

TII National Roads Conference 2018

Temporary Safety Measure Inspections

CC-STY-04002



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Agenda

- Safety Moment
- Purpose of TII Inspection Programme
- Introduction to CC-STY-04002 (HD16)
- Scope of Temporary Safety Measures Inspections
- CC-STY-04002 December 2017 update
- What we do with Inspection Findings
- TII Advice Notes
- Good / Bad Examples

Safety Moment: Risks to Road Workers

>85% of road workers experienced dangerous driver behaviour when working¹

75% of road workers received verbal abuse from passing motorists¹

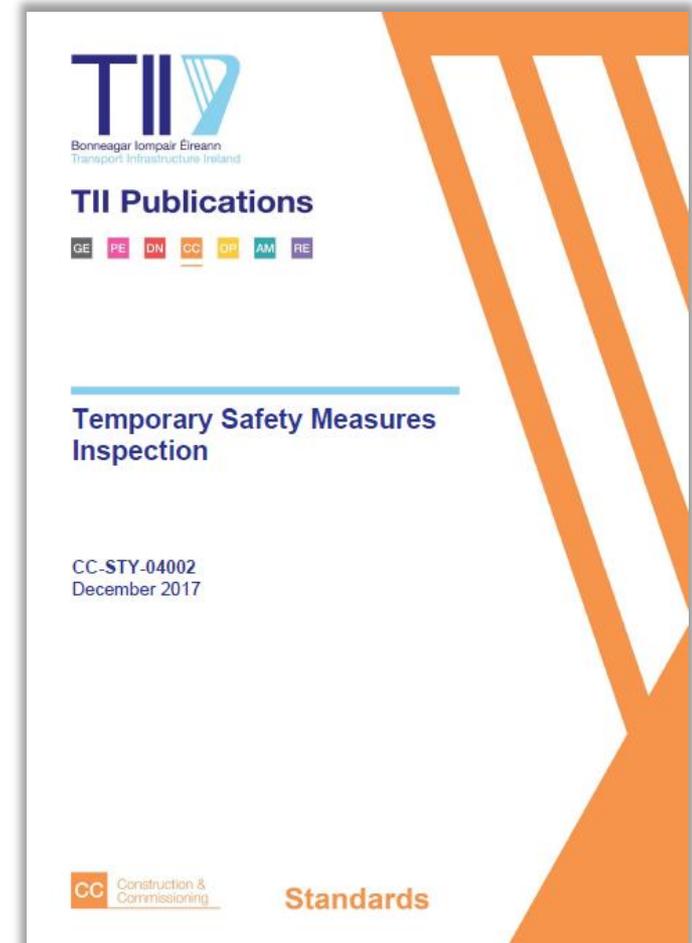
Respect Road Workers

Purpose of TII Inspection Programme

- *“To positively influence the safe construction of road schemes within the National Roads Network and to promote a consistent approach to construction safety across the industry”*
- Facilitate benchmarking of performance
- Identify trends of good and bad practice and develop and issue advice notes to share learning within the industry

Introduction to CC-STY-04002

- Temporary Safety Measures Inspection (TSMI) - safety procedure for road works introduced by TII following EU Directive 2008/96/EC on Road Infrastructure Safety Management (EU RISM)
- Standard addresses the requirements of the EU Directive and it's transposition into Irish Law under S.I. No. 472 of 2011



Scope of Temporary Safety Measures Inspections

- TII (Jacobs) undertake inspections of Temporary Safety Measures on projects directly procured by TII
- Local Authorities undertake inspections of Temporary Safety Measures on projects sanctioned and / or procured by Local Authorities
- Statutory Undertakers / Road Operators undertake inspections of Temporary Safety Measures on projects under their management

CC-STY-04002 December 2017 Update

Table 2.1 Frequency of Inspections for Static Road Works in operation for a duration in excess of 12 hours

Duration of Road Works	% of sites to be inspected per annum	Frequency of Inspection
Exceeding 1 year in duration	100% of sites to be inspected	Quarterly
6 months to 1 year in duration	100% of sites to be inspected	Two Inspections
1 month to 6 months in duration	50% of sites to be inspected	Single Inspection
Greater than 12 hours, less than 1 month in duration	10% of sites to be inspected	Single Inspection

CC-STY-04002 December 2017 Update

Table 2.2 Frequency of Inspections for Road Works in operation for a duration of up to 12 hours

Duration of Contract	Frequency of Inspection
Exceeding 6 months in duration	Six Inspections per annum
3 months to 6 months in duration	Four Inspections
Less than 3 months in duration	Single Inspection

CC-STY-04002 December 2017 Update

- See Table 2.3 for guidance on the application of Table 2.1 or 2.2 for sample Road Works types
- See also Appendix A for worked examples for determining the most applicable frequency of inspection required for sample types of Road Works

CC-STY-04002 December 2017 Update

- Notification Process updated to require at least 7 days' notice prior to implementation of Temporary Safety Measures
- Relevant bodies with responsibility for the maintenance of a region shall ensure a minimum of 12 inspections are undertaken annually per region, spread across the various maintenance activities and at different locations within their region
- Inspection Reporting section added

What we do with Inspection Findings

- Inspection findings are input into benchmarking tool:
 - Analysis of performance
 - Analysis of inspection criteria
- Advice Notes are developed based on outcome of analysis

New Advice Notes

Site:

- Overhead Lines Protection
- Working at Height Ladders

Temporary Traffic Management:

- TSM not Installed as per the TMP
- Works Vehicle Outside TM Setup
- Warning Signage
- Cone Spacing
- Vulnerable Road Users
- Sand bags
- Condition of Traffic Management Equipment

Advice Notes available at: <http://www.tii.ie/tii-library/policies/> → Construction Safety

TII
Bonneagar Iompair Éireann
Transport Infrastructure Ireland

Health and Safety
Advice Note

Temporary Safety Measures Sand Bags



These Advice Notes have been prepared in order to share current practice with respect to various traffic management activities

This Advice Note acts as a reminder to persons involved in the implementation of Temporary Safety Measures using the TII Temporary Traffic Managements Guidance Handbook and also those involved in the Maintenance Management of the road network under the MMaRC Contract.

