

Illinois Department of Natural Resources
CONSERVATION PLAN

(Application for an Incidental Take Authorization)
Per 520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080

150-day minimum required for public review, biological and legal analysis, and permitting

PROJECT APPLICANT: *The Forest Preserve District of Kane County (District)*
1996 S. Kirk Rd, Suite 320, Geneva, IL 60134

PROJECT NAME: *LeRoy Oakes Forest Preserve Trails*

COUNTY: *Kane*

AREA OF IMPACT (acreage): *This project will impact up to 0.002 acres of Ferson Creek to allow placement of riprap for scour protection of the existing abutments for a pedestrian bridge. The placement of the scour protection would occur between July 1 and October 1 of 2023. The desired term of the ITA is 2 years.*

The incidental taking of endangered and threatened species shall be authorized by the Illinois Department of Natural Resources (IDNR) only if an applicant submits a Conservation Plan to the IDNR Incidental Take Coordinator that meets the following criteria:

1. A description of the impact likely to result from the proposed taking of the species that would be covered by the authorization, including but not limited to -

A) identification of the **area to be affected by the proposed action**, include a legal description and a detailed description including street address, map(s), and GIS shapefile. Include an indication of ownership or control of affected property. Attach photos of the project area.

The project site is part of LeRoy Oakes Forest Preserve located at 37W700 Dean Street in St. Charles, Kane County, Illinois (Section 20, T40N, R8E) (Figure 1). The area of LeRoy Oakes Forest Preserve is 459 acres, but the project area is a smaller portion of the preserve located entirely north of Dean Street (Figure 2). The project site is entirely owned by the Forest Preserve District of Kane County.

B) **biological data** on the affected species including life history needs and habitat characteristics. Attach all biological survey reports.

*The state-threatened mottled sculpin (*Cottus bairdii*, aka *Uranidea bairdii*) and spike (*Elliptio dilatata*, aka *Eurynia dilatata*) are known to occur within Ferson Creek near the project site. The most recent fish surveys available are from 2009 and were associated with the removal of a low-head dam just upstream of the project area. The IDNR has also reported the spike from Ferson Creek downstream of the project location. A survey for the spike and other mussel species was*

completed in 2022 by the Forest Preserve District and the Illinois Natural History Survey (report attached).

Mottled Sculpin (Cottus bairdii)

According to the IDNR, the mottled sculpin (*Cottus bairdii*) may be found in the northern one-fourth of Illinois. This fish lives in creeks, rivers, and lakes. It is typically found in cold-water habitats, such as streams that receive water from springs or other groundwater sources. The mottled sculpin spawns in the spring. The male prepares a nest under a rock and stays with the eggs and young until they leave the nest. The female turns upside down to lay eggs on the roof of the nest chamber. More than one female may lay eggs in the same nest. The eggs hatch after three or four weeks. The mottled sculpin feeds on the bottom, eating aquatic invertebrates and small fishes. It may eat members of its own species.

The mottled sculpin may attain a length of two and one-half to three and one-half inches. The male is larger than the female. The stout body has a large head and an incomplete lateral line. The back and sides are brown with dark mottling. Body color tends to match that of the substrate, as this fish can change colors readily. The belly is white, but the chin is speckled. Two or three dark bars are present on the body under the dorsal fin. Black spots can be seen at the front and back edges of the first dorsal fin. The breeding male is dark. His dorsal fin is black with an orange or yellow band.

It is considered native to northern Illinois and listed by the IDNR as state-threatened, though it has been introduced in other parts of the United States where it is not considered native.

Spike (Elliptio dilatata)

The spike, also sometimes known as the lady finger, is listed as threatened in Illinois. It is a smaller freshwater mussel with a shell up to 5 inches in length. It has a shell that is solid, elongate, elliptical, and compressed to moderately inflated. The anterior end is rounded; the posterior end is rounded to slightly pointed. The dorsal margin is straight to slightly curved, the ventral margin is straight to curved in young shells, becoming arched in older shells. The umbos are low, usually not elevated above the hinge line. The beak sculpture, if visible, consists of three or four heavy loops. The shell has a smooth surface, greenish brown in color with faint green rays visible on small shells, becoming dark brown to black in adults.

Pseudocardinal teeth are well developed; two in the left valve, one in the right. Lateral teeth are short, roughened, and straight. The beak cavity is very shallow. The nacre is variable, most often purple, occasionally pink or white.

It is a species of small to large streams and occasionally lakes in mud or gravel in Illinois. It is considered widespread but sporadic in distribution. It is common in Missouri and Ohio, uncommon to rare in other states. Duncan and Eckert (2009) confirmed the following glochidial hosts for the spike: largemouth bass, rock bass, and Holston sculpin.

C) **description of project activities** that will result in taking of an endangered or threatened species, including practices to be used, a timeline of proposed activities, and any permitting reviews, such as a USFWS biological opinion or USACE wetland review. Please consider all potential impacts such as noise, vibration, light, predator/prey alterations, habitat alterations, increased traffic, etc.

Project Activities

The project includes the replacement of an existing bridge deck with a prefabricated bridge placed on the existing abutments/supports. Scour protection will be added at the base of the abutments which sit on existing concrete spread footings.

