

**Illinois Environmental Protection Agency  
Bureau of Water, Permit Section  
(IEPA)**

1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276, 217/782-3362

The IEPA has issued a Public Notice of a request for a Clean Water Act Section 401 water quality certification that would allow the issuance of a federal permit for the discharge of pollutants to waters of the State.

**Public Notice Beginning Date:**

Thursday, February 8, 2024

**Public Notice Ending Date:**

Wednesday, February 14, 2024

**Agency Log No.: C-0081-23**

**Federal Permit Information:** Federal permit/license no. LRC-2023-295 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

**Name and Address of Discharger:** Illinois Department of Transportation, Jose Rios - 201 W Center Ct., Schaumburg, IL 60196

**Discharge Location:** In Section 16 of Township 41-North and Range 12-East of the East 3rd Principal Meridian in Cook County. Additional project location information includes the following: The project is located along Rand Road between Elk Blvd. and Ballard Rd., Des Plaines, IL 60016

**Name of Receiving Water:** Des Plaines River

**Project Name/Description:** Rand Road over Des Plaines River Bridge and Roadway Reconstruction - Proposed bridge replacement and roadway widening for Rand Road over DesPlaines River in the City of Des Plaines, Illinois. Other improvements will include the widening of Rand Road and adding left turn lanes to the entrance to the North Elementary School and Chicago Behavioral Hospital. A multi-use path and sidewalk will be provided between Elk Blvd. and Ballard Rd.

**Construction Schedule:** Immediate (Planned project duration is approximately 759 days)

The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters must provide their name and address along with comments on the certification request. The IEPA Log number must appear on each comment page. Commenters may include a request for public hearing. Only hearing requests and comments that pertain to Clean Water Act Section 401 authority will be considered. This authority provides consideration of whether the permit or license would be consistent with Sections 301, 302, 303, 306, or 307 of the CWA, as well as "any other appropriate requirement of State [or tribal] law". Requests for additional comment period must provide a demonstration of need. The final day of comment acceptance will be on the Public Notice Ending date shown above, unless the IEPA grants an extended notice period. The attached Fact Sheet provides a detailed description of the project and the findings of the IEPA's antidegradation assessment.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please see the contact information below.

Name: Webert Deslien

Email: [webert.deslien@illinois.gov](mailto:webert.deslien@illinois.gov)

Phone: 217/782-3362

Post Document. No. C-0081-23-02082024-PublicNoticeAndFactSheet.pdf

The Illinois Department of Transportation (IDOT) has applied for a 401 Water Quality Certification for impacts associated with replacement of the Rand Road bridge over the Des Plaines River and roadway widening. The proposed project will occur in Township 41 North, Range 12 East, Section 16 in Des Plaines, Cook County, Illinois. Additional improvements will include the widening of Rand Road and adding left turn lanes to the entrance to the North Elementary School and Chicago Behavioral Hospital. A multi-use path and sidewalk will also be provided between Elk Blvd. and Ballard Rd.

The existing Rand Road is two lanes in each direction and the structure is a three-span bridge crossing the Des Plaines River which was constructed in 1928 and widened in 1982. This structure will be removed and replaced with a proposed three-span bridge. The bridge replacement is included within the approximately 0.35 miles of Rand Road corridor improvements east and west of the Des Plaines River.

The proposed project will involve widening the bridge 24 feet to provide a 12-foot wide median, two 12-foot-wide lanes in each direction, 2-foot wide gutters, a 5-foot wide sidewalk on the north side of the bridge, and a 10-foot wide shared-use path on the south side of the bridge. The bridge will be raised to alleviate the issue of the Des Plaines River flooding over the bridge deck, and existing traffic signal improvements, roadway lighting upgrades, storm sewer installation, and watermain replacement will be included with the project.

The proposed project will result in 0.048 acres (Ac) of permanent wetland impacts, and 0.051 Ac (185 linear feet) of permanent impacts and 0.036 Ac of temporary impacts to the Des Plaines River. Wetland impacts are proposed to be mitigated at a ratio of 1.5:1 for a total of 0.072 Ac of mitigation. Mitigation will be performed with the purchase of wetland credits from an in-basin commercial wetland bank.

