Comparison of core sampling and visual inspection for assessment of sewer pipe condition

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ABSTRACT

Sewer systems are costly to construct and even more costly to replace, requiring proper asset management. Sewer asset management relies to a large extent on available information. In sewer systems where pipe corrosion is the dominant failure mechanism, visual inspection (CCTV) and core sampling are amongst the methods applied mostly to assess sewer pipe condition. This paper compares visual inspection and drill core analysis in order to enhance further understanding of the limitations and potentials of both methods. Both methods have been applied on a selected sewer reach in the city of the Hague, which was reportedly subject to pipe corrosion. Results show that both methods, visual inspection and core sampling, are associated with large uncertainties and that there is no obvious correlation between results of visual inspection and results of drill core analysis.

KEYWORDS

Asset management, CCTV, core sampling, inspection, sewer condition