Additional Work without Steam Impacts

The project will also result in the addition of 5075 linear feet of new or improved mowed trails (unpaved), and 4408 linear feet of new ADA accessible aggregate trails, 3 culverts with riprap, a new picnic pavilion, ADA curb ramps, a new water pump, electrical service to the new pavilion, poured concrete walkways, and new pavement striping for parking.

Most of the improvements are in the vicinity of the Creek Bend Nature Center, with some trail improvements leading to the Pioneer Scholes Schoolhouse and Durant House Museum.

Project Timeline (2022-2023)

September-December 2022: any tree or shrub clearing necessary. Any additional work that can be completed that does not disturb the ground surface or remove flowering nectar source plants.

April-June 2023: complete all trail improvements and other amenities included in the project, except the bridge improvements.

June 1 – July 2023: timing of bridge improvements depends on ITA issuance and USACE permit authorization but will avoid the spawning period for the mottled sculpin, generally April-May.

Post-project monitoring as required by ITA (see below).

Additional Permit Reviews

Jeffrey Mengler of Hey and Associates, Inc. has submitted an application to the U.S. Army Corps of Engineers, Chicago District on behalf of FPDKC. The permit has been received and is attached for reference.

The District has completed consultation with the U.S. Fish and Wildlife Service regarding endangered and threatened species. A letter providing sign-off pertaining to the rusty patched bumble bee is also attached for reference.

D) explanation of the anticipated **adverse effects on listed species**; how will the applicant's proposed actions impact each of the species' life cycle stages.

Rock will be placed in Ferson Creek at the base of the existing concrete abutments to protect from scour. All work will occur from the banks of the creek, and no equipment will enter the flowing water. The abutments sit on an existing concrete spread footing so the rock riprap will be placed primarily against the creek banks. The area around both abutments will be searched for any mussels or fish prior to placement of the rock. Floating silt curtains will be deployed to capture any sediment dislodged by the placement of the rock.

Thus, there is minimal chance for impact to mottled sculpin or spike directly. The placement of the rock may improve the habitat for the sculpin.

The only other wetland impacts are to a wetland swale that is not possible habitat for the sculpin or spike.

2) Measures the applicant will take to minimize and mitigate that impact and the funding that will be available to undertake those measures, including, but not limited to -

A) plans to **minimize the area affected** by the proposed action, the estimated **number of individuals** of each endangered or threatened species that will be taken, and the **amount of habitat** affected (please provide an estimate of area by habitat type for each species).

The area affected by the project that could be habitat for the mottled sculpin or spike is approximately 0.002 acres for the placement of riprap rock for scour protection on the banks and base of existing concrete bridge abutments. All work to place the rock will be done from the banks and not in Ferson Creek.

The existing bridge deck will be removed, and a new prefabricated bridge deck placed on the abutments. All of this work will also occur only from the banks and no in-stream work is proposed.

The area for riprap placement and beneath the bridge deck will be searched for any live mussels or fish prior to beginning this work. Mussels will be relocated to suitable habitat upstream of the project area by properly permitted individuals on Forest Preserve District staff. Fish will be disbursed from the area by the sampling work in the stream.

Based on the information presented herein, take is estimated at no more than one (1) individual of either species, and that is considered very unlikely.

B) **plans for management of the area** affected by the proposed action that will enable continued use of the area by endangered or threatened species by maintaining/re-establishing suitable habitat (for example, native species planting, invasive species control, use of other best management practices, restored hydrology, etc.).

This project is aimed at providing expanded and improved public access through trails, an improved bridge crossing and other features. It does not affect the aquatic habitat for the mottled sculpin or spike beyond the placement of rock for scour protection in a 0.002 acre area around the existing concrete bridge abutments. Mottled sculpin use cobble bottom habitat and hence this rock placement may even be a habitat enhancement. The existing concrete spread-footing that supports the existing abutments is not likely suitable habitat for the spike, which needs a mud or gravel bottom. The scour protection will also serve to reduce the potential for streambank erosion at the bridge and thereby reduce future sedimentation of creek bottom habitat.

No further management of the stream habitat is proposed or needed for the mottled sculpin or spike to continue to use Ferson Creek.

C) description of **all measures to be implemented to avoid, minimize, and mitigate** the effects of the proposed action on endangered or threatened species.

- Avoidance measures include working outside the species' habitat.
- Minimization measures include timing work when species is less sensitive or reducing the project footprint.
- Mitigation is additional beneficial actions that will be taken for the species such as needed research, conservation easements, propagation, habitat work, or recovery planning.
- It is the applicant's responsibility to propose mitigation measures. IDNR expects applicants to provide species conservation benefits 5.5 times larger than their adverse impact.

The following measures will be implemented to avoid, minimize and mitigate any potential effects on the mottled sculpin or spike.

