

4.0 PROBABLE IMPACTS OF THE PROPOSED ACTION

4.1 LAND

4.1.1 Soils and Topography

In general, most of the soil types indicated as being present on the site have been previously disturbed by clearing for agricultural use (horse farm) and the construction of buildings and structures. Soils in the northernmost portion of the subject site have undergone minimal disturbance. On-site soil testing revealed that the soils on the subject property are suitable for both drainage and sanitary septic system purposes.

As noted in Section 3.1.1, Soil Mechanics indicated that no water, either natural or perched, was encountered in the test holes (dug to a depth of 32 feet) at the time the borings were done. Therefore, it can be assumed that, with the separation distances required for septic structures by NCDPW (two feet) and the distance between such systems and the groundwater table, filtration would be able to occur and, thus, constituents from the sanitary effluent (specifically nitrogen) would dissipate before they could reach the groundwater table. Therefore, it is anticipated that no special septic design would be required to permit the proper functioning of the proposed septic systems within the subdivision and to minimize the impact to groundwater. At the time of development, field observations would be conducted and adjustments (such as soil amendments or enlarging septic fields) may be made for individual septic systems.