

**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, June 20, 2024

**Public Notice Ending Date:**

Friday, July 5, 2024

**Agency Log No.: C-0189-22**

**Federal Permit Information:** Federal permit/license no. LRC-2022-00262 is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

**Name and Address of Discharger:** McHenry County Division of Transportation, Darrell Kuntz - 16111 Nelson Road, Woodstock, IL 60098

**Discharge Location:** In Section 19 of Township 43-North and Range 8-East of the East 3rd Principal Meridian in McHenry County. Additional project location information includes the following: Along Randall Road from Polaris Drive/Acorn Lane to Ackman Road, Crystal Lake and Lake in the Hills, IL 60156

**Name of Receiving Water:** Woods Creek and Crystal Lake Outlet

**Project Name/Description:** Randall Road Improvement Project - proposed comprehensive improvements to Randall Road, extending from Polaris Drive/Acorn Lane to McHenry Avenue within the Villages of Lake in the Hills and the City of Crystal Lake, and Unincorporated McHenry County, Illinois. The project spans approximately 2.01 miles and aims to enhance traffic flow, safety, and infrastructure.

**Construction Schedule:** Immediate (Planned project duration is approximately 1032 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.

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Post Document. No. C-0189-22-06202024-PublicNoticeAndFactSheet.pdf

The McHenry County Department of Transportation (MCDOT) has applied for a 401 Water Quality Certification for impacts associated with improvements to Randall Road between Acorn Lane and McHenry Avenue.

The proposed project will occur in Township 43 North, Range 8 East, Sections 17, 18, 19, 20, 29, 30, 31, and 32 near Crystal Lake and Lake in the Hills, McHenry County. The proposed improvements to this section of Randall Road include Roadway widening, stream relocations, the installation of a traffic signal at the Randall Road and Alexandra Boulevard intersection, and the construction of a sidewalk, shared use path, and bicycle lanes; as well as associated infrastructure. The proposed project will improve motorist safety by widening the roadway, installing a traffic light at the intersection, and by improving local transportation accommodations for non-motorized travel. Additionally, a curb and gutter will enclose the existing open drainage system, box culvert crossings will be upgraded with bridges, and the portion of Woods Creek Tributary will be relocated from the east side of Randall Road to the west side. Existing stormwater retention and detention will also be expanded.

Permanent impacts are expected to occur in 3.33 acres (Ac) of wetlands, and 1920.5 linear feet (LF) of streams as a result of roadway widening, construction of sidewalks and the multi-use path, culvert crossing upgrades, and stream relocation. Temporary impacts totaling 524.1 LF are proposed for dewatering activities to construct the proposed bridge crossing associated with the culvert upgrade, and removal of existing culvert at Miller Road and construction of new bridge. Impacts to wetlands and the tributary to Woods Creek will be mitigated via wetland bank credit purchase from various mitigation banks and impacts to Woods Creek will be mitigated through construction of the new stream channel.

Approximately 9235 cubic yards (CY) of clean fill, stone, and concrete will be placed within the impacted wetlands, and 6754 CY of clean fill, stone, and concrete will be placed within the impacted stream (Woods Creek Tributary).

Information used in this review was obtained from the application documents dated October 19, 2022, July 18, 2023, August 15, 2023, September 2, 2023, and March 1, 2024.

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

Woods Creek (Site W1) and the Woods Creek Tributary (Site W2) do not have segment codes and are both tributaries to Woods Creek Lake. The tributaries to Woods Creek Lake have 0 cfs of flow during critical 7Q10 low-flow conditions. The tributaries to Woods Creek Lake are classified as General Use Water. The tributaries to Woods Creek Lake are not listed as biologically significant streams in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor are they given an integrity rating in that document. The tributaries to Woods Creek Lake, tributaries to Waterbody Segment IL\_RTZZ, are not listed on the 2018 Illinois Integrated Water Quality Report and Section 303(d) List as they have not been assessed. These segments of the tributaries to Woods Creek Lake are not subject to enhanced dissolved oxygen standards.

