

**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:**

Wednesday, March 15, 2023

**Public Notice Ending Date:**

Tuesday, April 4, 2023

**Agency Log No.: C-0294-22**

**Federal Permit Information:** Federal permit/license no. LRC-2022-652 (Schaumburg) and LRC-2023-113 (Hanover Park) is under the jurisdiction of Chicago District, Regulatory Branch U.S. Army Corps of Engineers

**Name and Address of Discharger:** Villages of Hanover Park and Schaumburg, Jonathan Stelle - Springinsguth Road and Brookside Drive, Hanover Park, IL 60193

**Discharge Location:** In Section 30 of Township 41-North and Range 10-East of the East 3rd Principal Meridian in Cook County. Additional project location information includes the following: Springinsguth Road and Brookside Drive, Hanover Park, IL 60193

**Name of Receiving Water:** West Branch DuPage River

**Project Name/Description:** Springinsguth West Branch DuPage River Stream Corridor Improvements - Stream and stream bank improvements to West Branch DuPage River including installation of habitat, riffle grade control structures and stream barbs; installation of vegetated stone toe; stream re-meandering; stream profile enhancements; creation of wetlands and riparian habitat; floodplain terrace storage; and associated tree and native plantings.

**Construction Schedule:** Beginning Jun 2023 and ending Oct 2023

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-0294-22-03152023-PublicNoticeAndFactSheet.pdf

The Villages of Schaumburg and Hanover Park (“Applicants”) have applied for a 401 Water Quality Certification for impacts associated with streambank stabilization to the West Branch DuPage River, in Schaumburg and Hanover Park. The project will involve various improvements along 3,500 feet of the West Branch DuPage River between Springinsguth and Anne Fox School and includes both banks through the majority of the reach. The proposed improvements will reduce channelization through re-meandering portions of the reach to increase sinuosity, stabilize the streambanks, and create habitat for aquatic and terrestrial species. The proposed project site is located in Township 41 North, Range 10 East, Sections 29 and 30, in Cook County, Illinois. The Villages propose to complete this project jointly to restore the stream; however, are requesting separate Department of the Army, CWA Section 404 permits. This antidegradation assessment has been compiled for both projects to address cumulative impacts. \

The Hanover Park section is from Northway Drive to the southern property boundary of the Anne Fox School. The Schaumburg section is from Springinsguth to the Village of Hanover Park boundary at the western edge of Atcher Park. The project has received IEPA Green Infrastructure Grant Opportunity (GIGO) funding.

The main components of the project within the Hanover Park Section include:

- Daylighting 160 LF of stream (currently in a box culvert)
- Creation of 1 rock substrate area structures to aid in water quality improvements in addition to creating niche habitat for local wildlife
- 3 stream barbs
- 3000 linear feet of vegetated rock toe that will be planted with native emergent plant plugs and streambank grading along the entire extent of this stretch of the stream
- Installation of 327 linear feet of gravity block retaining wall
- Installation of 4 improved stormwater outlets with rock outlet protection to aid in Stabilization.
- 0.04 acres of emergent, 0.3 acres of open riparian, and 1.35 acres of low profile prairie restoration.

The main components of the project within the Schaumburg Section include:

- Re-meandering of 1,958 linear feet of stream
- Creation of two riffle structures that will provide habitat and grade control functions
- 625 linear feet of vegetated stone toe to be planted with native riverbank species
- Installation of 12 improved stormwater outlets with rock outlet protection to aid in stabilization

The Hanover Park portion of the improvements (Segment 1) begin at station 239+14 at the upstream end and continue approximately 1,500 feet downstream to a relocated box culvert opening at station 254+14. The channel will be comprised of vegetated rock toe on both the left and right stream banks to protect the sideslopes of the channel. Retaining walls are proposed on both banks at the upstream portion of the Hanover Park improvements to widen and stabilize the channel and allow for flatter slopes along the banks. Near station 240+55 outlet protection in the form of riprap will be included in the channel bottom to protect the channel from stormwater flows coming from the existing 36-inch by 72-inch box culvert. This portion of the project through Anne Fox Park will include removal and replacement of the 10-foot bituminous path and fence along the right bank (when looking downstream). At approximately station

