

TRAINING ANNOUNCEMENT & CHECKLIST

Class name: Bridge Construction Inspection Certification (BCIC)

Class Dates: Monday, March 25 - Friday, April 5, 2024 (10 days)

<p>Description</p>	<p>This advanced two-week course focuses on the knowledge and skills needed to serve as a Bridge Construction Inspector on bridge projects and other types of structural construction. Topics include bridge staking, excavation and embankment, foundations, steel reinforcement, substructures, structural steel, forms and falsework, prestressed beams, deck expansion joints, superstructures, deck drainage, bridge utilities, deck wearing courses, special structures, slope protection, documentation, approach panels, reconstruction, widening, and safety practices.</p> <p>Instruction includes lecture, demonstration, discussion, and practice activities. Quizzes, course resources, and content reviews are included to help participants prepare for the written exams. Depending on participants' prior knowledge and experience, they may want to do additional practice and review before taking the class and/or the exam.</p> <p>The Bridge Construction Inspector certification expires after five seasons. A recertification must be completed before the end of the fifth season. Once a certification is expired, you must complete the full initial certification course again to be certified. You may recertify any time after three years. An early recertification is recommended for people who did not do any bridge construction inspection after certification and have a bridge project coming up in the next construction season.</p>
<p>Learning Objectives</p>	<p>After the completion of this course the student will be able to:</p> <ul style="list-style-type: none"> • Identify bridge types and major component types and know the features that define those types of structures. • Describe and know the function of bridge elements, and the terminology used. • Understand the need for certified materials, know how to document and pay for materials used in bridge construction. Understand associated materials testing requirements. • Know the PPE required to be worn around bridge construction activities, and the potential hazards to be aware of while inspecting bridge construction projects. • Describe the information provided in a bridge plan and be familiar with navigating bridge plans to find needed bridge construction details and notes. • Understand foundation types and methods of foundation construction. Know the different types of pile, where each type is best suited, how piling is driven with field controls, how to compute when a pile has adequate bearing, and installation record keeping requirements. • Know the purpose and function of forms and falsework, the need for the inspector to take an active role in inspecting it. • Understand concrete volume computations and reinforcement weight computations. • Be familiar with where quantities for concrete and reinforcement are stated in plans for each element. • Recognize the importance of concrete cover to reinforcing and where cover requirements are given in bridge plans. • Correctly interpret bridge plan details showing reinforcing bar sizes, spacing and placement requirements. • Understand concrete consolidation requirements and rebar support requirements during concrete placement as stated in contract specification and alongside guidelines stated in the Bridge Construction Manual. • Understand the importance of the superstructure, and all the elements that make it up – including bearing assemblies, concrete beams or steel girders, the deck, concrete barriers, medians, sidewalks, metal railings, drainage elements, lighting, utility conduits, and expansion devices. • Realize the importance of other structures associated with bridges, such as slope paving, approach panels and retaining walls, know their functions and how they should be constructed.