Huff & Huff, Inc. (H&H) staff conducted wetland and surface water delineations for the proposed project on September 25 and 26 and October 1, 2, and 3, 2021. The survey identified 4 surface waters and 14 wetlands onsite. Of the surface waters, impacts are proposed to Woods Creek (Site W1) and the tributary

to Woods Creek (Site W2). Fish, Macroinvertebrate, and Water Quality monitoring were completed for Woods Creek and Woods Creek Tributary by H&H in 2015 and 2021. The Stream Assessment reports can be found in the application documents.

Site W1, Woods Creek, is a perennial, low gradient stream approximately 12 feet wide with an average depth of 14 inches. The portion downstream (east) of Randall Road was moderately meandering and contained a riffle-run sequence. The stream reach sampled included a pool area created by woody debris, as well as the riffle-run sequence. Woods Creek flows east beneath Randall Road approximately 1,365 feet north of Acorn Lane within the project limits. Woods Creek receives surface water from adjacent wetlands, uplands, and impervious surfaces and provides the functions of conveyance and wildlife habitat. The substrate consists of muck, silt, sand, and rocks. Pools were observed within Woods Creek within the project limits. Hydrology was disturbed by beaver activity. Adjacent land cover includes wet meadow, marsh, and scrub-shrub wetland.

Woods Creek had a Qualitative Habitat Evaluation Index (QHEI) score of 45, ranking it as “fair”. A Macroinvertebrate Index of Biotic Integrity (MIBI) rating of 22.1 was given, indicating a rank of “fair” and a Fish Index of Biotic Integrity (IBI) of 9 indicated a Restricted Aquatic Resource rating.

Site W2, Woods Creek Tributary, is a perennial, low gradient stream approximately 8 feet wide with an average depth of 12 inches. The portion of the stream sampled did not meander or contain pools but did contain two riffle areas one of which consisted of concrete rocks making up an artificial substrate. The Woods Creek Tributary flows south along the west side of Randall Road from north of Village Road to Miller Road, crosses Randall Road at Miller Road, and flows south along the east side of Randall Road for approximately 1,730 feet to its confluence with Woods Creek. The Woods Creek Tributary receives surface water from adjacent wetlands, impervious surfaces, and periodic overbank flooding from Woods Creek, and provides the functions of conveyance and wildlife habitat. The substrate consists of silt and clay. Riffles and pools were observed within the Woods Creek Tributary. Adjacent land cover includes residential land, a narrow riparian wooded area, and wet meadow, marsh, and scrub-shrub wetland.

The Woods Creek tributary had a Qualitative Habitat Evaluation Index (QHEI) score of 36, ranking it as “poor”. A Macroinvertebrate Index of Biotic Integrity (MIBI) rating of 21.1 was given, indicating a rank of “fair” and a Fish Index of Biotic Integrity (IBI) of 11 indicated a Restricted Aquatic Resource rating.

No mussels (live or dead) were found during mussel surveys conducted in both streams; however low numbers of Asiatic clams were found in each location. No suitable mussel habitat was present within the study areas.

A total of 251.4 LF of temporary impacts are expected for Woods Creek (Site W1) from the Randall Road bridge over Woods Creek. 272.7 LF of temporary impacts and 1920.5 LF of permanent impacts are expected in the Tributary to Woods Creek (Site W2) for the creek relocation activities, retaining wall, sight screen wall, sidewalk/bike path, removal of existing culvert at Miller Road and construction of new bridge over the tributary.

A total of 3.33 Ac of permanent impacts are proposed to six wetlands (Sites 5, 7, 11, 12, 13, and 15).

Site	Wetland Type	FQI	Mean C	Size in Project	Area Impacted (Ac.)
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				<b>Area (Ac.)</b>	
5	Wet Meadow/Marsh/ Scrub-Shrub	30.0	3.1	26.14	1.33
7	Constructed Stormwater Facility	9.4	2.0	1.75	1.75
11	Wet Prairie/ Drainageway	18.3	2.9	0.37	0.03
12	Wet Prairie/ Drainageway	23.0	3.1	0.43	0.1
13	Wet Prairie	22.5	3.0	1.20	0.08
15	Wet Meadow	2.0	0.8	0.24	0.04
<b>Total</b>				30.13	3.33