244+80, station 248+75 and station 250+87, additional riprap and retaining walls will be used to protect the streambank from the flows coming from the storm sewers on the left bank. Upstream of the proposed relocated culvert entrance to the 12-foot by 9-foot box culvert, two sediment forebays, one on each bank, will be excavated to promote sedimentation, improve water quality, and reduce velocities of the water in the channel. The forebays will provide additional floodplain storage. The box culvert opening is proposed to be relocated 166-ft downstream to provide room for the upstream channel and overbank improvements (sediment forebays). The opening will be outfitted with a new grate that reduces debris clogging. This area of the project will decrease velocities and allow sedimentation to occur before stormwater reaches the box culvert, thereby reducing the frequency of clogging at the culvert entrance and reduce upstream flooding.

The Schaumburg portion of the proposed improvements (Segment 2) begin at station 203+00 and continue approximately 2,950 feet downstream to station 232+50. Vegetated stone toe will be installed to protect both banks from station 203+00 down to the Springinsguth Road culvert, and from station 204+75 to station 210+00. The Springinsguth Road culvert will be cleared of two feet of sediment, as it was originally installed, improving flow capacity. The stream will be realigned following a winding pattern for 1,958 feet from station 209+42 to station 229+00. Floodplain terrace storage is proposed at Olde Salem Park along the left overbank between station 223+62 and 227+75. Two riffles will be installed to provide grade control at locations of existing infrastructure: one at station 222+16 and one at station 230+71. Bank protection will be installed along the right bank from station 222+75 to 224+40 to protect against erosion. Twelve existing stormwater outfalls will be improved with outlet protection. An existing sheet pile wall at station 231+00 will be removed allowing for an improved channel slope up to the Springinsguth Road culvert.

Construction of the vegetated rock toe will involve excavation to receive round to sub-round clean cobble. The upper bank will be re-graded and stabilized with cover crop, permanent native seeding, and erosion control blanket. Additionally, emergent plant plugs will be planted just below the normal water level (NWL) through the rock toe to further naturalize the banks and filter pollutants within the stream. Overall, the proposed project will have a positive effect on the West Branch as the streambanks will be stabilized and naturalized.

The riffle/rock substrate areas (one within the Hanover Park Section and two within Schaumburg) will be constructed consisting of coarse gravel and cobble placed in the bed of the stream within constricted cross sections. The target is to accelerate water column velocity over these substrates to improve aeration and thus dissolved oxygen. In addition, these rock substrate areas will aggrade new sands and small gravel to the design matrix of gravel, cobble and boulders and create new stream habitat currently absent within the site that shall serve to attract and sustain certain benthic macroinvertebrates, fish, and mussel species also scarce or absent within the reach.

Additional enhancements include removal of non-native invasive species along the banks of the creek and creating both floodplain terraces and wetlands to allow the stream to access these areas more frequently. In some areas the banks will be lowered to just above the normal water elevation to create a floodplain terrace. Hummocks and hollows will be created within these areas to increase the residence time of stormwater runoff and create habitat through interspersed vegetation zones. These areas will be vegetated with native wetland/riparian vegetation as shown on the plans.

Within the Hanover Park Section, flow diversion and temporary work structures to isolate the work area will be implemented and will include cofferdams downstream of Northway Drive, downstream of Anne Fox Pedestrian Bridge, and upstream of the existing box culvert. The construction will be completed in segments as follows:

1. Construct coffer dam #1 downstream of Northway Dr.

2. Construct coffer dam #2 downstream of Anne Fox Pedestrian Bridge.
3. Install in-stream sump pit and dewater isolated work area within existing channel from Northway to downstream of Anne Fox Pedestrian Bridge.
4. Complete in-stream construction from Northway to Anne Fox Pedestrian Bridge and stabilize disturbed area.
5. Remove coffer dam #1 at upstream limit of project and stabilize area disturbed by coffer dam removal.
6. Construct coffer dam #3 upstream of existing box culvert.
7. Install in-stream sump pit and dewater isolated work area within existing channel from Anne Fox Pedestrian Bridge to downstream of coffer dam #3.
8. Complete in-stream construction from Anne Fox Pedestrian Bridge to coffer dam # 3 and stabilize disturbed area.
9. Remove coffer dam #2 and coffer dam #3 and stabilize area disturbed by coffer dam removal.
10. Construct forebay areas and stream remeander off-line, while stream is still flowing through existing box culvert. Once stabilized bring stream on-line through remeander.
11. Remove existing box culvert and place new end section & grate. Stabilize any remaining disturbed areas.