Avoidance and Minimization

- *The impacts to habitat have been minimized to 0.002 acres of riprap placement.*
- *All work on the improvements to the existing bridge, including the riprap placement, will be done from the banks. No in-stream work is proposed.*
- *All other project-related work will avoid any impact to Ferson Creek.*
- *The project will avoid potential impacts to spawning mottled sculpin by working later in the summer.*
- *The project will reduce the potential for erosion of the streambanks at the bridge crossing.*

- *The project uses existing bridge abutments to support an improved pedestrian crossing of Ferson Creek.*
- *Searches will be conducted around the bridge abutments and beneath the bridge for any fish or mussels prior to commencement of work in the area.*

Mitigation

As mitigation for the potential impacts, the District will conduct surveys for mottled sculpin across various streams across Kane County. Seven surveys will be conducted by teams of 2-3 people. Surveys will be conducted using backpack electrofishing equipment and cover at least three 50 m² areas where general habitat conditions are recorded and all sculpin encountered will be measured and reported to IDNR. This work will directly support the actions identified in the Mottled Sculpin Conservation Planning Document and will follow IDNR protocol.

D) plans for monitoring the effects of the proposed actions on endangered or threatened species, such as species and habitat monitoring before and after construction, include a plan for follow-up reporting to IDNR.

The District will take measures to prevent the taking of mottled sculpin and spike during construction and does not anticipate a negative impact on the local population. Pre and post project monitoring shall serve to help prevent incidental take and measure the extent to which the project caused any changes in local mottled sculpin populations.

Pre-project monitoring

District staff and/or consultants will conduct surveys under and near the bridge for spike prior to the project. The surveys will be conducted July-September. Any spike located by hand will be relocated upstream of the project location while remaining on Forest Preserve District property. The District will comply with IDNR collection methodology and report any requested data on collected mussels. Mottled sculpin will not be relocated as the expectation is that they will be able to disperse up and downstream from the commotion of the project.

Post-project monitoring

District staff and/or consultants will conduct surveys in the project area by the bridge both one and three years after project completion. Post-project monitoring results will be provided to the IDNR Endangered Species Coordinator and the IDNR Incidental Take Authorization Coordinator and methodology and search area will be determined in consultation with the IDNR. This is anticipated to take place with backpack electrofishing equipment and include the impacted areas as well as 10 meters up and downstream. Mussels will also be collected using visual and tactile techniques and documented prior to release back to the same location.

E) Adaptive management practices that will be used to deal with changed or unforeseen circumstances that effect an endangered or threatened species. Consider environmental

variables such as flooding, drought, and species dynamics as well as other catastrophes. Management practices should include contingencies and specific triggers. Note: Not foreseeing any changes does not qualify as an adaptive management plan.

If a mottled sculpin or spike is observed within the area under or near the bridge, work shall be suspended in that area until the fish can be safely moved by staff with proper permits. IDNR staff shall be informed of any sculpin observations.

If field conditions are such that high water levels or flooding area present, all work will be suspended until suitable and safe conditions return.

If drought conditions in which the water levels in Ferson Creek are abnormally low occur during implementation of the project, it will actually make it easier to detect any sculpin or spike in the project area and take necessary precautions. During drought, fish and mussels will naturally move to deeper pools in the creek.

The release of fuels or other construction pollutants could adversely impact fish. To protect the waterways, all equipment fueling will take place at a designated location away from wetlands and the creek. This location will have spill response materials to clean up any accidentally spilled fuels or equipment leaks. Heavy equipment will work from the shore and not enter the creek to reduce potential of a spill or leak into the aquatic system. This will be done through the use of a crane to lift the existing rail car bridge from the abutments intact. The crane will be located approximately 40 feet away from the creek edge. The same crane will then lower the new bridge into place.

Any other unforeseen circumstances that arise will be evaluated relative to the listed species, and communications initiated with IDNR staff if necessary.

F) verification that adequate funding exists to support and implement all mitigation activities described in the conservation plan. This may be in the form of bonds, certificates of insurance, escrow accounts, or other financial instruments adequate to carry out all aspects of the Conservation Plan.

The funding for this project will be provided by a Recreational Trails Program (RTP) grant received by the District (RTP 19-154). The total project budget is \$400,000. A request has been submitted to extend the grant into 2023 for completion of this project.

3) A description of alternative actions the applicant considered that would reduce take, and the reasons that each of those alternatives was not selected. A "no-action" alternative shall be included in this description of alternatives. Please, describe the economic, social, and ecological tradeoffs of each action.

The no-action alternative would leave the existing bridge in place. While the supports/abutments have been deemed sound, the bridge deck is deteriorated and deficient. Not placing the scour protection

would allow for continued erosion around the abutments. This scour protection was an element of the structural engineering review of the abutments. The no-action alternative would leave the existing bridge in place, and it would likely need to be closed for public use at some point in the near future. This would not enable the use of the areas north of Ferson Creek in this part of LeRoy Oakes Forest Preserve.

An alternative to the proposed project would be to construct a new bridge at another location on Ferson Creek. This alternative would have much higher costs not supported by the RTP grant, and would likely cause greater impacts to aquatic habitat in Ferson Creek from bridge construction. A longer span bridge could be used to avoid abutments or supports in Ferson Creek but this would add considerably to the project cost and put it beyond the current RTP grant funding and in-house capability.

It should be noted that the prefabricated pedestrian bridge to be placed on the existing supports is already in the possession of the District at another location.

4) Data and information to indicate that the proposed taking will not reduce the likelihood of the survival or recovery of the endangered or threatened species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species existence in Illinois.

The Mottled Sculpin Recovery Team and the IDNR published a Species Status Assessment for the mottled sculpin in February 2022. The information found in this report is used here to evaluate the effect of the proposed taking.

