

Structures Level I

Course Objectives:

The Structures Level I is a two day course designed to give participants the skills and knowledge required to become a competent bridge and culvert construction inspector. Topics include – Plan Interpretation, Geotechnical Investigation, Bearing Piles, Structural Excavation, Concrete Placement and Testing, Structural Steel, Steel Reinforcement, Falsework/Formwork, Bridge Decks, 3-Sided Structures, Steel Reinforcement, Metal Arch Structures, and Specification of Bridge and Culvert Construction.

Level I qualification will be required to be maintained for Consultant inspectors on a KYTC project involving Structures.

Prerequisites: Concrete ACI Level I Grade and Drain Level 1

Basic plan reading skills will also be required. Online courses available at <https://www.nhi.fhwa.dot.gov/default.aspx> that provide a good basic understanding of structure plans. See - **TCCC Plan Reading: Bridge Plans - WEB-BASED**, and **TCCC Plan Reading: Culvert Plans - WEB-BASED**

Who should attend:

State, Contractor, and Consultant personnel who are or will be responsible for performing and/or inspecting work within the topics described above on KYTC projects.

Course Dates and Locations:

Date	Class Site	Capacity	Location
January 14-15, 2020	Kentucky Concrete Association	35	Frankfort, KY
February 5-6, 2020	Kentucky Concrete Association	35	Frankfort, KY
May 12-13, 2020	Kentucky Tech	40	Madisonville, KY
May 19-20, 2020	Jackson Energy	40	London, KY

What is the cost and how to register:

- There is no registration fee.
- Registration form is attached and should be submitted at least 2 weeks prior to the course. **Course space is limited**, so early registration submittal is encouraged to ensure enrollment in your preferred course.
- Registrants will be sent a confirmation when the form is received.
- Bring calculator, no cell phones allowed during the test

What is the cancellation policy:

- Cancellation must be received 72 hours prior to the start of the course.

For Questions, Please Contact:

Ryan Gossom, P.E. Division of Construction
502-564-4780 or Email: <mailto:ryan.gossom@ky.gov>

Send all registration forms to:

Janice Flygstad, Division of Construction
janice.flygstad@ky.gov

Highway Structural Inspector-Level I

Location _____

Date _____

Is this a RE-certification (SELECT ONE) – **YES** / **NO**

REGISTRATION FORM

INSPECTOR ID#: _____ (3 OR 4 DIGIT CODE FROM CURRENT QUALIFICATION CARD ~ N/A IF YOU HAVE NOT BEEN PREVIOUSLY QUALIFIED)

NAME: (Last, First, M.I.) _____

DATE OF BIRTH: (mm/dd/yy) _____

HOME ADDRESS: (Apt #) _____

***CHANGE ()** (Street) _____

(City) _____

(State, Zip) _____

Phone: () _____ Email: _____

***CHECK IF CHANGED FROM HOME ADDRESS ON RECORD.**

COMPANY ADDRESS: (Company Name) _____

***CHANGE ()** (State Employees) District _____ Crew _____

(Address) _____

Phone: () _____ Email: _____

***CHECK IF CHANGED FROM COMPANY ADDRESS ON RECORD.**

Highway Structural Inspection – Level One

Qualification Course Outline

(Class requirement: Students to bring their *Spec Book, Pencil, Paper, and Calculator*)
(ALL TIMES ARE **LOCAL**)

Day 1

- 8:30 Introduction and Overview of Course – PAGE #1**
- 8:40 Basic Bridge/Culvert Elements and Plan Interpretation – PAGE #3**
- 9:00 Staking, Layout, etc. – PAGE #16**
- 9:15 Geotechnical and Structure Excavation – PAGE #22**
- 10:00 Break**
- 10:15 Bearing Piles – PAGE #46**
- 10:45 Concrete – PAGE #63**
- 11:30 Prestress Concrete – PAGE #77**
- 12:00 Lunch**
- 1:00 Structural Steel – PAGE #100**
- 1:45 Reinforcing Steel – PAGE #121**
- 2:15 Break**
- 2:30 Joints – PAGE #143**
- 3:00 Forms and Falsework – PAGE #156**
- 3:30 Adjourn for the Day**



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Day 2

- 8:30 Bridge Decks – PAGE #172**
- 9:00 Deck Video**
- 10:00 Break**
- 10:15 Miscellaneous Items – PAGE #190**
- 10:45 3-Sided Precast Structures – PAGE #208**
- 11:15 Metal Arch and other Misc. Structures – PAGE #225**
- 11:45 Lunch**
- 12:45 Bridge Rehabilitation – PAGE #249**
- 1:30 Post Construction – PAGE #263**
- 2:00 Break**
- 2:15 Examination**