Within the Hanover Park section, the stone vegetated rock toe will require 1650 Cubic Yards (CY) of fill, and the retaining wall will require 160 CY of fill. There is also 3884 CY of earthen fill and 9 CY of fill for a rock substrate area proposed. Impacts to 0.195 acres (Ac) of Waters of the US (WOUS) in the Hanover Park Section are expected. Within the Schaumburg Section, bank protection will require 463 CY of fill and the stone toe will require 623 CY of fill. There is also 492 CY of riprap and 20,464 CY of earthen fill proposed. Impacts to 1.10 Ac of wetland fringe and 1.69 Ac of WOUS are expected. Mitigation of these impacts will take place in the form of stream restoration and native plantings outlined in the restoration plan, planting plan, and maintenance and monitoring narratives. As a result of the Hanover Park reach of the project, 0.34 acres of wetland creation, 1.35 acres of buffer restoration, and 160 linear feet of stream daylighting would occur. For the Schaumburg reach of the project, there would be 1.42 acres of wetland creation, 6.53 acres of native buffer creation, and 1,958 feet of stream remeandering.

The total distance of the improvements is anticipated to be 4,450-feet of which 1,500-feet is in Hanover Park and 2,950-feet are in Schaumburg.

Information used in this review was obtained from the application documents dated May 14, 2021, June 29, 2022, July 25, 2022, December 8, 2022, December 9, 2022, January 30, 2023

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

The West Branch DuPage River has 0 cfs of flow during critical 7Q10 low-flow conditions. The West Branch DuPage River is classified as General Use Water. The West Branch DuPage 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 West Branch DuPage River, Waterbody Segment IL\_GBK-14, 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, chloride, and flow alteration—changes in depth and flow velocity. This segment of the West Branch DuPage River is not subject to enhanced dissolved oxygen standards. TMDLs have been approved for Dissolved Oxygen and Fecal Coliform for this segment of the West Branch DuPage River as part of the DuPage River/Salt Creek TMDL.

The stream substrate consists of sand and gravel with little cobble. The banks are eroded and are typically 1-2' high and have overhanging roots.

Engineering Resource Associates (ERA) prepared a wetland delineation report on July 25, 2022 for the Hanover Park segment of the project and determined that one WOUS (West Branch DuPage River) exists onsite. The West Branch DuPage River flows generally from north to south through the project area and is lined by steep, tall banks with reed canary grass (*Phalaris arundinacea*) being the dominant vegetation. The USFWS NWI mapping database identifies the West Branch DuPage River in this location as freshwater riverine. Hydric soils were not observed likely due to riverbank modifications over the years.

Hydrology is provided by precipitation, surface runoff, stormwater discharge from municipal drains, the West Branch DuPage River, and possibly groundwater. No hydrology indicators were located outside of the banks of the river that would indicate presence of water for an extended period of time. Because only one of three criteria were satisfied, the area does not qualify as a wetland.

A 50-foot wetland buffer is present along the boundary of the river originating from the ordinary high-water mark. The buffer currently provides low-functional value due to the surrounding land use consisting of maintained lawn space on the school property or along residential back yards. This land use does not provide more than minimal soil stabilization, ground water infiltration, and pollutant assimilation functions. Additionally, as the buffer immediately adjacent to the riverbanks are dominated by non-native and low-quality species, this area provides very little ecological functions.

WBK Engineering, LLC (WBK) performed a wetland delineation of the project area on September 16, 2020, for the Schaumburg segment of the project. Based on the field visit information, WBK identified one WOUS (Waters 1) with wetland fringe and one wetland (Wetland 1) within the project area. Adjacent to the project boundary, an off-site wetland (Wetland 2) was identified. A total of 1.88 Ac of wetlands (Wetland Fringe and Wetland 1) and 1.69 Ac of WOUS (the West Branch DuPage River) were identified onsite.