Site 5 is a wet meadow, marsh and scrub-shrub wetland directly abutting Woods Creek west and east of Randall Road and approximately 770 feet south of Miller Road. It is assigned NWI codes PEM1A, PEM1/FO1C, R4SBC, and R5UBH. Dominant species consists of Eastern cottonwood (*Populus deltoides*), box elder (*Acer negundo*), common buckthorn (*Rhamnus cathartica*), gray dogwood (*Cornus racemosa*), Tatarian honeysuckle (*Lonicera tatarica*), tall scouring rush (*Equisetum hyemale*), riverbank grape (*Vitis riparia*), Virginia creeper (*Parthenocissus quinquefolia*), peach leaved willow (*Salix amygdaloides*), sandbar willow (*Salix interior*), red osier dogwood (*Cornus alba*), reed canary grass (*Phalaris arundinacea*), American elm (*Ulmus americana*), fox sedge (*Carex vulpinoidea*), Dudley's rush (*Juncus dudleyi*), American bugleweed (*Lycopus americanus*), Kentucky bluegrass (*Poa pratensis*), summer grape (*Vitis aestivalis*), black walnut (*Juglans nigrum*), hairy fruited sedge (*Carex trichocarpa*), white avens (*Geum canadense*), bittersweet nightshade (*Solanum dulcamara*), sawtooth sunflower (*Helianthus grosseserratus*), tall goldenrod (*Solidago altissima*), Canadian goldenrod (*Solidago canadensis*), Virginia mountain mint (*Pycnanthemum virginianum*), crack willow (*Salix x fragilis*), and hybrid cattail (*Typha x glauca*).

Site 7 is a constructed, emergent wetland located north of Miller Road, approximately 50 feet west of Randall Road. It is assigned NWI code PEM1A. Dominant species consists of Box elder, gray dogwood, soft stem bulrush (*Schoenoplectus tabernaemontani*), and American bugleweed.

Site 11 is a wet prairie and drainageway located east of Randall Road and north of Roosevelt Street. It is not assigned a NWI code. Dominant species consists of Sandbar willow, reed canary grass, and hybrid cattail.

Site 12 is a wet prairie and drainageway located east of Randall Road and north of Roosevelt Street. It is not assigned a NWI code. Dominant species consists of Purple loosestrife (*Lythrum salicaria*) and white paniced aster (*Symphotrichum lanceolatum*).

Site 13 is a wet prairie located east of Randall Road and north of Roosevelt Street. It is not assigned a NWI code. Dominant species consists of Red osier dogwood, green ash (*Fraxinus pennsylvanica*), bluejoint grass (*Calamagrostis canadensis*), Kentucky bluegrass, and Virginia mountain mint.

Site 15 is a wet meadow located west of Randall Road and south of Village Road. It is assigned NWI code PEM1A. Dominant species consists of Sandbar willow and hybrid cattail.

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

Copper, Lead, Zinc, and Total Suspended Solids (TSS) are expected to increase slightly with the project. However, with the added lanes and improved storm water treatment, water quality is expected to be maintained in each watershed.

The contribution of the additional or new lanes will be offset by the implementation of BMPs.

Maintenance operations generate chlorides in the streams during the deicing season as a result of salt application.

The chloride Water Quality Standard of 500 mg/L will be achieved for Woods Creek.

The pollutant load increases that would occur from this project include some possible increases in total suspended solids. These increases, a normal and unavoidable result of the excavation and filling to realign the Woods Creek Tributary, remove the existing culvert, and construct a new bridge on Miller Road may occur in the proposed project area. 3.33 acres of wetland and 1920.5 LF of stream will be permanently impacted. Temporary impacts totaling 524.1 LF will occur in both receiving streams.

Clean fill, stone and concrete will be used for the project.

Temporary impacts to Site W1, Woods Creek, and Site W2, Woods Creek Tributary are expected as a result of culvert removal and cofferdam placement. Permanent impacts are expected in Site W2 as a result of creek relocation, retaining wall, sight screen wall and multiuse path placement. All wetland impacts proposed are permanent impacts. The wetland impacts are all permanent and a result of Randall Road Bridge construction over Woods Creek, roadway widening, sidewalk and retaining wall construction, Woods Creek Tributary relocation, detention pond construction, and bike path construction. Tree removal is also proposed for this project.