Information used in this review was obtained from the application documents dated December 10, 2019, May 11, 2023, July 14, 2023, August 25, 2023, and October 24, 2023.

### **Identification and Characterization of the Affected Water Body.**

On December 10, 2019, Huff and Huff, Inc performed a wetland delineation in the project area. Three wetlands (Sites 1, 2, and 3) and two surface waters (Sites W1 and W2) were identified within or adjacent to the Environmental Survey Request (ESR) limits. Of these, wetland Sites 1 and 2, and surface water W1 (the Des Plaines River) are expected to be impacted by the proposed project.

The Des Plaines River has 48.4 cfs of flow during critical 7Q10 low-flow conditions. The Des Plaines River is classified as General Use Water. The Des Plaines River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating in that document. The Des Plaines River, Waterbody Segment IL\_G-28, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life use with potential causes given as alteration in stream-side or littoral vegetative covers, cause unknown, chloride, dissolved oxygen, flow regime modification, nitrogen (observed effect), and total phosphorus, fish consumption use with potential causes given as mercury and polychlorinated biphenyls (PCBs), and primary contact use with a potential cause given as fecal coliform. This segment of the Des Plaines River is not subject to enhanced dissolved oxygen standards.

The Des Plaines River (Site W1) is a riverine perennial stream, which flows south beneath Rand Road approximately 530 feet northwest of East Ballard Road. Site W1 receives surface water from adjacent uplands, wetlands, and impervious surfaces. Adjacent land cover consists of forested land and wetland, and the substrate is riprap, silt, pebbles, and sand. Bank vegetation consists of Black walnut (*Juglans nigra*), box elder (*Acer negundo*), riverbank grape, bur oak (*Quercus macrocarpa*), American elm (*Ulmus americana*), common buckthorn, tree of heaven (*Ailanthus altissima*), and hackberry (*Celtis occidentalis*). 1.42 Ac of the

Des Plaines River lies within the ESR, of which 0.051 Ac will have permanent impacts from riprap placement, and 0.036 Ac will have temporary impacts from cofferdam placement.

Site 1 is a forested floodplain associated with the Des Plaines River located south of Rand Road and east of East Ballard Road. Site 1 begins immediately east of the Des Plaines River and extends approximately 550 feet southeast. Dominant vegetation includes common buckthorn (*Rhamnus cathartica*), tall boneset (*Eupatorium altissimum*), calico aster (*Symphotrichum lateriflorum*), black mustard (*Brassica nigra*), waterpepper (*Persicaria hydropiper*), nodding bur-marigold (*Bidens cernua*), devils beggarticks (*Bidens frondosa*), reed canary grass (*Phalaris arundinacea*), riverbank grape (*Vitis riparia*), and Virginia creeper (*Parthenocissus quinquefolia*). The native FQI and native mean C value are 15.0 and 2.5 respectively, indicating moderate floristic quality with some native character. This area receives surface water from adjacent uplands, impervious surfaces, and periodic overbank flooding from the Des Plaines River. This wetland has a direct hydrologic connection to the Des Plaines River and will be considered jurisdictional. A total of 0.04 acre of Site 1 is located within the ESR limits of which 0.034 Ac will be permanently impacted as a result of roadway and retaining wall construction, as well as drainage improvements.

Site 2 begins approximately 75 feet east of the Des Plaines River and extends east approximately 350 feet. Dominant vegetation includes common buckthorn and devil's beggarticks. The native FQI and native mean C value are 7.8 and 1.9 respectively, indicating degraded floristic quality. This area receives surface water from adjacent uplands, impervious surfaces, and periodic overbank flooding from the Des Plaines River. This wetland has a direct hydrologic connection to the Des Plaines River and will be considered jurisdictional. A total of 0.03 acre of Site 2 is located within the ESR limits of which 0.014 Ac will be permanently impacted as a result of roadway and retaining wall construction.

