

HIGHWAY BRIDGE DETAILER II

DESCRIPTION: Under general supervision of a structural designer, performs structural detailing* of a broad scope and complexity in the preparation of bridge and structure plans; applies drafting skills, using a detailed understanding of geometry and a general understanding of the structural design concepts involved; performs related work as required.

*Detailing is drawing to scale and dimensioning intricate details and ensuring that the details, in the appropriate views, show all the needed information for construction, also ensuring that detailed elements fit each other in the three dimensional space.

EXAMPLES OF WORK: (A position may not be assigned all of the duties listed, nor do the listed examples include all of the duties that may be assigned.)

Using outline sketches provided by the designer, details and dimensions plan view, elevation view and cross section of any bridge element.

Transfers survey data from notes to the design plans.

Calculates a quantity for each pay item on the plans.

Communicates detailing information with the structural designer to ensure proper preparation of the plans.

Performs detailing work related to shop plans.

FULL PERFORMANCE KNOWLEDGE, ABILITIES AND SKILLS: (These may be acquired on the job and are needed to perform the work assigned.)

Ability to: detail, as directed by the structural designer, a complete set of plans for bridge construction projects; produce plan views, elevation views and cross sections from outline sketches; read and understand engineering survey notes.

ENTRY KNOWLEDGE, ABILITIES AND SKILLS REQUIRED: (Applicants will be screened for possession of these through written, oral, performance, and/or other evaluations.)

Knowledge of: NDOR bridge standard details; the development process of bridge plans.

Ability to: produce plan views, elevation views, and cross sections from complete sketches; perform mathematical calculations including geometry, algebra and trigonometry; read and understand the terminology used in bridge plans; accurately transfer information from sketches to the design plans; create and manipulate CAD and microstation files; communicate with others to resolve differences and convey ideas.

Skill in: operating CAD; operating P.C.

HIGHWAY BRIDGE DETAILER II (continued)

JOB PREPARATION GUIDELINES: (Entry knowledge, abilities, and/or skills may be acquired through, BUT ARE NOT LIMITED TO, the following coursework/training and/or experience.)

Any combination of training and/or experience that will enable the incumbent to possess the required knowledge, abilities and skills. A general qualification guideline for positions in this class is high school education or equivalent AND education or experience in detailing bridge plans using computer aided design.