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

To minimize the surface water impacts during construction of the bypass, appropriate erosion and sediment control Best Management Practices will be implemented in accordance with local, state, and federal regulations. With proper implementation of Best Management Practices and compliance with the National Pollution Discharge Elimination System construction permit, short-term construction-related water quality impacts will be avoided or minimized. Both temporary and permanent soil erosion and sediment control measures will be implemented in order to minimize pollutants entering the adjacent wetlands during construction and to maintain a high quality of stormwater runoff. All temporarily disturbed area will be regraded to pre-existing conditions. Permanent stabilization will be achieved by seeding and/or planting disturbed areas outlined in the application's Landscaping Plans.

Wetland Site 7, a stormwater detention facility, will be regraded to a stormwater detention facility and compensatory storage facility. In-stream work is proposed within Woods Creek Tributary as part of the creek relocation. Impacts to the creek are considered permanent, and the relocated creek will serve as mitigation for the permanent impact. Total temporary impacts to Woods Creek for the removal of an existing culvert and temporary construction activities as a result of placing cofferdams are anticipated to

be 0.06 acre. The relocated creek channel will be fully constructed and stabilized before the channel is opened to accept the flow of the Woods Creek Tributary under the new Miller Road bridge. All temporary materials used for construction will be removed from the site upon completion of the project.

A total of 3.33 Ac of permanent wetland impacts are anticipated which will be mitigated at a 5.5:1 ratio. The mitigation ratio for Site 7 has not yet been determined. The required mitigation credits are outlined in the table below:

Site	Community Type	Impact Area (Ac)	Mitigation Ratio	Mitigation Credits Required (Ac)
5	Wet Meadow/ Marsh/Scrub-Shrub	1.33	5.5:1	7.30
7*	Constructed Stormwater Facility	1.75	1.5:1	-
11	Wet Prairie/ Drainageway	0.03	5.5:1	0.16
12	Wet Prairie/ Drainageway	0.1	5.5:1	0.53
13	Wet Prairie	0.08	5.5:1	0.45
15	Wet Meadow	0.04	5.5:1	0.06
	<b>Total Wetland Impact</b>	3.33	<b>Total Wetland Mitigation</b>	8.50

\*mitigation ratio is pending USACE direction

Mitigation for the permanent impacts to Site W2 will be accomplished through the realignment of the tributary. This will provide a functional improvement of approximately 1920 LF of the creek through plantings to create a 15-foot buffer of native vegetation, and streambed features including pool/riffle sequences and a sand and cobble bottom for water quality and habitat purposes. Additional flood storage will also be provided. Any additional wetland mitigation needed for the Randall Road Improvement Project will be provided by purchase of credits from the Squaw Creek and Blackberry Creek mitigation banks, both within the watershed of the proposed impacts.

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

The purpose of this project is to identify a transportation system improvement that will enhance mobility and local access while addressing safety issues and environmental impacts within the study area. The study area is characterized by severe congestion, inconsistent access, safety and accident concerns, and a lack of pedestrian and bicycle access. The improvements proposed will improve regional mobility,

enhance access deficiencies, improve pedestrian/bicycle mobility, accommodate land use planning goals and community values, and address safety concerns. The improvements to the Randall Road corridor are needed to improve operational efficiency and decrease travel times.

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

Viable alternatives to improve the analysis process consisted of identifying a range of potential solutions and then evaluating those solutions against a set of criteria. The evaluation process that was used is a three-tiered evaluation screen that applied progressively more demanding criteria to the range of alternatives and ultimately led to the Preferred Alternative. The levels are defined as follows:

- Level 1: Functional Evaluation - Eliminates options that are unrealistic or not feasible.
- Level 2: Comparative Evaluation - Identifies feasible options that best address the purpose and need. Alternative Packages are formed from combinations of the best options.
- Level 3: Detailed Evaluation – Identifies the Preferred Alternative that best addresses the Project Purpose and Need.