Waters 1 is identified as the West Branch DuPage River and is approximately 2600 LF within the project area. The stream extends east and west outside of the project boundary.

Wetland Fringe is 1.12 acres located along the north and south sides of the West Branch DuPage River within the boundary of the property. The Wetland Fringe has a Floristic Quality Index of 15.40, and a Native Mean C value of 2.96 with dominant vegetation consisting of reed canary grass (*Phalaris arundinacea*). The FQI and Native Mean C values indicates a degraded wetland. The delineated wetland fulfills all three indicators of a wetland; hydrophytic vegetation, hydric soils, and wetland hydrology.

Wetland 1 is a 0.76-acre wetland located southwest of the West Branch DuPage River. Wetland 1 has a Floristic Quality Index of 6.36, and a Native Mean C-Value of 2.25 with dominant vegetation consisting of reed canary grass (*Phalaris arundinacea*). The FQI and Native Mean C values indicates a degraded wetland. The delineated wetland fulfills all three indicators of a wetland; hydrophytic vegetation, hydric soils, and wetland hydrology.

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

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 dredging and placement of fill in the West Branch DuPage River may occur as a result of streambank improvement activities. In the Schaumburg segment, the proposed fill quantities include 492 CY of riprap, 463 CY of bank protection, 623 CY of stone toe construction, and 20,464 CY of earthen fill. In the Hanover Park segment, proposed

fill amounts include 1650 CY for vegetated rock toe, 160 CY for retaining wall construction, 3884 CY for earthen fill, and 9 CY for the rock substrate area construction. Material that would be used to stabilize the banks and the two rock substrate areas include coarse gravel and cobble placed in the bed of the stream within constricted cross sections. Material placed will not be eroded by normal or expected high flows. The material is sized based upon the modeled and anticipated flows. Woody material would also be placed for habitat and anchored within back water habitat areas. Stone toe will be used to stabilize banks, stream barbs will be installed to deflect flow away from outside bank, and riffles will be installed for grade control and to ensure appropriate cover over existing infrastructure. Sedimentation caused by construction are expected to be temporary.

Dissolved oxygen within the water column is expected to increase because of increased stream velocity and aeration caused by flow over the new substrates. In addition, the proposed rock substrate areas will add new sand and small gravel to the design matrix of gravel, cobble and boulders and create new stream habitat not currently present within the site that will attract and sustain certain benthic macroinvertebrates, fish, and mussel species also scarce or absent within the reach

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

The project will not result in the deterioration of the existing aquatic community, such as a shift from a community of predominantly pollutant-sensitive species to pollutant-tolerant species or a loss of species diversity. The project seeks to improve the aquatic community through enhancement of habitat and restoration of the currently degraded plant community and will not result in a loss of a resident or indigenous species whose presence is necessary to sustain commercial or recreational activities. The project will not preclude continued use of a surface water body or water body segment for a public water supply or for recreational or commercial fishing, swimming, paddling, or boating. The stream is not used for boating or swimming as the water depths are not too shallow to paddle or swim. The stream is not used for commercial fishing. Recreational fishing will likely be enhanced by the project through improved habitat within the stream.

A stormwater pollution prevention plan and planting plan has been included in the plan set. All disturbed areas will be treated for permanent erosion control by seeding with native deep-rooted vegetation and stabilized with 100% biodegradable erosion control blanket. The proposed project is the least damaging to the aquatic resources while alleviating erosion and flooding within the West Branch.

The increase in total suspended solids would be local and temporary and existing riverbed habitat would be temporarily disturbed by construction activities. To construct the proposed improvements, the in-stream work areas will be dewatered and bypassed allowing construction to occur in the dry stream bed. This will eliminate sediment from entering the stream. A series of coffer dams and phasing of the stabilization work is proposed to achieve this. Stabilization will be completed in short segments to avoid having an area destabilized for extended periods of time. Segments are excavated, stone placed and graded, and stabilization with seed and blanket will follow. If any additional dewatering is necessary within the active construction limits, water will be pumped into sediment containment devices before being directed back into the stream or storm sewer.

