



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Dianna L. Taylor
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: July 7, 2017

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement Monday, July 10, 2017 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Friday, July 21, 2017**. Applicants will not be accepted after that time and date.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE IV

Senior Bridge Inspection Engineer
Region 4/District 6/Bureau of Operations
Office of Highways Project Implementation
Springfield

Attachments
42063

Technical Applications [PM1080 rev 6/1/17](#)****must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by **Friday, July 21, 2017, 4:30 p.m.** Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



An Equal Opportunity Employer

Position Summary Sheet

Classification:	Civil Engineer IV	Salary:	\$5,800 - \$7,515*
Position Title:	Senior Bridge Inspection Engineer	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW114-23-56-505-00-01	IPR#:	42063

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Region 4, District 6/Bureau of Operations/126 E Ash St, Springfield, IL

Description Of Duties:

This position is accountable for detailed inspection of district bridges and structures to fulfill the requirements of the National Bridge Inspection Standards, those of the district and state Maintenance policies; management of the district Bridge Inspection Specialist team; preparation of necessary reports and forms; input of required data into the Bridge Information System (BIS) or Illinois Structured Information System (ISIS); supervision of district bridge-related Day Labor projects; and preparation of contract documents for bridge repair plans.

Special Qualifications:

Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- Extensive district-wide travel and occasional state-wide travel including overnight stays
- Occasional overtime during nights and weekends
- 24 hour emergency call availability; and ability to report to headquarters within 45 minutes of call-out
- Ability to perform outdoor work in a variety of adverse conditions including, but not limited to, inclement weather, rough terrain, heights, constructions sites, and roadways open to traffic

Desired:

- Six years of experience in civil engineering including four years of supervisory responsibility of which three years should be in highway engineering
- NBIS 2-week class, Fracture Critical 1-week class and Element Level Inspection class
- Knowledge of bridge types, basic components and problems related to bridges
- Strong oral and/or written communication skills
- Extensive familiarity with bridge construction and/or maintenance practices and procedures

Shift/Remarks:

7:00 am – 3:30 pm / Monday - Friday (40 hours per week, 30 minute lunches)

THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

**Technical Application PM1080 was revised 6/1/17. The previous application form, revised 9/9/16, will be accepted until close of business 7/31/2017. Applications received on 8/1/17 or after must be on the revised form.

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	May 1, 2017	POSITION:	Senior Bridge Inspection Engineer
APPROVED BY:	Jeffrey South	OFFICE/DIVISION:	OHPI/ Region 4 – District 6 Operations
CODE:	PW114-23-56-505-00-01	REPORTS TO:	Bridge Maintenance Engineer

Position Purpose

This position is accountable for detailed inspection of bridges and structures throughout the District to fulfill the requirements of the National Bridge Inspection Standards, those of the District and State Maintenance policies; management of the District's Bridge Inspection Specialist team; preparation of necessary reports and forms and input of required data into the Bridge Information System (BIS) or Illinois Structured Information System (ISIS). This position shall also supervise bridge related Day Labor construction work within the district and assist the Bridge Maintenance Engineer in preparing bridge repair plans.

Dimensions

Subordinate Personnel:	2 direct, 0 indirect, 4 seasonal
Number of NBIS structures in District:	850
Number of non-NBIS structures in District:	1000
Number of NBIS inspections annually:	+/- 350
Number of non-NBIS inspections annually:	+/- 250
Number of Day Labor bridge projects annually:	+/- 5
Value of contract plans produced annually:	\$4,000,000

Nature and Scope

This position reports to the District Bridge Maintenance Engineer. Reporting directly to this position are the Bridge Inspection Technicians (2) and Associate Bridge Inspection Technician (1) positions. Civil Engineers, Engineering Technicians and Highway Maintainers on loan from other Bureaus or team sections report to this position as required by operational needs.

The duties of this position are complex due to the large number and variety of bridges and structures involved. Access to critical areas of many structures is poor, making adequate inspection very difficult. The incumbent's analysis and recommendations have appreciable impacts on the safety of motorists, preservation of structures, and plans and procedures for temporary or permanent repair. Bridges are a large investment of public funds. Proper inspection and evaluation according to current standards, policies and engineering judgment protects this investment, attempts to prevent structural failures, and increases the level of public safety. The incumbent must have knowledge of bridge nomenclature. S/He must possess the ability and special training to recognize structural problems related to fracture critical members and scour in various bridge designs. The incumbent must properly and adequately advise the District Bridge Maintenance Engineer of structural deficiencies or potential problems.