A wide range of alternatives were identified and evaluated through the first two screening levels. After the Level 2 screening, four alternative packages including an option for pedestrians was developed. The alternative then consisted of the options that best addressed the Purpose and Need and were given the highest rankings during the first two screening evaluations. These alternatives went through Level 3. The major difference between each of the four alternatives is the proposed improvements at the intersection of Algonquin and Randall Roads.

The Preferred Alternative is similar to Alternative 4 with the exception of a 2-leg Continuous Flow Intersection (CFI) at Algonquin and Randall Roads. It was determined that the 2-leg CFI was able to meet the Purpose and Need while minimizing impacts to right-of way and the environment. Village Road is signalized, and Angela Lane and Alexandra Boulevard will be converted to right-in/right-out intersections. Additional enhancements were also considered for the Preferred Alternative. These enhancements include access mitigation, bicycle and pedestrian facilities such as overpasses and a multi-use path along Randall Road.

### **Alternative 1**

Construct six lanes along the mainline Intersections with Randall Road (in order from south to north):

- County Line Road: No improvements anticipated (project omission, intersection addressed with the Algonquin Commons and Galleria developments)
- Harnish Drive: No improvements anticipated (project omission, intersection addressed with the JC Penny development)
- Bunker Hill Road: Additional Turning Lanes
- Stonegate Road: Eliminate Access
- Algonquin Road: Modified Diamond Interchange (SPUI)
- Acorn Lane/Polaris Drive: Modify access based on space allowable from improvements to Algonquin Road
- Miller Road: Additional Turning Lanes
- Village Road: Close Access and divert traffic to Angela Lane through Carlemont Drive
- Angela Lane: Additional turning lanes and signalize (with a traditional traffic signal application)

- Alexandra Boulevard: Close Access and divert traffic to Angela Lane through Carlemont Drive
- Ackman Road: No improvements anticipated (project omission, intersection being addressed with the Rakow Road Improvements Study)

### **Alternative 1b\***

Same as Alternative 1 with the following Pedestrian/Bicycle Options:

- Multiuse path along the east and west sides of Randall Road
- An underpass at the Woods Creek culvert and an overpass at the parks (Richard Taylor Park to Ken Carpenter Park), Miller Road, near Jacobs High School/Algonquin Library, and near Angela Lane

\*This alternative is being evaluated to develop an understanding of the additional impacts the pedestrian/bicycles options will have on any particular alternative. The options may be added to any of the alternatives but will only be evaluated with Alternative 1. The pedestrian/bicycle options may be modified or eliminated from consideration based on agency support, funding, and potential impacts.

### **Alternative 2**

Construct six lanes along the mainline with one lane dedicated in both directions as HOV lane  
Intersections with Randall Road (in order from south to north):

- County Line Road: No improvements anticipated (project omission, intersection addressed with the Algonquin Commons/Galleria/JC Penny developments)
- Harnish Drive: No improvements anticipated (project omission, intersection addressed with the JC Penny development)
- Bunker Hill Road: Additional Turning Lanes
- Stonegate Road: Eliminate Access
- Algonquin Road: Grade Separated Turning Movements
- Acorn Lane/Polaris Drive: Modify access based on space allowable from improvements to Algonquin Road
- Miller Road: Additional Turning Lanes
- Village Road: Close Access and divert traffic to Angela Lane through Carlemont Drive
- Angela Lane: Additional turning lanes and signalize (with the continuous Green-T application)
- Alexandra Boulevard: Close Access and divert traffic to Angela Lane through Carlemont Drive
- Ackman Road: No improvements anticipated (project omission, intersection being addressed with the Rakow Road Improvements Study)

### **Alternative 3**

Construct six lanes along the mainline Intersections with Randall Road (in order from south to north):

- County Line Road: No improvements anticipated (project omission, intersection addressed with the Algonquin Commons/Galleria/JC Penny developments)
- Harnish Drive: No improvements anticipated (project omission, intersection addressed with the JC Penny development)
- Bunker Hill Road: Additional Turning Lanes
- Stonegate Road: Additional Turning Lanes and Signalize