The vegetated rock toe construction consists of excavation to receive round to sub-round clean cobble. The upper bank will be re-graded and stabilized with cover crop, permanent native seeding, and erosion control blanket. Additionally, emergent plant plugs will be planted just below the NWL through the rock toe to further naturalize the banks and filter pollutants within the creek. Overall, the proposed project will have a positive effect on the West Bank DuPage River as the streambanks will be stabilized and naturalized. Planned vegetation removal and restoration includes removal of non-native invasive species along the banks of the creek and creating both floodplain terraces and wetlands to allow the stream to

access these areas more frequently. Additionally, these areas will be vegetated with native wetland/riparian vegetation.

Materials will be temporarily stored on site in the staging areas outlined in the plans. All disturbed areas will be planted with native deep-rooted vegetation and stabilized with erosion control blanket following completion of soil disturbing activity in that area.

Soil erosion and sediment control methods include performing the improvements in stages. Stage 1 involves tree clearing. Stage 2 consists of flow diversion installation to construct riffle number 2 (230+68 to 230+90), perform channel regrading (215+50 to 217+50) and install 2 stone toes (204+85 to 210+00 and 203+00 to 203+84), in that order. Stage 3 consists of construction or realigned portions of the channel offline (210+00 to 215+00 and 217+50 to 229+00). Finally, Stage 4 will connect offline portions of the channel by removing any remaining bank material, re-grading the existing channel in areas of fill, and installing planting and complete restoration. Only one stage at a time will be cleared and soil stabilization will be completed. Winter shut down will be addressed early in the fall growing season in order to stabilize any bare areas. Temporary erosion control measures will be practiced on all open, idle areas throughout the winter.

Overall, the proposed project will have a positive effect on the West Branch DuPage River as the streambanks will be stabilized and naturalized. No mitigation is proposed for this project as the project itself is compensation for any impacts proposed.

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

The purpose of the Springinsguth West Branch DuPage River Stream Corridor Improvement project is to provide flood storage, stabilize streambanks, and enhance habitat. The improvements will reduce channelization through remeandering portions of the reach to increase sinuosity, stabilize the streambanks, and create habitat for aquatic and terrestrial species while decreasing pollutant loading through bank stabilization and restoration with native deep-rooted vegetation.

The project will repair existing pedestrian paths within the project area. Signage discussing the project and water quality benefits will be provided at each pedestrian bridge location as Hanover Park well as Northway Drive and Springinsguth Drive.

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

The proposed project will reduce pollutant loading within the West Branch DuPage River. The material being placed consists of clean cobble, sand, and gravel for the purpose of restoring the stream to a more natural system and stabilizing the banks reducing sediment from entering the stream. A no action alternative is not feasible as this type of restoration must occur within the stream and provides a beneficial environmental outcome.

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

An EcoCAT endangered species consultation was submitted on December 8, 2022 (Project #2307404) to the Illinois Department of Natural Resources. The consultation identified protected resources that may be in the vicinity of the proposed action. On December 9, 2022, the Department evaluated this information and concluded that adverse effects are unlikely. The consultation under 17 Ill. Adm. Code Part 1075 and 1090 was terminated.

If erosion control blanket is to be used, the Department also recommends that wildlife-friendly plastic-free blanket be used around wetlands and adjacent to natural areas, if not feasible to implement project wide, to prevent the entanglement of native wildlife.

A Section 7 consultation was conducted on July 29, 2022, in order to determine whether any federal or state listed species or habitat are likely to be adversely impacted by the project. It was determined that the following federally listed species may be present within Cook County: Northern Long-eared Bat (*Myotis septentrionalis*), Piping plover (*Charadrius melodus*), Eastern massasauga (*Sistrurus catenatus*), Rufa Red knot (*Calidris canutus rufa*), Hine's emerald dragonfly (*Somatochlora hineana*), Rattlesnake-master Borer Moth (*Papaipema eryngii*), Rusty patched bumble bee (*Bombus affinis*), Eastern prairie fringed orchid (*Platanthera leucophaea*), Leafy-prairie clover (*Dalea foliosa*), Mead's milkweed (*Asclepias meadii*), and Prairie bush clover (*Lespedeza leptostachya*). A review of T & E species potentially present in the project area review, USFWS coordination, and the field survey is as follows:

