

- i) Pipe deflection measurements shall be carried out by an independent inspection party in accordance with section 3.3 of this specification. Initial deflection measurement shall take place once individual sections of the pipelines have been completed between manholes or chambers and final deflection measurement shall be undertaken immediately prior to issue of the Provisional Acceptance Certificate.

## **21.3.2 Field Testing of Pipelines**

### ***21.3.2.1 Hydrostatic Testing of Pipelines General.***

- a) Submit for the Engineer's approval details of the proposed methods and program for testing, including details of test equipment. Arrange for all tests to be witnessed by the Engineer or other person appointed by the Engineer. Provide everything necessary for carrying out testing and cleaning including water, pumps, gauges, piped connections, stop ends and all other temporary works. Ensure that pipelines are properly completed and supported before being put under test.
- b) Use clean water of an approved quality for hydrostatic testing and pipeline cleaning.
- c) Test the pipeline in lengths between manholes.
- d) Use properly designed fittings for the purpose of temporarily closing the openings in pipelines to be tested. Use fittings adequately strutted to withstand the pressure specified.
- e) Ensure that the arrangement for testing a pipeline includes provision for the purging of air from the pipeline prior to a water test.
- f) The Contractor must make his own arrangement for the supply and disposal of water used for testing which must be obtained from a source accepted by the Engineer.
- g) The Contractor must complete the pipelines between the ends of laid and tested lengths of pipeline by tie-in sections of the shortest practical length.