4. Septic system design options

The information gathered prior to site visit include:

1. Rules etc.
2. Wastewater characteristics
   • Type of system appropriate for the general area
3. Preliminary site information
   • General soils information about area
   • Specific site information
4. Septic system design options

Most of the preliminary materials will be easy to assemble and maintain as most practitioners tend to work in a rather narrow area or region.
Soil and site conditions

5. Full investigation of the site/soil
6. Prediction of wastewater flow paths
7. Determine the types of additional information needed
8. Assessment of treatment potential
9. Risk assessment of site

Once the preliminary material is collected the site work can begin.
5.Integration of system into environment
6.Prediction of wastewater flow paths
7. Determine the types of additional information needed
8. Assessment of treatment potential
9. Risk assessment of site

The site evaluation involves more than just the soil description. All aspects of the site that will related to wastewater treatment need to be considered.
Ten site evaluation components (cont.)

10. Recording and reporting site evaluation data and recommendations to designer/client
Putting it all together
No restrictive horizons
Wetness condition @ 44”
Max. trench bottom @ 32”

Clay texture
LTAR = 0.25 g/ft²

Weak, medium, SBK
▼ by 0.05 g/ft²
LTAR = 0.20 g/ft²

Friable, mod. sticky, mod. plastic consistence
▲ by 0.05 g/ft²
LTAR = 0.25 g/ft²

3 chroma and conc. @ 36”
Increase trench bottom to 24”
▲ by 0.05 g/ft²
LTAR = 0.3 g/ft²
Lastly, the site must be evaluated to see if there is enough available space to install a system with the given LTAR. This is generally done by laying out the system on the site.
On any given septic system 3 zones of infiltration or infiltrative surfaces need to be considered. Zone A is the trench bottom and biomat, zone B is the most limiting zone below the trench, and zone C is the “window” or horizontal zone that water must move through as it moves down gradient from the system. The ability to keep the system aerobic will depend on not exceed the hydraulic conductivity of the most limiting of these layers, thus the most limiting layer is the ones that must be considered for design purposes.
Conclusions

- Site and soil evaluation is iterative – many steps
- All aspects of site (including adjacent areas) are considered
- Consideration of the waste type must be made

The overall goal is to protect public and environmental health.

Conclusions
Structure is an important but overlooked aspect of soil evaluation
If possible structure should be viewed in a pit
The relationship between structure and water movement is complex and differs depending on moisture content
More research is needed