The mottled sculpin is not a species of conservation concern globally or regionally. It is considered vulnerable, imperiled, or critically imperiled in eight of the 35 states and provinces where it occurs. In 2020, the Illinois Endangered Species Protection Board (ESPB) added mottled sculpin to the Endangered and Threatened Species list in Illinois. Per the listing petition presented to the ESPB, listing criteria met by the species included restricted habitats, low populations, and disjunct populations.

The historic range of Mottled Sculpin in Illinois included Lake Michigan, the Des Plaines River basin, the Fox River basin, the upper Illinois River basin, the Kankakee River basin, the Rock River basin, and the Vermilion River of the Wabash River basin. Mottled sculpin distribution in Illinois has decreased in extent (i.e., the species' range) over the history of occurrence records. Most mottled sculpin occurrence records are in the Fox River basin. Although the species appears extirpated from several streams in the basin, new records have occurred in multiple streams, including several in the past decade. It is likely the species exists in other small tributaries of the Fox River basin as many of the smaller streams are not surveyed.

Many locales with mottled sculpin abundance records have been surveyed multiple times and so temporal trends in abundance can be evaluated and variation in site-specific abundance can be estimated. Eight Basin Survey sites have been sampled in multiple years. The Rock River basin, Fox River basin, and Vermilion River (Wabash) basin are represented by these sites. Proportional deviation from mean abundance was calculated for each sample within each survey site and a linear trendline was fit to those points to visualize coarse trends in abundance over time. Half of the repeatedly sampled survey sites exhibited a positive temporal trend and half a negative trend, so no statewide pattern of change in

abundance was discerned. Six of the evaluated survey sites are within the Fox River basin, and of those sites half exhibited positive abundance over time and half negative. So no trend was discerned within the Fox River basin.

The status assessment goes on to conclude that mottled sculpin populations have not yet been defined and so no abundance estimates may be attempted. No reasonable estimate of total mottled sculpin abundance in Illinois is possible given the limitations of existing distribution and abundance records.

IDNR fish sampling in 2009 near the location of a dam that has been removed from Ferson Creek, detected 12 mottled sculpin. The dam was located just upstream of the project site, and the sculpin were detected in the sampling area downstream of the dam. So this is likely in or near the project location, hence the need for this ITA.

Given the limited in-stream impacts (0.002 acres of rock placement) and the other precautions described herein, it is estimated that the take will be no more than one individual or 8% of the number detected. The number detected by the IDNR is likely an underestimate of the local population. It is also reported in the status assessment that while the trends in sculpin numbers is inconsistent, the Fox River basin continues to be the stronghold within the state. Thus it would seem that the take of one individual from the Fox River basin population is not likely to reduce the likelihood of the survival or recovery of this listed species in the wild within the State of Illinois.

The biotic community of which this aquatic species is a part, or the habitat essential to the species existence in Illinois will not be adversely affected by this minor impact to a small single site on Ferson Creek.

Spike

The INHS database contains 590 records from over 70 counties in Illinois, thus historically spike mussels have been found throughout Illinois, particularly in the Illinois, Kaskaskia, Kankakee, Fox, Sangamon, Wabash, and little Wabash Rivers. In 2016 there were 43 extant records for the spike in the Illinois Natural Heritage Database.

Live spike were found in Ferson Creek during mussel sampling by the IDNR/INHS in 1998, 2010, and two efforts in 2018. In each sampling event, 4-6 live individuals were recorded. All of these sampling efforts were farther downstream near Randall Road.

All mussels will be relocated from the proposed work area prior to construction, and the extent of suitable habitat for this and other mussels in Ferson Creek and the Fox River basin is clearly much greater than the extent of the proposed project. Therefore, it is our determination that this project will not reduce the likelihood of survival of this species in Illinois, the biotic community of which the species is a part, or the habitat essential to the species existence in Illinois.

5) An implementing agreement, which shall include, but not be limited to (on a separate piece of paper containing signatures):

- A) the names and signatures of all participants in the execution of the conservation plan;
- B) the obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities included in the conservation plan and a schedule for preparation of progress reports to be provided to the IDNR;
- C) certification that each participant in the execution of the conservation plan has the legal authority to carry out their respective obligations and responsibilities under the conservation plan;
- D) assurance of compliance with all other federal, State and local regulations pertinent to the proposed action and to execution of the conservation plan;
- E) **copies of any final federal authorizations for a taking already issued to the applicant, if any.**

Implementation Agreement
LeRoy Oakes Forest Preserve Trails Improvements
Kane County, Illinois.

A) The names and signatures of all participants in the execution of the conservation plan;



Benjamin Haberthur, Executive Director, Forest Preserve District of Kane County



Patrick Chess, Director of Natural Resources, Forest Preserve District of Kane County

B) The obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities included in the conservation plan and a schedule for preparation of progress reports to be provided to the IDNR;

Ongoing Starting in 2021 through August 2022 – Securing of all necessary permits and authorizations to carry out this RTP-funded project. These include USACE Clean Water Act authorization, Kane County Stormwater Management Ordinance authorization, this Incidental Take Authorization, and ongoing coordination with the U.S. Fish and Wildlife Service.

June – August 2022 – completion of engineering plans, finalize cost estimates, bid packet preparation, and bid selection.

June 2022 – District completed survey for spike.