- Algonquin Road: Additional Turning Lanes
- Acorn Lane/Polaris Drive: No improvements anticipated (No-action)
- Miller Road: Additional Turning Lanes
- Village Road: Convert to Right-in/Right-out intersection
- Angela Lane: Additional Turning Lanes and signalize (with a traditional traffic signal application)
- Alexandra Boulevard: Convert to Right-in/Right-out intersection
- Ackman Road: No improvements anticipated (project omission, intersection being addressed with the Rakow Road Improvements Study)

#### **Alternative 4**

Construct six lanes along the mainline Intersections with Randall Road (in order from south to north):

- County Line Road: No improvements anticipated (project omission, intersection addressed with the Algonquin Commons/Galleria/JC Penny developments)
- Harnish Drive: No improvements anticipated (project omission, intersection addressed with the JC Penny development)
- Bunker Hill Road: Additional Turning Lanes
- Stonegate Road: Convert to Right-in/Right-out intersection
- Algonquin Road: Continuous Flow Intersection (CFI)
- Acorn Lane/Polaris Drive: Additional Turning Lanes
- Miller Road: Additional Turning Lanes
- Village Road: Convert to Right-in/Right-out intersection
- Angela Lane: Additional Turning Lanes and signalize (with a traditional traffic signal application)
- Alexandra Boulevard: Convert to Right-in/Right-out intersection
- Ackman Road: No improvements anticipated (project omission, intersection being addressed with the Rakow Road Improvements Study)

#### **Preferred Alternative**

The Preferred Alternative consists of the following improvements to Randall Road:

- Construct six lanes along the mainline.
- Improvements to Intersections with Randall Road (in order from south to north):
  - County Line Road: No improvements anticipated (project omission, intersection addressed with the Algonquin Commons/Galleria/JC Penny developments)
  - Harnish Drive: No improvements anticipated (project omission, intersection addressed with the JC Penny development)
  - Bunker Hill Road: Additional Turning Lanes
  - Stonegate Road: Convert to Right-in/Right-out intersection
  - Algonquin Road: 2 Leg - Continuous Flow Intersection (CFI) – CFI improvements on Randall Road
  - Acorn Lane/Polaris Drive: Additional Turning Lanes
  - Miller Road: Additional Turning Lanes
  - Village Road: Continuous Green T Intersection
  - Angela Lane: Convert to Right-in/Right-out intersection
  - Alexandra Boulevard: Convert to Right-in/Right-out intersection
  - Ackman Road: No improvements anticipated (project omission, intersection being addressed with the Rakow Road Improvements Study)

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

An IDNR/IDOT coordinated natural resource review was completed on February 23, 2024.

Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075:

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Class 3 Groundwater (C3GW) – Lake in the Hills Fen

The Department recommends the following to avoid and minimize impact to Lake in the Hills Fen Class 3 Groundwater:

- Use best management practices whenever possible, such as water run-off filtration through increased use of native plants, vegetated drainage swales, and rain gardens.
- More permeable surfacing; and decreased use of chlorides on roads, sidewalks, and driveways.
- Disc site upon completion to de-compact the surface after final soil is placed to ensure good infiltration.
- Use careful consideration before discharging within this Class 3 Area.

Illinois Natural Areas Inventory (INAI) - Algonquin Geological Area and Lake-in-the-Hills Fen

The Department recommends the following to avoid impacts to Lake in the Hills Fen Nature Preserve:

- All equipment should be power washed off-site to remove exotic/invasive seed or propagules.
- Strict adherence to soil erosion and sediment control BMPs to prevent impacts to the Nature Preserve.
- Areas of exposed soil should be re-seeded with an approved IDOT seed mix or non-invasive cover crop.
- Fencing and signage clearly delineating the boundaries of the Nature Preserve should be installed to ensure no disturbances occur within the Nature Preserve.
- All boundaries adjacent to conservation land should include 10-foot minimum buffer/firebreak between the conservation land boundary and facility fencing to prevent interference with any land management activities conducted on conservation land.
- If erosion control blanket is to be used, the Department also recommends that wildlife-friendly plastic-free blanket be used to prevent the entanglement of native wildlife. If wildlife-friendly plastic-free blanket cannot be used, then the plastic erosion control blanket should be removed once vegetation is established.
- No equipment should be stored within right-of-way.
- Parking and staging in areas adjacent to the Nature Preserve should also be avoided.
- All temporary and permanent lighting should be avoided near the Nature Preserve. If lighting is required, the Department recommends:
  - All lighting should be fully shielded fixtures that emit no upward light.
  - Only “warm-white” or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) should be used to minimize blue emission.

