i. The minimum total wall thickness, including the liner and outer protective layer shall be declared by the manufacturer, which shall be complying to the standard performance criteria.

ii. Use pipes with wall thickness that achieve a minimum hoop flexural modulus of 15.0 GN/m^2 over the reinforced wall thickness for pipes of 350mm diameter and above, and 12.0 GN/m^2 for pipes of less than 350mm diameter. This shall be demonstrated by the application of the equation $S = (EI)/D^3$ to show that the hoop flexural modulus of a pipe is not less than the required minimum figure where S is the stiffness of the manufactured pipe, D is the mean diameter of the manufactured pipe, E the required hoop flexural modulus and I being given by $t^3/12$ where t is the reinforced wall thickness of the manufactured pipe.

f) Fittings

i. Fittings shall be manufactured similar to the pipe construction or better thereof as per the existing standard manufacturing techniques, complying with applicable standards on performance and testing.

III. Mechanical and other characteristics

The pipe class for a specific application shall depend on the required diameter (DN), the pressure rating (PN) necessary for the application, and the pipe stiffness (SN) derived from the structural analysis depending on site conditions (soil, installation, compaction, loads etc.).

a) Minimum initial specific stiffness.

- As detailed in section 2.1.as above.
- For other nominal stiffness class in certain areas in accordance to defined parameters of BS/DIN EN 14364.

b) Minimum initial specific longitudinal tensile strength shall be in

accordance to BS/DIN EN 14364.

c) Fabricate pipes and fittings capable of withstanding the working pressures, test pressures and loadings specified.