October 1, 2022 – April 1, 2023 – no ground disturbance to be protective of rusty patched bumblebee.

April - June 2023 – Construction of trails and other amenities. District to take delivery of bridge.

June – July 2023 – District to install bridge and install scour protection.

June – August 2024 – District to complete -post-project surveys for sculpin and spike.

- C) **Certification that each participant in the execution of the conservation plan has the legal authority to carry out their respective obligations and responsibilities under the conservation plan;**

See certification clause below.

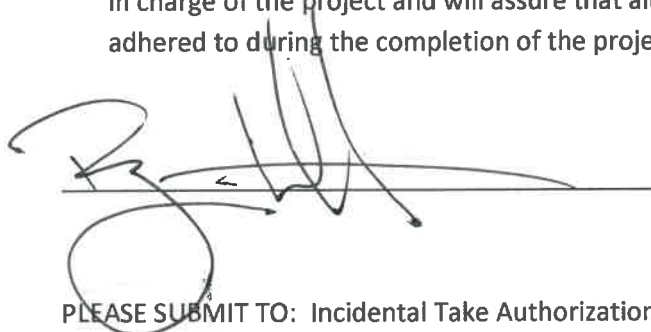
- D) **Assurance of compliance with all other federal, State and local regulations pertinent to the proposed action and to execution of the conservation plan;**

See certification clause below.

- E) **Copies of any final federal authorizations for a taking already issued to the applicant, if any.**

No federal permits for Take have been requested or issued.

CERTIFICATION: The Forest Preserve District of Kane County hereby certifies that it has the authority and funding to complete the project and to address the issues proposed in this Incidental Take Conservation Plan for the mottled sculpin and spike. The Forest Preserve District of Kane County is in charge of the project and will assure that all applicable state, federal, and local laws will be adhered to during the completion of the project.

 _____ DATE: 4/11/23

PLEASE SUBMIT TO: Incidental Take Authorization Coordinator, Illinois Department of Natural Resources, Office of Resource Conservation, Division of Natural Heritage, One Natural Resources Way, Springfield, IL, 62702 OR DNR.ITAcordinator@illinois.gov

LeRoy Oakes Trail and Signage RTP

Client:

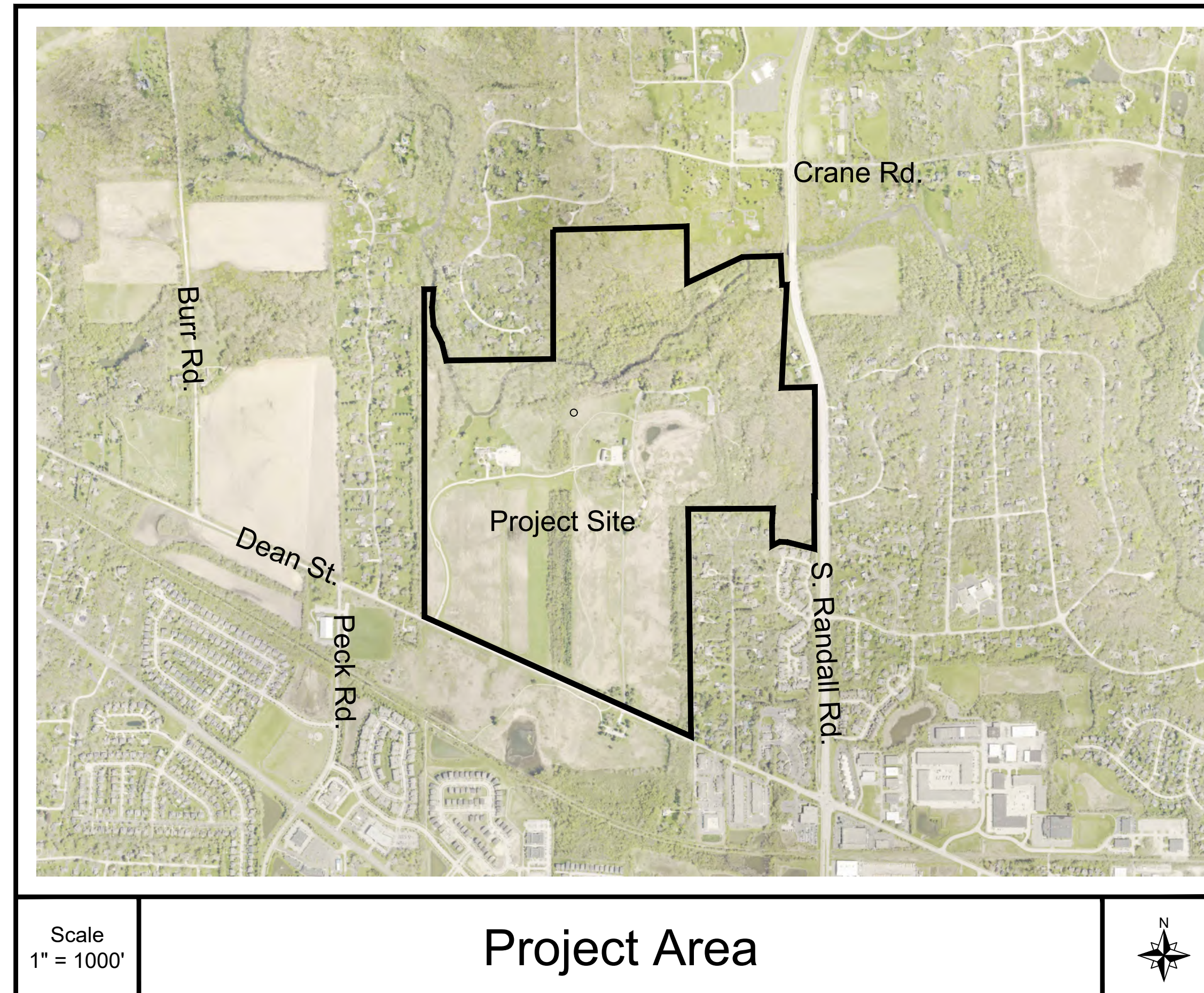
Forest Preserve District of
Kane County
Zach Tegge
1996 South Kirk Road, Suite 320
Geneva, Kane County, IL 60134
Office (630) 208-8664