Typical bridge inspections performed and/or supervised by this position include routine NBIS Inspections, In-Depth NBIS Inspections, Element Level Inspections, Fracture Critical Inspections, Underwater Inspections, Damage Inspections, and Special Inspections of various types. The incumbent and his/her subordinates are responsible for personally performing all district bridge inspections required by the IDOT Structural Services Manual, except those relating to major river bridges inspected by the Central Office Bridge Inspection Unit. The incumbent and his/her subordinates are responsible for documenting all inspections, entering all inspection data into the Illinois Structural Information System (ISIS), and maintaining required documents in bridge files.

Performing required inspections will often require that the incumbent be able to traverse rough terrain and steep grades, operate in confined spaces, work from ladders or high spaces, and operate various inspection access equipment. Overtime will sometimes be required in order to fulfill all inspection duties within the mandated deadlines and occasional overnight travel may be required, primarily for training purposes.

During emergency after hour call outs, the incumbent investigates bridge issues that arise such as impact damage to structures, structure deterioration that poses an immediate safety risk to the public, flooding of structures and scour issues arising from flood events. After investigating, the incumbent is responsible for coordinating necessary safety measures with maintenance crews, law enforcement, and other local agencies. This requires being on call 24 hours a day and the ability to report to headquarters within 45 minutes.

The incumbent accomplishes his/her bridge inspection duties both first hand and through the Bridge Inspection Technician and Associate Bridge Inspection Technician positions assigned as subordinates. The incumbent is responsible for assigning inspections to subordinates and ensuring assigned inspections are completed in a satisfactory and timely manner. The incumbent assists subordinates as necessary and is responsible for administering evaluations and discipline to subordinates. The incumbent also supervises various seasonal help to aid in bridge inspection duties. For safety reasons, inspections are often performed by two inspectors and the incumbent must be able to work with other inspectors in performing inspection duties.

In addition to bridge inspection duties, this position serves as the Resident Engineer on bridge related Day Labor projects within the district. The incumbent is responsible for communicating with Day Labor crews and offering technical assistance when needed.

This position is also responsible for assisting the Bridge Maintenance Engineer with the preparation of bridge repair contracts for Day Labor, contract maintenance, bridge painting, and major bridge preventative maintenance. The incumbent utilizes knowledge of IDOT specifications, experience in bridge construction, computer aided drafting skills, technical writing, and knowledge of the plan preparation and submittal process to accomplish this.

The incumbent works within the guidelines of the National Bridge Inspection Standards, PONTIS Element Inspection Standards, Structural Services Manual, the FHWA's Bridge Inspector's "Training Manual 90," Bureau of Personnel rules, and various labor agreements.

Contacts within the Department are with all District Bureaus, District Maintenance Yards, the Central Bureau of Maintenance, and the Central Bureau of Bridges and Structures. Contacts outside the Department are with City, State and County officials, repair contractors and the traveling public. This position may require overtime and overnight travel.

The effectiveness of this position may be measured by the results achieved in complying with the requirements of the National Bridge Inspection Standards. This includes and is documented by the quantity and quality of inspections and reports completed. Ultimate effectiveness is measured in the level of safety and integrity of the bridges and structures maintained.

Principal Accountabilities

1. Plans, directs and controls the District Bridge Inspection Technician team in the continuing detailed field inspection of bridge structures throughout the district to ensure compliance with the National Bridge Inspection Standards.
2. Conducts field inspections of fracture critical structures, underwater bridge inspections, and various special inspections to meet the requirements of the National Bridge Inspection Standards.

3. Detects and analyzes structural problems encountered during inspections and makes specific recommendations based on observations and structural expertise. Must evaluate the seriousness of all problems encountered and take appropriate action as required.
4. Completes all necessary reports concerning bridge inspections and enters required inspection data into the Illinois Structure Information System (ISIS). Requests reports and analyzes information from ISIS.
5. Ensures safe operation and maintenance of the specialized equipment and vehicles used by the inspection crew.
6. Responsible for being knowledgeable of the National Bridge Inspection Standards and technological developments relating the bridge inspection through training and other resources.
7. Assists the Bridge Maintenance Engineer in preparing Day Labor and contract repair plans when necessary.
8. Serves as Resident Engineer on Day Labor bridge repair projects.
9. Responds to emergency bridge callouts as necessary.
10. Ensures all work is performed in a manner that is safe and conducive to the fair and equitable treatment of all employees.
11. Trains, motivates and evaluates subordinates to ensure a well-developed and competent staff.
12. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
13. Performs other duties as assigned.