



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Method of Measurement for Road Works Series MM 2900 - CCTV Survey of Road Drainage Systems

CC-RMP-02900

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About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical). This system replaces the NRA Design Manual for Roads and Bridges (NRA DMRB) and the NRA Manual of Contract Documents for Road Works (NRA MCDRW).

Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference. For migration of documents from the NRA and RPA to the new system, each current document was assigned with new outer front and rear covers. Apart from the covers, and inside cover pages, the documents contain the same information as previously within the NRA or RPA systems, including historical references such as those contained within NRA DMRB and NRA MCDRW.

Document Attributes

TII Publication Title	<i>Method of Measurement for Road Works Series MM 2900 - CCTV Survey of Road Drainage Systems</i>
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NRA DMRB and MCDRW References

For all documents that existed within the NRA DMRB or the NRA MCDRW prior to the launch of TII Publications, the NRA document reference used previously is listed above under 'historical reference'. The TII Publication Number also shown above now supersedes this historical reference. All historical references within this document are deemed to be replaced by the TII Publication Number. For the equivalent TII Publication Number for all other historical references contained within this document, please refer to the TII Publications website.

Series 2900: CCTV Survey of Road Drainage Systems

Scope 1 This part applies to the use of CCTV survey for the inspection of road drainage systems, including recording and storage format of the data for drains not exceeding 1800mm diameter.

CCTV Survey of Road Drainage Systems

Units 2 The units of measurement shall be:

- (i) site establishment.....item
- (ii) setting up at survey points.....number
- (iii) provision of report.....item
- (iv) surveying of drains.....linear metre
- (v) surveying of gully connections.....linear metre
- (vi) extra over for use of a rodding camera.....linear metre
- (vii) extra over for the use of a pan and tilt camera.....linear metre
- (viii) forced ventilation.....day

Measurement 3 Site establishment shall be measured once only and shall include dismantling and removing from site on completion. Any additional site establishment to suit the Contractor's method of working shall not be measured.

4 Setting up at survey points shall be measured once only for each individual section between node points that are included in the survey and shall include moving equipment to the survey point and subsequent dismantling.

5 The length of drain to be surveyed shall be measured as the individual lengths along the centre line between any of the following:

- (i) The internal faces of the chambers
- (ii) The external face of headwalls
- (iii) The intersection of the centre lines at pipe junctions
- (iv) The centre of gully gratings (or where no grating is provided, the centre of the gully)
- (v) The position of terminations shown in the Contract

6 The measurement of forced ventilation shall be per day or part thereof during which forced ventilation is necessary.

Itemisation

- 7 Separate items shall be provided for the measurement of CCTV survey of road drainage systems in accordance with Chapter II paragraphs 3 and 4 and the following:

Group	Feature	
I	1	Site establishment
	2	Setting up at survey points
	3	Provision of report
	4	Surveying of drains
	5	Surveying of gully connections
	6	Extra over for use of a rodding camera
	7	Extra over for use of a pan and tilt camera
	8	Forced ventilation
II	1	Depth to invert not exceeding 6 metres
	2	Depths to invert not exceeding 6 metres
III	1	Diameters not exceeding 125mm
	2	Diameters exceeding 125mm but not exceeding 475mm
	3	Diameters exceeding 475mm but not exceeding 900mm
	4	Diameters exceeding 900mm but not exceeding 1200mm
	5	Diameters exceeding 1200mm but not exceeding 800mm
IV	1	Setting up on pavement
	2	Setting up on verge not exceeding 3m from carriageway edge
	3	Setting up on verge exceeding 3m from carriageway edge
	4	Setting up off highway (beyond highway boundary)
V	1	Existing internal diameter (Rehabilitation only)

Note: Groups II and III features shall only be used with Group I Features 4 and 5. Group IV Features shall only be used with Group I Feature 2.

**CCTV Survey of
Highway Drainage
Systems**

- 8 The items for CCTV survey of road drainage systems shall in Highway accordance with the Preambles to the Bill of Quantities General Directions include for:

Item Coverage

- (a) lifting of covers and replacement;

(b) recording and coding;

- (c) plans;
- (d) still photographs;
- (e) video recordings;
- (f) stoppers and over-pumping;
- (g) suspension of work due to high flows;
- (h) scheduling work to avoid times of high flows and to allow clearance of blockages;
- (i) maintaining communication with Employer's Representative and the officers of any other body from whom a Consent has been required for the duration of the survey;
- (j) establishment, moving between locations and removal of forced ventilation plant and equipment;
- (k) protection measures in connection with existing damaged covers and gratings.



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