Engineer:

Hey and Associates, Inc.
8755 West Higgins Road, Suite 835
Chicago, IL 60631
Office (773) 693-9200
Fax (847) 740-2888

Benchmark:

Control Point located at south east corner of visitor center parking lot
Elevation = 743.76 (NAVD 1988)
Control Point located at north east corner of visitor center parking lot
Elevation = 742.76 (NAVD 1988)
As established by GPS observations 03/10/2022.



Sheet Index: (Sheet # / Drawing # / Title)

1. C1.0 Cover Sheet
2. C1.1 General Notes
3. C1.2 Site Key Plan
4. C2.0 Existing Conditions
5. C2.1 Existing Conditions
6. C2.2 Existing Conditions
7. C2.3 Existing Conditions
8. C2.4 Existing Conditions
9. C2.5 Existing Conditions
10. C2.6 Existing Conditions
11. C3.0 Layout Plan
12. C3.1 Layout Plan
13. C3.2 Layout Plan
14. C3.3 Layout Plan
15. C3.4 Layout Plan
16. C3.5 Layout Plan
17. C3.6 Layout Plan
18. C4.1 Soil Erosion and Sediment Control Plan
19. C4.2 Soil Erosion and Sediment Control Plan
20. C4.3 Soil Erosion and Sediment Control Plan
21. C4.4 Soil Erosion and Sediment Control Plan
22. C4.5 Soil Erosion and Sediment Control Plan
23. C4.6 Soil Erosion and Sediment Control Plan
24. C4.7 Soil Erosion and Sediment Control Plan
25. C5.1 Grading and Drainage Plan
26. C5.2 Grading and Drainage Plan
27. C5.3 Grading and Drainage Plan
28. C5.4 Grading and Drainage Plan
29. C5.5 Grading and Drainage Plan
30. C5.6 Grading and Drainage Plan
31. C5.7 Grading and Drainage Plan
32. C6.0 Details
33. C6.1 Details
34. C6.2 Details
35. C6.3 Picnic Shelter Details
36. C6.4 Trail Sections

Call J.U.L.I.E. 1-800-892-0123 at least 48 hours before start of construction with the following:

County: Kane County
City or Township: St. Charles
Tier, Range & Section: T40N, R08E, Sec. 20S & 29N

The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto.

PROFESSIONAL SEAL

Signature: _____
Date: _____
License Expires: _____

This document shall not be considered a valid technical submittal unless it bears an original seal and signature.

Base Survey Information provided by:

Hey and Associates, Inc. &
Kane County GIS

No.	Revision/Issue	Date

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture
8755 W. HIGGINS ROAD, SUITE 835
CHICAGO, ILLINOIS 60631
OFFICE (773) 693-9200
FAX (847) 740-2888
CHICAGO@HEYASSOC.COM

