

A PRACTICAL GUIDE TO BRIDGE MAINTENANCE

2 Day Training Course: A Thorough Inspection Toolkit

This 2-day training course will provide participants with a fundamental grounding in the key areas of bridge maintenance as it applies today.

FACE TO FACE TRAINING

24-25 November 2022 · Melbourne



Our Expert Course Instructor



Glyn Jones

Glyn specialises in bridge inspection, surveillance, determining maintenance treatments with estimates and mentoring young engineers. Glyn is a highly regarded, experienced consultant, a dynamic presenter, and very capable teacher and mentor.

KEY LEARNING OBJECTIVES

- ▶ Review the various types of bridge structural maintenance currently undertaken
- ▶ Revise the types of inspections which lead onto maintenance.
- ▶ Consider the types of materials that require to be maintained
- ▶ Consider how to carry out the works – Direct labour, contract or alliances
- ▶ Preparing for work:
 - Skills and training
 - Vehicle and equipment
 - Personal Protective Equipment (PPE)
 - Traffic Control & Railway requirements
 - Maintaining a diary of critical events

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ABOUT THE COURSE

This course provides participants with a fundamental grounding in the key areas of bridge maintenance as it applies today. The course begins with an introduction to inspections before examining each type of maintenance required and components in detail. It is proposed to revisit some of the old traditional practices and see how they have changed over the years.

Many new engineers are missing out on some of the basics before launching into semi management roles. It is intended that this course will give an insight into some of these practices.

Emergency bridging – an area that has been overlooked in recent years. This will also be examined briefly, from incidents such as bush fires, floods and detours for heavy vehicles. Today we tend to re-invent the wheel for each emergency instead of learning from past experience.

WHO WILL BENEFIT

- Structural engineers who are keen to learn the basic skills in bridge maintenance.
- Bridge maintenance project engineers and surveillance officers.
- Asset managers who may have limited experience in the fields of maintenance techniques, inspections and project hand over.
- Construction and maintenance foremen and leading hands who will benefit by understanding the surveillance that will follow.

Would You Like To Run This Course On-Site?

Informa Corporate Learning: On-site & Customised Training

If you have **8+** interested people, an onsite course can be an ideal solution. Speak with **Sushil Kunwar** on **+61 (2) 9080 4395** to discuss your customised learning solution, or email **training@informa.com.au**.

EXPERT COURSE INSTRUCTOR



Glyn Jones

Glyn joined the Country Roads Board of Victoria in 1959 as a newly qualified engineer at Warrnambool. For the next 30 years Glyn wore many hats in Victoria working for Vic Roads, including Regional Bridge Engineer. This involved bridge inspection, managing the maintenance

and construction works, developing proposals for new structures, assisting municipalities with their structural problems and managing a precast concrete yard.

Glyn was one of the first to be called in any bridging emergency and this was highlighted in the Ash Wednesday fires of 1983 when his area in South West Victoria lost about 10 major structures. In 1989 Glyn was seconded to an Australian Aid project in Indonesia for 3½ years. There, he wrote the manuals for both bridge inspection and bridge maintenance. Once these were written, Glyn travelled into the provinces teaching and implementing the manual material.

Glyn worked for 8 years as the Regional Bridge Engineer with the RTA in Western NSW. This was the home of many old large timber truss and girder structures. Many of the old traditional crafts were retained thereby employees who were highly skilled. A video was made for posterity on these skills and won a prestigious award at the National Heritage Day in Sydney in 2002.

In 2014 Glyn had an active part to play in the auditing for Queensland Rail in their far west areas in regards to their inspection, maintenance and manpower needs.

In 2015, Glyn assisted the WA Main Roads to assess their Emergency Bridging capabilities. He guided them through their refurbishing their Bailey Bridge components, designed the storage facilities for the Bailey and conducted training for the Bridge Crews.

For the last 16 years, Glyn has run his own consulting company and has specialised in bridge inspection, surveillance, determining maintenance treatments with estimates and mentoring young engineers. In this period Glyn has written a few manuals for Vic-Roads and the RTA.

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2-Day Course Outline

Day One

- Module 1** Introduction to Road Structures Management
- Module 2** Structures inspections overview
- Module 3** Preparing for Work
- Module 4** Timber Maintenance
- Module 5** Concrete Maintenance & Repairs
- Module 6** Steel Repairs
- Module 6A** Steel Protection
- Module 7** Masonry Bridge Repairs

Day Two

- Module 8** Care & Maintenance of Bearings
- Module 9** Expansion Joint Maintenance
- Module 10** Ancillary Maintenance – gantries, Noise & Retaining Walls
- Module 11** Timber Maintenance
- Module 12** OH&S for Bridge Maintenance (Optional)
- Module 13** Emergency Bridging
- Module 14** Maintenance Specifications – (General comments only)
- Module 15** Estimating for Maintenance



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- Consider the types of materials that require to be maintained
- Consider how to carry out the works – Direct labour, contract or alliances
- Preparing for work:
 - Skills and training
 - Vehicle and equipment
 - Personal Protective Equipment (PPE)
 - Traffic Control & Railway requirements
 - Maintaining a diary of critical events
- Technical matters relating to Timber Structures
- Technical matters relating to Steel Structures and their protection
- Technical matters relating to Concrete Structures
- Technical matters relating to Masonry Structures
- Expansion joints and bearings maintenance challenges
- Road and stream bank stability treatments
- OH&S (optional)
- Emergency Bridging in maintenance operations.
- Some notes will also be handed out on:
 - Writing a good specification
 - Estimating maintenance works

WHAT OUR CLIENTS HAVE SAID ABOUT THIS COURSE:

"Different approaches around the country were discussed, experienced approach."

Bridge Engineer, **Gosford City Council**

"I enjoyed hearing about Glyn's experience of bridge defects. Increased my general knowledge of bridge inspections and maintenance."

Engineer Investigation and Design,
Charter Towers Regional Council

"All aspects, different standards of inspections, welding of reo, emergency bridging."

Structures Superintendent, **John Holland**

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Easy Ways to Register

1 **Web**
www.informa.com.au/bridgemaintenance

2 **Telephone**
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A Practical Guide to Bridge Maintenance

Course Code	Location	Course Date	Early Bird price valid until 4 Nov 22		Standard price valid after 4 Nov 22		4+ Dels Discount	
P22GT13ME	Melbourne	24-25 November 2022	\$2,995 + \$299.50 GST	\$3,294.50	\$3,095 + \$309.50 GST	\$3,4045.50	\$2,476 + \$247.60 GST	\$2,723.60

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If you have 8+ interested people, an on-site course can be the ideal solution – giving you the opportunity to customise our course content to your specific training needs, as well as attracting significant savings compared to public course costs.

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1. **Custom design** – Together, we will identify the best blended learning solution for your culture, your people and your training objectives.
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3. **On-site training** is a cost effective way to train your people and achieve your defined outcomes.

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