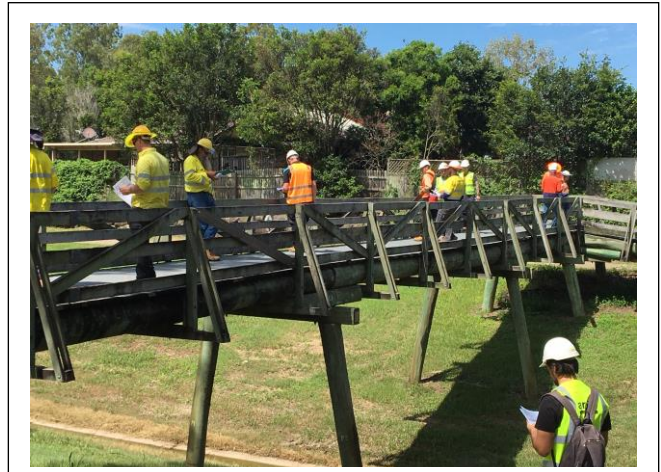


# Level 1, 2 and 3 Infrastructure Inspection awareness

## Course Information

Bridges and other structures are crucial asset elements of the infrastructure network. It is essential that their condition is monitored, and repairs are planned and completed in an efficient and timely manner. The systemic inspection, condition rating and monitoring of these assets are vital components to managing the lifecycle of these structures.

This 5-day online workshop (2 hours daily) will assist participants to develop the knowledge and skills to understand the scope of Level 1, 2 and 3 inspections in accordance with industry best practice. Attendees should have a basic knowledge of bridges and culverts.



## Learning Outcomes

This course aims to provide an introduction to, and awareness of, bridge inspections levels (Level 1, 2 and 3) and the monitoring process. The course will provide each participant with a general understanding of bridge inspections and its importance as part of the asset management process.

At the end of this course, participants should be able to:

1. Identify the difference in scope between Level 1, Level 2 and Level 3 bridge inspections and monitoring inspections.
2. Recognise deterioration mechanism and their relationship with the condition rating
3. Understand the scope and limitations for each inspection level.
4. Understand the importance of accurate data capture with a methodical system that supports infrastructure assets management and decision making.

## Trainers



**Tim Heldt**

*BEng (Hons), PhD*

*Chief Technology Leader - ARRB*

Tim has over 30 years' experience in multi discipline engineering and project delivery including structural evaluation, asset management, and strategic planning.



**Nigel Powers**

*BEng (Hons)*

*National Infrastructure Strategist - ARRB*

Nigel has over 18 years' experience in the Victorian public service with practical experience in program delivery, project management and asset management of road assets



**Alex Aldana**

*BEng (Hons), MEngSci*

*Senior Professional - ARRB*

Alex has 4 years of industry experience including Level 1, 2 and 3 infrastructure inspections, bridge maintenance prioritisation, and asset management.

## Course Information

**Price:** \$1,500

**Date:** December 7 – 11, 2020

**Duration:** 2-hour daily sessions over 5 days

## Outline

The following table summarise the modules contents:

MODULES	CONTENT	TIME AND DATE
<b>Module 1 – Introduction to Structure Inspection</b>	<ul style="list-style-type: none"><li>- Asset management principles and record keeping</li><li>- DOT Victoria Policies and Roles</li><li>- Scope of Level 1, 2 and 3 inspections</li><li>- Safety requirements</li></ul>	<ul style="list-style-type: none"><li>- 7 December</li><li>- 11.30AM (AEST)</li></ul>
<b>Module 2 – Structures and Components</b>	<ul style="list-style-type: none"><li>- Type of structures</li><li>- Identification of structure components</li><li>- DoT Victoria Manual – VICRoads Structure Inspection Manual (SIM)</li></ul>	<ul style="list-style-type: none"><li>- 8 December</li><li>- 11.30AM (AEST)</li></ul>
<b>Module 3 – Deterioration Mechanism</b>	<ul style="list-style-type: none"><li>- Defects and condition rating</li><li>- Material defects: Concrete, steel/iron, and timber</li><li>- Other defects</li></ul>	<ul style="list-style-type: none"><li>- 9 December</li><li>- 11.30AM (AEST)</li></ul>
<b>Module 4 – Level 1 and Level 2 Inspections</b>	<ul style="list-style-type: none"><li>- Level 1 inspections</li><li>- Level 2 inspections</li><li>- Condition rating and deterioration</li></ul>	<ul style="list-style-type: none"><li>- 10 December</li><li>- 11.30AM (AEST)</li></ul>
<b>Module 5 – Level 3 Inspections / Investigations</b>	<ul style="list-style-type: none"><li>- General information and principles</li><li>- Load assessment</li><li>- Guidelines for bridge monitoring</li></ul>	<ul style="list-style-type: none"><li>- 11 December</li><li>- 11.30AM (AEST)</li></ul>

\*Each module contains a 15-20 minutes answer questions.

## Who Should Attend

Participants who seek to gain an understanding of the fundamental concepts and procedures for bridge inspections. The workshop is primarily aimed at, but not limited to:

- State and Local Government personnel
- Engineers involved in the management of bridges
- Road and bridge maintenance field staff
- Works Supervisors
- Graduates
- Inspectors

It will be beneficial for attendees to have a basic knowledge of bridges and culverts.

## Contact

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**For more information**

[vicroads.vic.gov.au](http://vicroads.vic.gov.au)

