

Course Title: Bridge Engineering Inspection (7283)	
Duration: 1 Day	Certification: LASNTG Certification
Expiry Period: 5 Years	Award: Attendance Certificate

Introduction:

LASNTG has developed this one-day course for Local Authority Engineers who have must have successfully passed the [BIS -MI] course and have the appropriate qualifications and experience to attend EI.

Aim of Programme:

- To provide experienced LA Engineers with an enhanced/better understanding of the Irish road bridge Stock, including their structural and nonstructural components, materials, modes of failure, vulnerability and types of defects, to recognise serious issues from superficial to structural issues.
- Also, to recognise and understand the important role that masonry stone bridges occupy in the Irish road bridge network in a functional and heritage context.
- To develop skills and knowledge to carry out bridge Engineering Inspections, using the LA Bridge Management System (Pavement Management System-Bridge Section) and the Mobile Application (APP), for Engineering Inspections, thereby creating a LA bridge database inclusive of bridge condition, thus providing a formalised and appropriate bridge asset register for subsequent bridge management purposes in each county
- to provide DoT with a national bridge data base providing a picture and details of the non-national road bridge stock and their condition, thereby aiding the best use of available resources to maintain the bridge stock into the future.

Target Learner:

This training programme is for learners who are Local Authority Engineers [AE, EE, SEE, SE] (preferably at Chartered Level) with at least 5 years post graduate experience, with significant experience in bridges, e.g., 2 years in bridge design, assessment, construction, repair, inspection or repair and who have completed and passed the BIS and MI course or have a post graduate qualification including a bridge module.

Learning Outcomes:

- Responsibility for bridge maintenance and engineering inspections
- Bridge types, structural members and other components
- The Engineering Inspection
- Defects common to all Bridges
- Defects in Concrete Bridges

For more information please contact the Local Authority Services National Training Group.

T: 052 616 6260 | E: lasntg@tipperarycoco.ie | W: www.lasntg.ie



An Roinn Iompair Department of Transport

- Defects in Masonry arch bridges
- Defects in Metal and composite decks with metal primary members
- Component condition rating
- El Condition Rating

Assessment:

There is **Theory** based examination which is a Classroom Exam and Standard Pass is 70% and the duration is 15 minutes.

Also, an **assignment** upon completion of bridge inspection(s) on site in own LA jurisdiction and submission of - BIS and EI inspection report within 3 weeks to trainer/tutor and the Standard Pass is 70%.

Entry requirements:

- Attendees of EI course must have successfully passed the [BIS -MI] course and have the appropriate qualifications and experience to attend EI
- Applicants must be able to demonstrate a level of knowledge, skill and competence associated with Level 4 of the NFQ.
- Minimum age of 27
- Honours Degree in Civil or Structural Engineering, from a third level Institution recognised by Engineers Ireland. Preferably Chartered Engineer Status. LA engineering grade AE, EE, SEE, SE
- Computer skills sufficient to use and manage the LA bridge data base (PMS), to liaise with IT specialists, and ability to use the Android tablet Bridge APP for onsite inspections. Willingness to inspect bridges and aptitude to discern and assess problems. Capability of inspecting bridges; including physically able to access under bridge soffits in stream/river beds at suitably appropriate 'safe' times and negotiate slopes and banks all in a safe manner.
- 5 years engineering experience since graduation. Significant bridge experience i.e. a minimum of 2 years practice in at least two of the following: bridge design, construction, assessment, repair or inspection, preferably including masonry bridges.
- Knowledge of supervising bridges repair works desirable.
- Current valid Safe Pass card required.
- Ability to assess risk. Working knowledge of SMS
- Ability to work at heights and near and in water.
- Have a valid car driver licence.
- Ability to sketch an advantage.
- Ability to compose and take reasonable photographs with the Android Tablet.

For more information please contact the Local Authority Services National Training Group.



An Roinn Iompair Department of Transport

Equipment the learner must have:

Each trainee must have an Android Tablet (Wi-Fi enabled) with access to the Pavement Management System BAMP APP. BAMS Bridge Guidelines. AM STR 06026 [NRA BD21/14] and AM STR 06002 [NRA BA16/14]

Enquiries and Booking:

Please contact your local Regional Training Centre:

- Ballincollig: <u>brtc@corkcoco.ie</u>
- Ballycoolin: <u>ballycoolintraining@fingal.ie</u>
- Castlebar: <u>crtc@mayococo.ie</u>
- Roscrea: <u>roscreartc@tipperarycoco.ie</u>
- Stranorlar: <u>stranorlarrtc@donegalcoco.ie</u>

See <u>www.lasntg.ie</u> for further details



For more information please contact the Local Authority Services National Training Group.