xi. Ensure the loss does not exceed the limit stated in 'vi' above. If the pipeline fails the test, locate and repair the faults and repeat the test.

D. Ensure that all valves in the pipeline are satisfactorily operating under working pressure and that the pipelines have been finally cleaned out as specified hereafter.

E. Do not test pipes against closed valves.

18.3.4 Hydrostatic Testing of Non Pressure Pipelines

A. Test all non-pressure pipelines up to 1000mm diameter after completion of concrete or granular bedding up to the soffit of the pipeline. Clear the bedding around pipe joints to allow for visual inspection for leaks. Ensure that the trench is kept dry. Apply water head for testing of either depth to invert plus 1.0m, or 5.0m, whichever is the greater. Measure the head at the lower end of the pipeline.

B. Maintain the water head over a period of 30 minutes and if necessary, add water from a measuring vessel at 10 minute intervals. Record the quantity of water added from the measuring vessel.

i. The leakage in (litres) out of quantity of water added, shall not exceed 0.5 X pipe diameter (m) X length of pipe under test (m).

C. For non-pressure pipes greater than 1000mm diameter, inspection for water tightness, workmanship and compliance to this specification shall be carried out by man entry.

D. Not more than 7 days prior to handover all pipelines shall be subject to an infiltration test as follows:

i. Test the pipeline in lengths between manholes or such shorter lengths as the Engineer may direct or permit. Maximum length to be tested shall be 1 kilometer.

ii. Dewatering shall have been discontinued for at least 3 days prior to test.

iii. Volume of water infiltrating into the pipe shall be accurately measured for a minimum period of 1 hour.

iv. Maximum infiltration shall not exceed 1 liter per millimeter of pipe diameter per kilometer of pipe per day.