a. Soil tests shall be carried on the spot by a lab specialized in soil tests to be licensed in the Emirate of Sharjah, with the necessity of studying the following technical points:

   1. Type and properties of soil layers.
   2. Engineering recommendations concerning the soil bearing capacity and the volume of the expected sinking.
   3. Level, type and contents of underground water.
   4. Impact of soil and underground water on the rust and corrosion of steel.
   5. Impact of the sea ebb and tide on the foundations balance.
   6. Requirements of shoring sides of excavation.
   7. Recommendations concerning the type of foundations.

b. The locations of digging the soil for test must be determined on the site map, along with determining the coordinates according to the Municipality survey reference.

c. The recommendations of the concrete specifications and appropriate cement for the site soil (According to the British Specifications 5328 – Part 1 – 1997, and Syria newsletter No. 31, provided that the breaking force of the reinforced concrete must not be less than 30N/mm2.

d. The foundations must be within the plot boundaries. The bases maybe projected beyond the plot limits within 40cm from the road side only. Regarding that the depth of the bases must not be less than the depth specified in the soil report for protecting the basis from the soil drift and changes in humidity resulting from the climate and temperature conditions.

e. A system for draining underground water must be provided if necessary for avoiding the leakage of humidity inside the building.

f. When making deep excavations for the basement floors or other purposes, a protection system must be provided for protecting the shoring of sides of excavation within the plot limits. The system of shoring the sides of excavation may extend beyond the plot limits from the street or path way side only after getting the Municipality's written approval thereon. Moreover, it should be observed in the design that the protrusion beyond the plot boundaries should not affect the adjacent buildings and services.