



COURSE NUMBER

FHWA-NHI-134001

COURSE TITLE

Principles and Applications of Highway Construction Specifications

Well-written highway construction specifications are those that can be interpreted accurately to minimize confusion and reduce owner-contractor disputes. Across the country, current practices, standards, and requirements for writing specifications are changing. Agencies also are using effective specifications to manage risk and support alternative contracting methods.

NHI 134001 Principles of Writing Highway Construction Specifications is a highly engaging, two-day, instructor-led training session. It includes content that highlights the role of specifications as contract documents and tools for assigning risk. Course participants engage in lessons and practice sessions to identify types of specifications, select the most appropriate type for a given project, and generate an original, effective highway construction specification.

This is not a grammar course; however, adequate course content emphasizes the use of basic grammar and writing style so that the learners can generate specifications that are correct, consistent, clear, complete, and concise.

OUTCOMES

Upon completion of the course, participants will be able to:

- Explain the purposes of a specification.
- Explain how specifications are used to assign risk and influence the behavior of different parties, within a given a scenario.
- Compare the functions of Standard and Supplemental Specifications with the functions of Special Provisions.
- Explain how the “order of precedence” affects writing specifications and preparing plans.
- Describe the purpose of the General Provisions.
- Explain how a consistent writing style can affect the interpretation of specifications.
- Complete a checklist of the information needed before writing or revising a specification.
- Explain the potential benefits of writing in the active voice.
- Rewrite passive voice sentences into the active voice.
- Evaluate specifications to determine the need for imperative or indicative mood.
- State the five Cs used in specification writing. (Note: the five Cs include: correct; consistent; clear; complete; concise.)
- Explain each element of the AASHTO five-part format.
- Identify potential ambiguities in the wording, given a sample specification.
- Identify the potential benefits of each of the five Cs, given a sample specification.
- Apply the five Cs and the host agency’s preferred format to revise the specification, given a sample specification.
- Write a new specification to a given set of criteria using the five Cs and the host agency’s preferred format, given a sample specification.
- Compare method versus end-result specifications.
- Relate the type of specification to the allocation of risk.
- Write an end-result specification to replace a method specification, given an excerpt from a method specification.

TARGET AUDIENCE

This course is designed primarily for individuals who write, review, and implement an agency’s contract specifications. Participants might represent Federal, State, and local transportation agencies; other public agencies; contractors; and consultant firms. Individuals who do not write specifications but may contribute to their development, as well as those who use specifications, could also benefit from this course and the interaction with their classmates. Such participants might include personnel from environmental, materials, or construction sections or units; legal departments; work zone and safety professionals; contractor personnel; and any others involved with the design and construction of transportation facilities.

TRAINING LEVEL: Intermediate

FEE: 2021: \$250 Per Person; 2022: N/A

LENGTH: 2 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

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