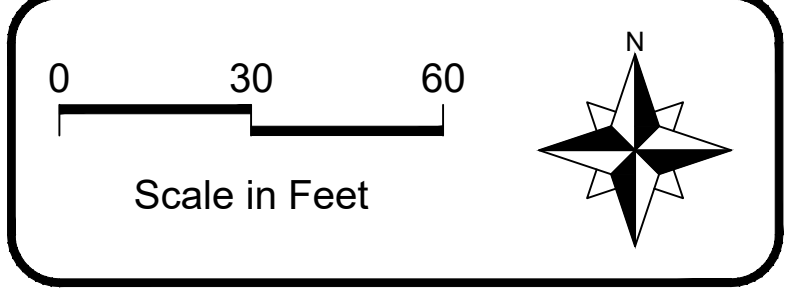
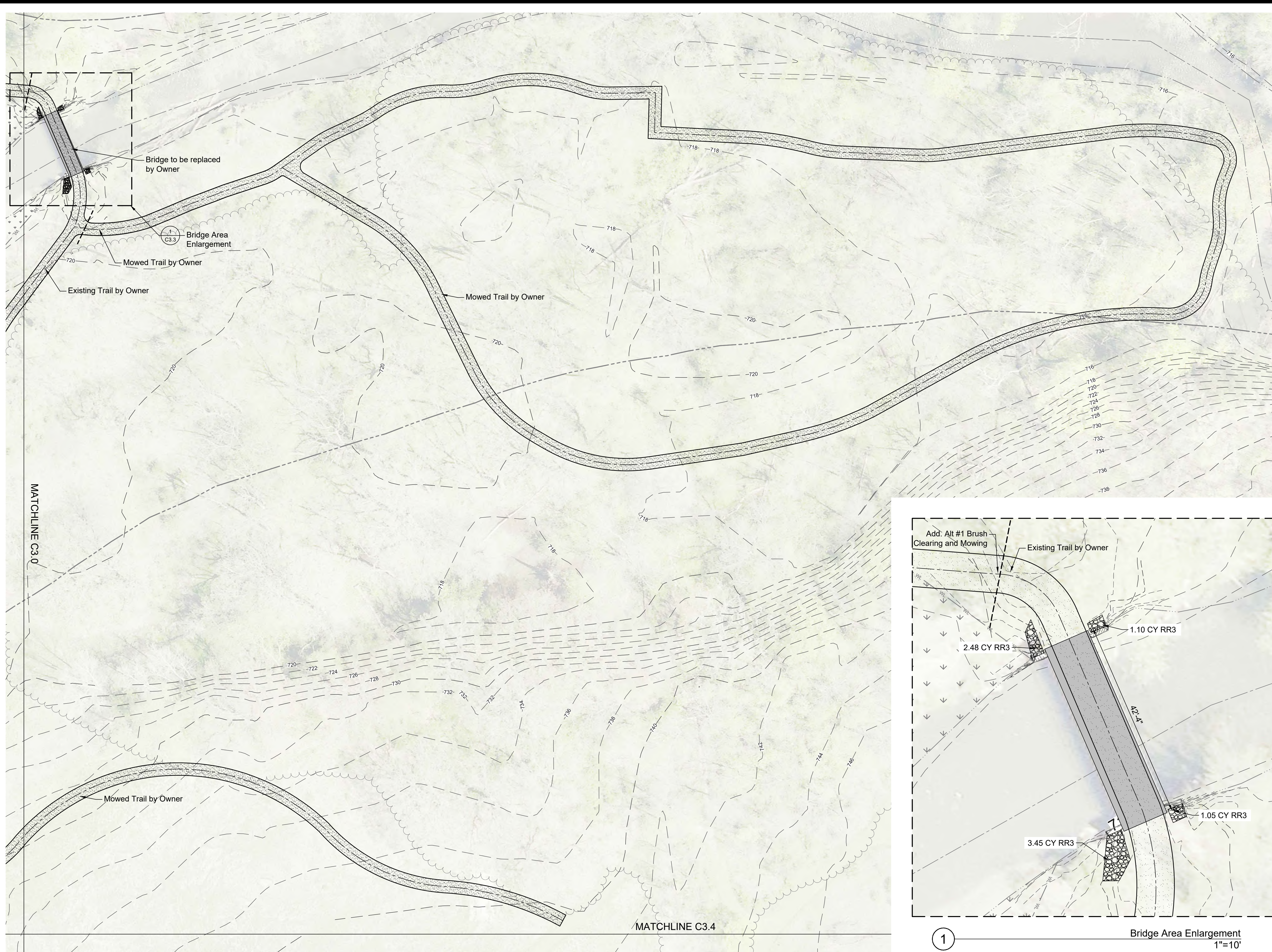
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-002429

Leroy Oakes
Trails and Signage RTP
St. Charles, IL 60175

Cover Sheet

PROJECT NO: 21-0285		DRAWING NO:
DESIGNED BY	ERA	C1.0
DRAWN BY	ERA	
CHECKED BY	RJA	
APPROVED BY	TRP	
ISSUE DATE	06/13/2022	SHEET NO: 1 OF 36