- Sand bags should be used on the bottom rung of the sign frame only.
- Sand bags should not be used for stabilising cones, double up the base of the cone if required.

- Water barriers should be used as designed and sandbags should never be used to secure water barriers.
- Always check sand bags for damage caused by rot in the wet or breakdown in the heat or in the sun before setting them out.
- Only use sand in sand bags never stones or gravel



Advice Notes

Sample Advice Notes

<http://www.tii.ie/tii-library/policies/> → Construction Safety



Health and Safety Advice Note

Temporary Safety Measures Use of Warning Vehicles



These Advice Notes have been prepared in order to share current practice with respect to various traffic management activities

This Advice Note has been prepared to advise on best practice with respect to the use of Warning Vehicles for continuously moving works in accordance with the Temporary Traffic Management (TTM) Guidance Handbook for Road Marking Works.

- There is to be no working from the rear of any vehicle, unless it is suitably protected from oncoming traffic in that direction.
- Warning vehicles can be used in advance of the works area to provide protection to workers for continuously moving works where a risk assessment deems it appropriate.
- Warning vehicles must be of conspicuous colour with appropriate rear markings and signage as per Section 4.2 of the TTM Guidance Handbook for Road Marking Works.

- If a Contractor proposes not implementing a warning vehicle e.g. for short term works where conditions and visibility are good and traffic is light, a documented risk assessment to deal with the increased risk of removing the warning vehicle must be completed to identify suitable and sufficient alternative controls.
- If no warning vehicle is used, at a minimum operatives must be protected by a dedicated spotter at their location. Traffic must be marshalled by follow me vehicle to control speeds past the works area.
- The lateral safety zone should be maintained using a cantilevered spring board.
- Rear doors of the vehicle must be closed to ensure the traffic management signage on the works vehicle is clearly visible to the road user.

A Site Specific Risk Assessment must be carried out by the TTM installer on any layout used in the TTM Guidance Handbook, prior to implementing it on site.

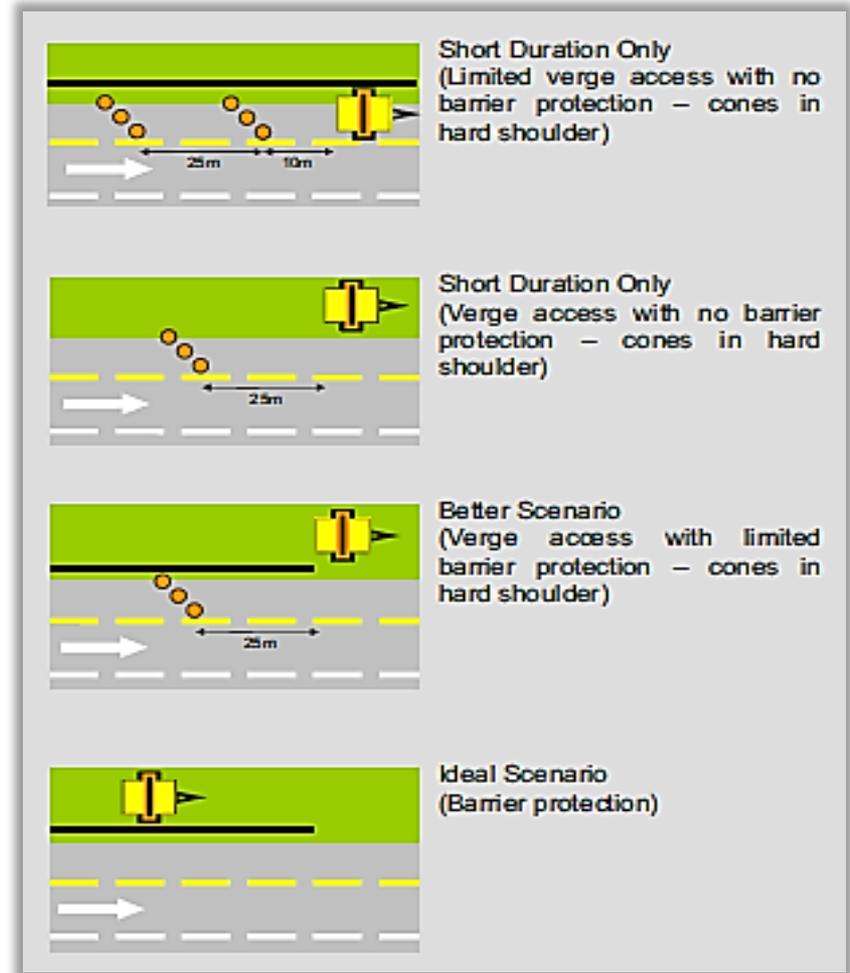
VMS Protection & Positioning

Bad Practice



VMS should be regarded as a fixed object (hazard)

Good Practice



Safety Zones

Bad Practice



Good Practice



Condition of Signs

Bad Practice



Good Practice



Condition of Traffic Cones

Bad Practice



Good Practice



Condition of TM Equipment

Bad Practice



Good Practice



Works Vehicles

Bad Practice



Good Practice



Works Vehicles

Bad Practice



Good Practice



Pedestrians

Bad Practice



No alternative safe route provided

Good Practice



Pedestrians separated from works

Thank you

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