#### **Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.**

The Rand Road improvements and the proposed bridge will increase the impervious areas for the corridor. Approximately 0.3 acres (13,100 square feet) of maintained impervious area will be added for the 0.35 mi corridor improvements for Rand Road. It is anticipated that chlorides will wash off the roadway surface into the roadway drainage system and roadside ditches that will outlet to the Des Plaines River. The current chloride loading by the City for the project area utilizes approximately 520 lbs of salt per application, based on the current application rate of 300 pounds per lane-mile. The chloride loading will increase slightly by roughly 60 pounds of salt per application due to the added impervious areas resulting from the corridor improvements, for a total of 580 pounds of salt. This is an 11 percent increase in salt per application. The number of applications is dependent upon the number of weather events in any given year. The project area required 20 applications during the 2022-2023 Winter Operations

Any increase in suspended solids that occurs will be confined to the area near the existing bridge. This would be expected to occur upon removal of the existing bridge piers. Aquatic life in the portion of the river that will be disturbed during construction may be negatively impacted from placement of the cofferdam but in time, they should recover once construction is complete and the cofferdam is removed.

#### **Fate and Effect of Parameters Proposed for Increased Loading.**

To minimize the surface water impacts during construction, appropriate erosion and sediment control Best Management Practices (BMPs) will be implemented in accordance with local, state, and federal regulations. With proper implementation of BMPs short-term construction-related water quality impacts will be avoided or minimized. IDOT Standard Specifications for Road and Bridge Construction will guide erosion and sediment control efforts at the site. All erosion and sediment control measures will be maintained and will remain in place until construction is completed, and site conditions stabilize. Areas disturbed by construction will be stabilized with permanent seeding following final grading and use of erosion control blankets or mulch will be laid over the permanent seeding. Existing trees and shrubs that will remain within the project area will be protected and proposed shade and evergreen trees will be planted along the project corridor. Temporary

measures in accordance with applicable IDOT standards will be used to control erosion and sedimentation while the project is under construction, prior to establishment of permanent measures. Other BMPs to be utilized include temporary ditch checks applied during construction, ditches planted with vegetation, inlet filters and pipe protection to prevent sediment runoff from entering the system, and catch basins with sumps to allow settling of sediment.

The City maintains Rand Road over the Des Plaines River and will implement the following Winter Operations BMPs:

- Annual training for plow operators to improve the efficiency of de-icing application and to reduce loss of de-icing chemicals.
- The City utilizes calibrated spreaders equipped with ground sensors that can accurately control the rate of spreading.
- Prewetting solid deicing chemicals/mixtures for better adhesion to the pavement surface and for melting of the ice/snow.
- Adjusting the application rates of de-icing chemicals according to pavement temperature and weather conditions.
- Store all salt on an impermeable pad that must be constructed to ensure that minimal stormwater is coming into contact with salt unless the salt is stored in a container that ensures stormwater does not come into contact with the salt.
- Cover salt piles at all times except when in active use, unless stored indoors.
- Good housekeeping practices must be implemented at the site, including: cleanup of salt at the end of each day or conclusion of a storm event; tarping of trucks for transporting bulk chloride; maintaining the pad and equipment; good practices during loading and unloading cleanup of loading and spreading equipment after each snow/ice event, a written inspection program for storage facility, structures and work area; removing surplus materials from the site when winter activity finished where applicable, annual inspection and repairs completed when practical; evaluate the opportunity to reduce or reuse the wash water.
- Calibrate all salt spreading equipment at least annually before November 30th.
- For working areas, provide berms and or sufficient slope to allow snow melt and stormwater to drain away from the area. If snow melt and stormwater cannot be drained away from the working area, channeling water to a collection point such as a sump, holding tank or lined basin for collection, discharge at a later time, use for prewetting, and use for makeup water for brine must be considered.
- Maintenance yards and trucks have been upgraded to reduce chloride runoff to waterways.