Final Engineering



LEGEND

No.	Revision/Issue	Date

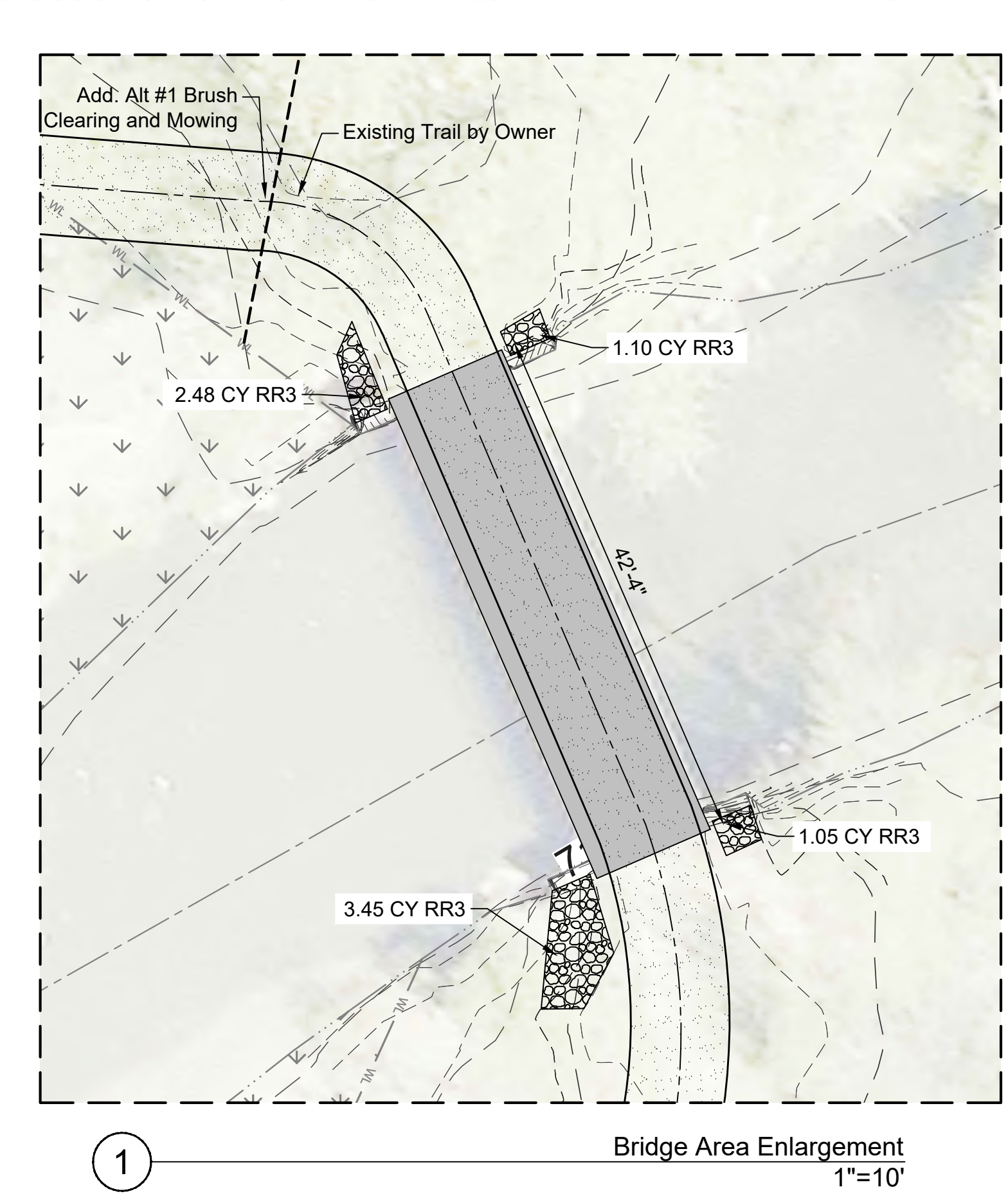
Hey and Associates, Inc.
 Engineering, Ecology and Landscape Architecture
 8755 W. HIGGINS ROAD, SUITE 835
 CHICAGO, ILLINOIS 60631
 OFFICE (773) 693-9200
 FAX (847) 740-2888
 CHICAGO@HEYASSOC.COM
 PROFESSIONAL DESIGN FIRM
 LICENSE NO. 184-002429

Leroy Oakes
 Trails and Signage RTP
 St. Charles, IL 60175

Layout Plan

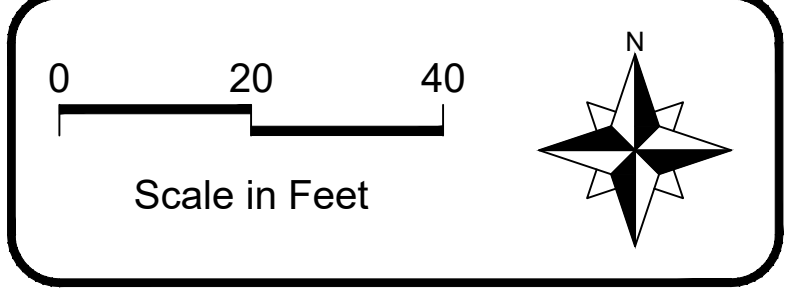
PROJECT NO:	21-0285	DRAWING NO:	C3.3
DESIGNED BY:	ERA		
DRAWN BY:	ERA		
CHECKED BY:	RJA		
APPROVED BY:	TRP	SHEET NO:	14 OF 36
ISSUE DATE:	06/13/2022		

Final Engineering



File: P:\12\000\21-0285 - Leroy Oakes Trails and Signage RTP\0285_C3.X.dwg Plot Date: June 21, 2022 Plotted by: Ethan Applebaum

Copyright © 2021 Hey and Associates, Inc.



LEGEND		
No.	Revision/Issue	Date

Hey and Associates, Inc.
 Engineering, Ecology and Landscape Architecture
 8755 W. HIGGINS ROAD, SUITE 835
 CHICAGO, ILLINOIS 60631
 OFFICE (773) 693-9200
 FAX (847) 740-2888
 CHICAGO@HEYASSOC.COM
 PROFESSIONAL DESIGN FIRM
 LICENSE N.O. 184-002429

Leroy Oakes
 Trails and Signage RTP
 St. Charles, IL 60175

SESC Plan

PROJECT NO:	21-0285	DRAWING NO:	C4.4
DESIGNED BY:	ERA		
DRAWN BY:	ERA		
CHECKED BY:	RJA		
APPROVED BY:	TRP	SHEET NO:	
ISSUE DATE:	06/13/2022		21 OF 36

Final Engineering

File: P:\2100021-0285-Leroy Oakes FRK\05 CAD\21-0285-C4.X.dwg Plot Date: June 21, 2022 Plotted by: Ethan Applebaum

Copyright © 2021 Hey and Associates, Inc.