

South West Water CCTV Survey Specification

The CCTV Surveys and photographs are to be in colour.

Pan & Tilt Survey of Sewers

The Pan & Tilt camera shall be capable of 360° rotation and tilt up to 90° from the horizontal. The camera position is to be clearly displayed and recorded at the control vehicle.

The Contractor shall stop the camera at all connections, breaks and open joints and execute 90° tilt to the vertical and a full 360° rotation to inspect the defect/connection.

The Contractor will be required to stop the camera at defects as follows:-

All sewers

All defective junctions and connections (as defined in the WRc Manual of Sewer Condition Classification, Fourth Edition, published 2004)

Continuous defects: at the beginning of the defect thereafter at 5m intervals unless another photograph is required before that because of other defects.

General condition at (a) intervals of 10 metres
or (b) each sewer length

1. CCTV Survey

1.1. CCTV Data Display

At the start of each survey length the following minimum information will be clearly displayed on the viewing monitor and video recording:-

- Camera meterage position in the line from adjusted zero
- Sewer dimensions
- Manhole/pipe length reference
- Date of Survey
- Road name/Location
- Direction of Survey
- Time of start of survey
- Sewer use

Once the survey is underway the following minimum information shall be continually displayed:-

- Camera meterage position
- Sewer dimension
- Manhole/pipe reference
- Direction of survey

The size and position of the data shall be such as not to interfere with the main subject of the picture.

1.2. Camera Meterage

The CCTV shall display an automatically updated record in metres and tenths of metre of the camera position from the zero point start of the survey length. The measurement shall be accurate to +- 1% or 0.3m whichever is the greater.

1.3. Camera Image Quality

The camera and illumination system shall be capable of providing a clear, accurate and in focus record of the sewer internal condition.

1.4. Camera Speed

The speed of the camera in the sewer shall be limited to:

- m/s for sewers of diameter less than 200mm
- 0.15 m/s for sewers of diameter exceeding 200mm but not exceeding 310mm
- m/s for sewers of diameters exceeding 310mm

2. Reports

2.1. Survey Report

The Survey report shall include the following items:-

- Written report and site coding sheet in Microsoft Word or PDF format
- Video data in MPEG4 format
- Digital photographs in JPEG format
- The report shall be computer validated, printed and presented in accordance with the format laid down in WAA/WRC "Manual of Sewer Condition Classification" fourth Edition published 2004