Permanent impacts to Wetland Sites 1 and 2 will total 0.048 Ac. Of the total impacts 0.034 Ac of impact will be as a result of roadway and retaining wall construction as well as drainage improvements and 0.014 Ac of impact will be as a result of roadway and retaining wall construction. Mitigation required will be at a 1.5:1 ratio for a total of 0.072 mitigation acres and will be achieved by purchasing wetland bank credits from an in-basin commercial wetland bank.

The Des Plaines River (W1) will be permanently impacted as a result of bridge replacement and rip rap placement in 0.051 Ac, and temporarily impacted as a result of cofferdam placement in 0.036 Ac. The permanent impacts which also include removal and replacement of the two piers will not be mitigated for as the impact is not considered a loss. Any temporary impacts will be mitigated through restoration of original contours and re-seeding with native wetland species.

The proposed bridge piers impacting site W1 were designed on steel H-piles which minimizes the impacts compared to a typical wider spread footing design. Additionally, the impacts to wetland sites 1 and 2 were minimized to the extent possible by constricting retaining walls adjacent to the roadway instead of roadway embankment.

## **Purpose and Social & Economic Benefits of the Proposed Activity.**

The purpose of the project is to enhance safety, increase traffic capacity, and improve the mobility of the Rand Road corridor. The proposed structure will be approximately four feet higher than the existing bridge and the roadway profile will be raised between the school entrance and Ballard Road. The new improvements provide adequate compensatory storage minimizing the number of properties affected by frequent flooding in the area.

## **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.**

The Applicant evaluated the following alternatives:

No Build Alternative - This alternative would involve not replacing the 95-year-old bridge that is rated in severe condition. The deterioration has seriously affected the primary structure components, in this case the beams. IDOT will close this bridge as it is considered to be structurally deficient. Debris would continue to accumulate at the piers and in turn reduce the waterway and increase scour of the foundations. Roadway and bridge overtopping/flooding requiring road closure would continue as the bridge is already 6 feet below the hydraulic requirements. The lack of a westbound left turn lane from Rand Road to the North Elementary School entrance and Wilson Lane would cause crashes west of the bridge. Lastly, the eastbound Rand Road left turn to Ballard Road could not be lengthened due to the narrowing of the lanes at the bridge, resulting in causing backups and increased crashes. This alternative was not chosen for the reasons discussed above.

Replace the bridge in-kind with a profile raise and no roadway/bridge widening - This alternative would lack a westbound Rand Road left turn lane to the relocated Wilson Lane (access to SicoMaria of the Chicago Behavioral Hospital) to the North Elementary School entrance and would cause crashes west of the bridge. Additionally, the eastbound Rand Road left turn to Ballard Road cannot be lengthened due to the narrowing of the lanes at the bridge causing backups and increased crashes. For these reasons, this alternative was not chosen.

Replace the floor drains on the new bridge deck with scuppers and a closed drainage system connected to the roadway drainage system and routed west - This alternative would involve routing a bridge closed drainage system to the west and connecting to the roadway drainage system. The roadway/bridge drainage systems west of the bridge would require routing such that they outlet into the compensatory storage area created to the northwest of the bridge. However, the drainage system would require substantial redesign to discharge into the compensatory storage area northwest of the bridge and the compensatory storage basin was not designed to handle stormwater runoff volume from the roadway. The amount of water diverted from the drainage system could potentially reduce the compensatory storage volume required for the fill in the floodplain resulting from this project. If the available compensatory storage volume is reduced, new flooding conditions may result. For these reasons, this alternative was not chosen.

Replace the floor drains on the new bridge deck with scuppers and a closed drainage system connected to the roadway drainage system and routed east - This alternative would also involve routing a bridge closed drainage system, but this one would be routed to the east and connect to the roadway drainage system. However, no right-of-way was planned to be obtained in the "green" areas east of the bridge as these areas are owned by the FPDC. The area east of the proposed bridge has limited right-of-way due to the location being in the urban section of Rand Road. Construction of the proposed roadway, sidewalk, multi-use path, and a significant amount of utilities, the area east of the bridge does not have sufficient space for "green" areas to provide bioswales or other BMP elements. This alternative was not chosen.