	<ul style="list-style-type: none"> List the conditions that necessitate repair and rehabilitation of bridges and understand the methods and associated pay items that are used to perform those repairs.
Prerequisites	<p>Before attending the BCIC course, all prerequisites must be completed and on file with the Technical Certification Program and Lake Superior College.</p> <p>You must be currently certified in:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Aggregate Production Tester <input type="checkbox"/> Concrete Field Tester <input type="checkbox"/> Concrete Field Inspector <input type="checkbox"/> Grading and Base Tester <p>You must complete the following eLearning (Approximately 30 hours):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Construction Inspection of Structures Series: Subsurface - AT-TC3CN053-17-T1 <input type="checkbox"/> Construction Inspection of Structures Series: Substructures - TC3CN054-17-T1 <input type="checkbox"/> Construction Inspection of Structures Series: Superstructures - TC3CN055-17-T1 <input type="checkbox"/> Construction Inspection of Structures Series: Rehabilitation and Maintenance - AT-TC3MN032-17-T1 <input type="checkbox"/> Reinforcing Steel for Structures - TC3MS064-21-T1 <input type="checkbox"/> Introduction to Pile Driving: Bridge Foundations – MnDOT eLearning (MnDOT ELM course code: BRDG00061) <input type="checkbox"/> Preparing to Drive Piles – MnDOT eLearning (MnDOT ELM course code: BRDG00062) <input type="checkbox"/> Driving Test and Foundation Piles - MnDOT eLearning (MnDOT ELM course code: BRDG00063) <input type="checkbox"/> Plan Reading – MnDOT eLearning (MnDOT ELM course code: BRDG00072) <p>Confirm you have completed these required eLearning courses by submitting your certificates of completion to Iris Hiemenz (contact info. below) by 12:00 p.m. (noon) Monday, March 11, 2024, 14 days prior to class. If all certificates of completion are not submitted, your registration will be cancelled to allow registration of waitlisted individuals whose prerequisites are complete. No admittance will occur if prerequisites are not met.</p> <p>The following AASHTO eLearning is optional but is strongly recommended:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Concrete Series: Basics of Cement Hydration - TC3MS009-15-T1 <input type="checkbox"/> Concrete Series: Fresh Properties - TC3MS010-15-T1 <input type="checkbox"/> Math Basics Series for Highway Technicians: Introductory Math Concepts - AT-TC3ED004-17-T1
Audience	<p>Employees affiliated with Bridge Construction operation who are certified in Aggregate Production Tester, Concrete Field Tester, Concrete Field Inspector, and Grading and Base Tester.</p> <p>The Bridge Construction Inspector Certification is required for agency/owner personnel acting as an Inspector on constructions projects of significant structures, such as cast-in-place concrete culverts, pile supported structures, bridges, and retaining walls. For all bridge projects, there must be at minimum of one certified Inspector per project. People who have and use this certification work as Inspectors at MnDOT and local agencies (counties and cities).</p>
Dates and Times	<p>Monday, March 25, 2024, to Friday, April 5, 2024, 8:00 a.m. – 4:30 p.m.</p> <p>On both Mondays (3/25 and 4/1), class begins at 9:00 a.m. On both Fridays (3/29 and 4/5) class ends at 1:00 p.m. to allow you to take online exams</p>
Location	<p>MnDOT Shoreview Training and Conference Center 1900 Co. Rd. I W, Shoreview, MN 55126</p>

Materials	See the Bridge Construction Inspector Certification course materials page on the Technical Certification Program website for a complete and current list of what to print, download, and bring to class.
Class Fee	\$1,500.00 Meals are not provided.
Registration Procedures	<p>Lake Superior College (LSC) handles all TCP class registrations and billing. The LSC staff and registration system processes requests in the order they are received. Classes fill quickly, so you should register as soon as possible.</p> <p>For non-MnDOT technicians: Follow your organization's external training registration procedure then register following LSC's process described on the Technical Certification Program website.</p> <p>For MnDOT employees:</p> <ul style="list-style-type: none"> • Get supervisor approval. • Do NOT register yourself with LSC's registration system. Work with your district's training representative who will complete your registration for you. (If you register with LSC and attend or just show up to this training without encumbering funds with an EIOR you will be required to complete a Purchasing Violation form.) • If you need to make any changes to your registration, contact your district's training representative. <p>All: Look first for the registration confirmation email and then, two weeks before class, for the class reminder email for important information.</p>
Cancellation Procedures	<p>Cancellations and class changes must be made by phone or email if received by the Lake Superior College (LSC) Registration Office at least seven (7) calendar days prior to the class. No refunds will be issued after that time. If you do not attend the class, you will not receive credit for the class or get access to the exam. You must re-register and pay another class fee.</p> <p>See the Technical Certification Program website for more information on cancellations and changes, along with contact information.</p>
Contact Info	<p>Registration: Iris Hiemenz: iris.hiemenz@lsc.edu 218.733.1023</p> <p>Content expert: Mark Spafford: mark.spafford@state.mn.us</p> <p>Technical Certification Program: tech-cert.dot@state.mn.us</p>
Accommodations	Individuals who need a reasonable accommodation to participate in this course, contact Suzanne Johnsrud: suzanne.johnsrud@lsc.edu
Additional Information	For additional information, visit the MnDOT Technical Certification Program website at https://www.dot.state.mn.us/technical-certification/index.html