- Based on the higher luminous efficiency of LEDs, do not over-light area. Only light the exact space with the amount (lumens) needed to meet safety requirement.
- Good housekeeping practices should be implemented and maintained during and after construction to prevent trash and other debris from inadvertently blowing or washing into nearby natural areas.
- A long-term invasive species management program should be implemented to minimize the spread of invasive species into the Nature Preserve.
- Required fencing, excluding areas near or adjacent to public access areas (e.g., roads, parking areas, trails, etc.), should not exceed 6 feet in height and should have a 6-inch gap along the bottom to prevent the restriction of wildlife movement.

The Department advises that the applicant should be aware that they may be liable for any adverse impact to an Illinois Nature Preserve or Illinois Land and Water Reserve pursuant to the Illinois Natural Areas Preservation Act [525 ILCS 30/21-23]. Violations under this Act can carry significant penalties.

#### Rusty-patched Bumble Bee (*Bombus affinis*)

The following commitments were provided in the Natural Resources Review dated September 22, 2023:

- The project area shall be mowed from March 15th through October 14th of any given year for the length of construction so as not to allow the growth and establishment of vegetation or floral resources.
- Mower decks shall be set at a height that does not cause scalping and soil disturbance
- It is recommended that areas which are not currently mowed and maintained be mowed at a deck height of 6 inches unless the vegetation is shorter such that this deck setting would not be feasible. Areas which are currently mowed and maintained shall be mowed and maintained at the current height and deck settings.
- No parking or construction staging shall occur along the portion of Randall Road adjacent to the Lake in the Hills Fen Nature Preserve.
- Disturbed areas shall be reseeded with a Class 4 and 5 A or B seed mixture in accordance with Section 250 of IDOT's Standard Specifications for Road and Bridge Construction.

The Department notes "The Department concurs that with these commitments and has determined adverse impacts to the Rusty-patched Bumble Bee are unlikely. Please note that due to the federal status of the Rusty-patched Bumble Bee, and its potential occurrence in the project area, coordination with the U.S. Fish and Wildlife Service may be necessary and is separate from this consultation and Illinois State regulations."

Blanding's Turtle (*Emydoidea blandingii*), Common Moorhen (*Gallinula chloropus*), Elfin Skimmer (*Nannothemis bella*), Prairie Buttercup (*Ranunculus rhomboideus*), Redveined Prairie Leafhopper (*Aflexia rubranura*), Woolly Milkweed (*Asclepias lanuginosa*), and Yellow Headed Blackbird (*Xanthocephalus xanthocephalus*)

Based on the scope of work, location, and survey results, the Department has determined that adverse impacts to these species is unlikely. Given the above recommendations are adopted, the Department has determined that impacts to these

protected resources are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

#### Review for Endangered Species Act - Section 7:

“The proposed improvement was reviewed in fulfillment of our obligation under Section 7(a)2 of the Endangered Spec(IPaC) web-based review tool. Through IPaC, an official species list was received and is saved to the project folder. The list contains the endangered, threatened, proposed and candidate species and proposed and designated critical habitat that may be present within or in the vicinity of the proposed improvement. The following species are listed: Northern long-eared bat (NLEB), Whooping crane (experimental population, non-essential), Rusty patched bumble bee (RPBB), and Eastern prairie fringed orchid (EPFO). There is no critical habitat in the project vicinity. Under 50 CFR 402.12(e), the accuracy of the species list is limited to 90 days.”