- Northern Long-eared Bat (*Myotis septentrionalis*) - The Northern Long-eared bat is a federally threatened species. Habitat for this species include caves and mines during hibernation, surrounding wooded areas in autumn during swarming, and roosts and forages in upland forests and woods. It is Unlikely that the Northern Long-eared Bat would be found within the project site. Some dead or dying trees were noted along the river, but the upland wooded habitat they are often found in was not present. If removal of expected roost trees is to take place, it shall occur during winter months when the bats are hibernating in caves and not out foraging. Based on these conclusions, the proposed action may affect, but is not likely to adversely affect, this species.
- Piping Plover (*Charadrius melodus*) – The Piping plover is a federally endangered species. Habitat for this species is lakeshore beaches. As the location of the project is far away from any lakeshore frontage, no impacts to the Piping Plover are expected.
- Eastern massasauga (*Sistrurus catenatus*)- The Eastern massasauga is a federally threatened species. Habitat for this species includes graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies, open woodlands, and shrublands). The disturbed nature of the investigated area makes it unlikely that the Eastern massasauga would be present in the project area. No effects are expected.
- Rufa Red knot (*Calidris canutus rufa*) – The Rufa Red knot is a federally threatened species. Effects to this species will only occur along coastal areas or large wetland complexes during the migratory window of May 1 thru September 30. The location of the project is far away from any lakeshore frontage, therefore no impacts to the Rufa Red knot are expected.
- Hine's emerald dragonfly (*Somatochlora hineana*) - The Hine's emerald dragonfly is a federally endangered species with designated critical habitat. Habitat for this species is spring-fed wetlands, wet meadows, and marshes. The location of the project is far outside of the critical habitat for the Hine's Emerald Dragonfly. No effects are expected.
- Rattlesnake-master Borer Moth (*Papaipema eryngii*) – The Rattlesnake-master borer moth is a candidate species. Habitat for this species is undisturbed prairie and woodland openings that contain only their food plant, Rattlesnake-master (*Eryngium yuccifolium*). No Rattlesnake Master Borer Moth was noted onsite; therefore, it is unlikely that the Rattlesnake-Master Borer Moth would be found within the project limits. No effects are expected.



- Rusty patched bumble bee (*Bombus affinis*) – The Rusty patched bumble bee is a federally endangered species. Habitat for this species includes grasslands with flowering plants from April through October, underground and abandoned rodent cavities or clumps of grasses above-ground as nesting sites, and undisturbed soil for hibernating queens to overwinter. Due to the expanse of maintained turf onsite, it is not likely that the Rusty-Patched Bumblebee would be found onsite.
- Eastern prairie fringed orchid (*Platanthera leucophaea*) - The Eastern prairie fringed orchid is a federally threatened species. Habitat for this species is moderate to high quality wetlands, sage meadow, marsh, and mesic to wet prairie. The wetland community was not determined to be high quality with a native FQI greater than 20 and a native mean C greater than 3.5. The Eastern Prairie Fringed Orchid is not likely to be present within the action area and evidence of the Orchid was not found at the time of the field visit. As such, the proposed action is anticipated to have no effect on this species.
- Leafy-prairie clover (*Dalea foliosa*) - The leafy-prairie clover is a federally endangered species. Habitat for this species is prairie remnants on thin soil over limestone. This location is unsuitable for growth of leafy-prairie clover and as such, the proposed action is anticipated to have no effect on this species.
- Mead's milkweed (*Asclepias meadii*) – Mead's milkweed is a federally threatened species. Habitat for this species is late successional tallgrass prairie, and tallgrass prairie converted to hay meadow. This location is unsuitable for growth of Mead's milkweed and as such, the proposed action is anticipated to have no effect on this species.
- Prairie bush clover (*Lespedeza leptostachya*) – The Prairie bush clover is a federally threatened species. Habitat for this species is dry to mesic prairies with gravelly soil. This location is unsuitable for growth of the Prairie bush clover and as such, the proposed action is anticipated to have no effect on this species.

### **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 community by reducing channelization through re-meandering portions of the reach to increase sinuosity, stabilize the streambanks, and create habitat for aquatic and terrestrial species. The project will also repair existing pedestrian paths and provide signage discussing the project and water quality benefits at each pedestrian bridge location. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.