SECTION 3820 - GRAVITY SEWER DEFLECTION TESTS

PART 1 - GENERAL

1.1 SCOPE OF WORK:

Provide all labor, materials, equipment and services required for gravity sewer deflection testing specified herein.

PART 2 - EXECUTION

2.1 GRAVITY SEWER LINE DEFLECTION TESTING:

A. All PVC pipe and ABS pipe (including composite wall pipe) shall be tested for deflection after backfilling is completed. Deflection testing shall satisfy OEPA requirements. A vertical ring deflection greater than five percent (5%) will not be allowed. This deflection is defined as a five percent reduction in the vertical base or average inside diameter.

B. The method of testing shall be subject to the approval of the ENGINEER. The deflection test may be conducted with a mandrel, a ball, a cylinder, or in another manner acceptable to the OWNER, accomplished on a manhole-to-manhole basis, following complete flushing of the line by the CONTRACTOR. If rigid balls or mandrels are used to test the pipe deflection, no mechanical pulling devices shall be used. If mandrels are used, they shall be fluted mandrels with an odd number of flutes and a minimum of nine (9) flutes. A different gage is required for each different diameter of pipe, and the CONTRACTOR shall furnish all equipment required to complete the deflection tests. The deflection tests shall be witnessed by the OWNER and any section of pipe that fails to meet the aforementioned requirements shall be excavated and the failed sections shall either be relayed or replaced, and retested for deflection until the requirements are met.

C. Upon completion of the aforementioned testing, if any debris that could impede the CCTV taping process or functionality of the sewer is discovered, the sewer shall be completely cleaned by a reputable sewer cleaning service.

D. Deflection test shall be performed no less than sixty (60) days after all sewer pipe trenches have been backfilled to finished grade and all sewers have passed both the leakage test(s) and CCTV test(s).

PART 3 - BASIS OF PAYMENT

Testing of gravity sewers for deflection is not a pay item.

END OF SECTION