Replace and raise profile of the bridge along with additional improvements (Preferred Alternative) – The bridge structure will be removed and replaced with a proposed three-span bridge that is 213'-9 ½" back-to-back abutment length and is 82'-0" out-to-out width, which accommodates two 12' east and two 12' west travel lanes, a 12' center median, a 5' sidewalk on the north side, and a 10' multi-

use path on the southside. The proposed bridge replacement is included within the approximately 0.35 miles of Rand Road corridor improvements east and west of the Des Plaines River. The Des Plaines River has experienced 8 major river floods in the last 15 years. The preferred alternative to replace the bridge and raise the profile would reduce the amount of flooding at the bridge. The proposed side path from Elk Boulevard to Ballard Road will connect the FPDCC's existing Des Plaines River Trail and North Elementary School which will provide a safe travel path for children to ride their bikes to school. Additionally, the side path will provide a link between the local planned bike path system to the Des Plaines River Trail. The proposed project was determined to be the preferred alternative.

**Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.**

A Natural Resources Review (NRR) was issued by IDOT on May 11, 2023. The review provided the following information:

The Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075 found that the Illinois Natural Heritage Database contains one record of the State listed threatened Kirtland's snake and one Illinois Natural Area Inventory (INAI) site (Carle Woods) in the vicinity of the project area. No suitable habitat for Kirtland's is within the project limits, thus no adverse effects from the project will occur to this species. Carle Woods INAI site is located 0.5-mile north of the project site and due to its distance from the project location, no adverse effects to this site will occur from the project. There are no dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the overall project. Therefore, consultation under Part 1075 is terminated.

The Review for Illinois Interagency Wetland Policy Act – Part 1090 was terminated.

A Review for Endangered Species Act – Section 7 found that the following species are listed in Cook County: Northern long-eared bat (NLEB), piping plover, red knot, whooping crane (experimental population, non-essential), Eastern massasauga, Hine's emerald dragonfly, Eastern prairie fringed orchid (EPFO), and leafy prairie-clover. It was determined that there is no Critical Habitat in the project vicinity.

- Northern long-eared bat - There are no records of maternity roost trees, maternity colonies, or hibernacula in the vicinity of the project corridor; however, a suitable travel corridor is present along the Des Plaines River. An IPaC qualification interview was completed and determined that the project is within the scope of the programmatic biological opinion and is not likely to adversely affect the NLEB provided the following conservation measures are implemented:
  - Trees three inches or greater in diameter at breast height shall not be cleared from April 1<sup>st</sup> through September 30th of any given year.
  - This determination is based in part on the results of the bridge/structure assessment (11-2-2022) which found no bats or signs of bats utilizing the bridge. According to the memo, all bridge assessments for signs of bats are valid for two years and expired assessments will need to be updated prior to the start of work on the bridge.
  - Additionally, the memo also states: “At this time, the Tricolored bat is proposed for listing as federally endangered. The species habitat requirements are similar to NLEB. They often roost in trees during the summer active season and hibernate in caves or mines during the winter. Therefore, this office has determined that the above conservation measures may also provide protections for the Tricolored bat. However, once the USFWS issues their final ruling on whether or not to list the Tricolored bat as federally endangered, there may be additional consultation needed for those projects that have not been completed by the effective date.”

- Eastern prairie fringed orchid (EPFO) – The proposed project limits were evaluated and including the use of EPFO guidance from the USFWS, Chicago Ecological Services Field Office, found that there are no impacted prairies or high-quality wetlands in the project corridor. Therefore, it was determined that the proposed project will have no effect on the EPFO.
- Other Federally Listed Species – The preferred habitat of each of the remaining species were cross-referenced with knowledge of the project area and it was determined that there are no suitable habitats present. The proposed project will have no effect on and of the remaining listed species.

The NRR provided by IDOT states the following summary: “We have determined that the proposed improvement is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of any critical habitat.”

**Agency Conclusion.**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the area by replacing a structurally deficient crossing with one that will provide protection from flooding / over-topping, as well as safety improvements to the roadway. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.