#### Northern long-eared bat

“Within IPaC there is a Determination Key for the NLEB and Ibat. We used the key to determine applicability of the project with the USFWS revised programmatic biological opinion for transportation projects and to assess what effect the project would have on NLEB. We completed an IPaC qualification interview 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 (3) inches or greater in diameter at breast height shall not be cleared from April 1st through September 30th of any given year.

This determination is based in part on the results of the bridge/structure assessment which found no bats or signs of bats utilizing the bridge. Please note that all bridge assessments for signs of bats are valid for two years and that expired assessments will need to be updated prior to the start of work on the bridge.

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.”

#### Rusty patched bumble bee

“At the request of IDOT, INHS conducted a RPBB habitat assessment in 2023 of the project limits to determine the locations where high or medium quality habitat exists within the corridor. Results of the survey indicate high quality habitat along the Lake of the Hill Fen Nature preserve margin and within a patch of mesic prairie/grassland south of Woods Creek within Morningside Park. INHS observed RPBB workers in the latter habitat on the mesic prairie.

In order to avoid adverse effects to this species IDOT proposed the following commitments:

- The project area shall be mowed from March 15th through October 14th of any given year for the length of construction so as not to allow the growth and establishment of vegetation or floral resources.
- Mower decks shall be set at a height that does not cause scalping and soil disturbance.
- It is recommended that areas which are not currently mowed and maintained be mowed at a deck height of 6 inches unless the vegetation is shorter such that this deck setting would not be feasible. Areas which are currently mowed and maintained shall be mowed and maintained at the current height and deck settings.
- No parking or construction staging shall occur along the portion of Randall Road adjacent to the Lake in the Hills Fen Nature Preserve.
- Disturbed areas shall be reseeded with a Class 4 and 5 A or B seed mixture in accordance with Section 250 of IDOT’s Standard Specifications for Road and Bridge Construction or the McHenry County Conservation District (MCCD) Fen Mix

In accordance with Section 7 of the Endangered Species Act, we determined that the project may affect but is not likely to adversely affect the Rusty patched bumble bee.”

“This project was submitted to the USFWS on 9-13-2023 for concurrence with the determinations made. The USFWS response to our determination in a 2-21-2024 response letter. USFWS concerns about the length of time that the floral resources will be unavailable (i.e., temporal loss of resources) within the project right-of-way are offset by the presence of the combined, 400+-acre, Lake in the Hills Fen Conservation Area and Lake in the Hills Fen State Nature Preserve. These high-quality natural areas provide dry gravel prairies, rare hanging graminoid fens, and other high quality wetland areas which provide a rich diversity of floral resources for pollinators. Due to the presence of this adjacent high-quality natural area complex and based on the information provided, we concur with your determination of “may affect, not likely to adversely affect” for the rusty patched bumble bee.”

#### Eastern prairie fringed orchid

Upon completion of the evaluation of the project area for potentially suitable EPFO habitat, no species were observed. Poor habitat was observed as well and therefore it was determined that there would be no effect to EPFO from the proposed improvement.

#### Hines Emerald Dragonfly

“This project was submitted to the USFWS on 9-13-2023 for concurrence with the determinations made. USFWS provided responses to BDE on 9-25-2023 indicating their concerns that wetlands located adjacent to Lake in the Hills (LITH) Fen associated with the project could provide habitat for larval or adult Hines Emerald Dragonfly (HED). Hines emerald has never been documented within the county and does not appear on the official species list generated from IPaC.”

“USFWS provided a final response to IDOT dated 2-21-2024 indicating that surveys would be required to determine if the HED is present. Results of those surveys would inform us of the next steps in the consultation process. The results of the surveys would not stop the project from proceeding and would not result in a jeopardy determination for the HED. Information about the HED, the habitat assessment conducted for HED larval habitat, and surveys required to complete consultation, need to be incorporated into a revised NRR.

McHenry County Department of Transportation commits to perform the required survey for Hines Emerald Dragonfly in 2024 and will complete all the steps required to finalize the coordination with USFWS prior to any ground disturbing activities associated with the wetlands along the Lake in the Hills Fen. Coordination with USFWS will be completed in the summer of 2024.”

**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 providing improved operational efficiency and decreased travel times as well as address safety concerns in the corridor. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.