

APPENDIX F – ENVIRONMENTAL CONSTRAINTS MEMORANDUM

MEMORANDUM

To: Michelle Carpenter
Turning Point Energy

From: Ashley Payne
Kimley-Horn and Associates, Inc.

Date: July 12, 2023

Subject: *Blackberry Township, Kane County, Illinois – KN216 Environmental Constraints Memorandum*

INTRODUCTION

Kimley-Horn was contracted by Turning Point Energy to review the KN216 project study area for potential environmental constraints. See Figure 1 for project location and Figure 2 for the study area boundary. The study area is located in Blackberry Township, Kane County, Illinois. The study area is approximately 82 acres in size and is located in Sections 23 and 14 of Township 39N, Range 7E. Kimley-Horn reviewed available background data to assist in determining if there are any potential environmental constraints for the study area.

ENVIRONMENTAL CONSTRAINTS:

Level 1 (Desktop) Wetland Delineation

Kimley-Horn reviewed available topographic maps, the National Wetlands Inventory (NWI), the National Hydrography Dataset (NHD), LiDAR, soil survey data, public waters, floodplain data, and aerial photography to identify potential wetlands or surface waters within the study area vicinity.

U.S. Geological Survey (USGS) Topographical Map

A review of the Sugar Grove, Illinois 7.5-minute topographical quadrangle depicts gravel pits on the eastern end of the study area. There is an unimproved road that crosses from the northwestern corner of the study to the middle of the eastern border. An intermittent pond is located on the southern portion of the study area. A building is identified in the southeastern corner of the study area. The study area is primarily undeveloped land. The USGS topographical map is presented as Figure 3.

National Wetlands Inventory (NWI)

Based on a review of the U.S. Fish and Wildlife Service (USFWS) NWI,¹ portions of 4 wetland features are present within the study area. The NWI-mapped features are identified as excavated ponds (PUBGx). The NWI-mapped features are presented on Figure 4.

¹ USFWS. 2023. National Wetlands Inventory. Vector Digital Data. Published May 1, 2023.

USGS National Hydrography Dataset (NHD)

Based on a review of the USGS NHD,² portions of two unnamed flowline segments transect the study area. One unnamed waterbody is present within the study area. The NHD-mapped resources are presented on Figure 4.

2-ft LiDAR Contours

Two-foot contours³ were reviewed to determine if any wetland areas or drainage swales may be present in the study area. The eastern portion of the study area generally slopes to the east and is drained via swales, some of which approximately align with the NHD-mapped flowline segments. The western portion of the study area has varied topography that drains into the excavated portions of the study area and to the east. The study area ranges in elevation from 732 to 810 feet above sea level. The 2-foot contours are presented on Figure 5.

Kane County Soil Survey

A review of the Kane County soil survey via the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey (WSS) database⁴ identified 9 soil types within the study area. The entire study area is mapped with a predominantly non-hydric soils rating at or below 8 percent, or a non-hydric soils rating of 0 percent. Hydric soils rating data are presented on Figure 6.

Illinois Department of Natural Resources (IDNR) Public Waters Inventory

A review of the IDNR Public Waters Inventory⁵ was completed. The Fox River is located approximately five miles east of the study area. The IDNR Public Waters feature is presented on Figure 7.

FEMA Floodplain

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Viewer⁶ was reviewed to determine if any FEMA 100-year floodplain is located within the project study area. Based on Panel 17089C0310H (effective August 3, 2009), the project study area is located within Zone X which is outside the FEMA 100-year floodplain. The FEMA floodplain data are presented on Figure 8.

Previous Study Area Disturbance

Historic aerials from 1993 to 2021 were reviewed to determine previous land use and disturbance on the study area and are presented in Attachment A. Several potential wetlands were visible on the reviewed historic aerials, see comments in Table 1. The study area has been used for agricultural purposes and gravel pits since at least 1993.

² USGS. 2023. National Hydrography Dataset. Vector Digital Data. Published March 7, 2023.

³ USGS. 2020. USGS 1 Meter DEM Panels. Published March 30, 2020.

⁴ USDA. 2022. USDA. Web Soil Survey. Illinois. Vector Digital Data. Published October, 2022.

⁵ IDNR. 2023. Illinois Public Waters. Available online at

<https://idnr.maps.arcgis.com/apps/webappviewer/index.html?id=b64decfb69504164a46badb2841ebb11>

⁶ USGS. FEMA National Flood Hazard Layer Viewer. Available online at <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>

Table 1. Study Area Historic Aerial Review

Year (Month, Day)	Land Use	3-month Antecedent Precipitation Conditions	Comments
1993	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural field, gravel pits, and forest. Linear features present in northern agricultural area. Saturated soil visible in center of northern agricultural area. Pond visible in the southern central portion of the study area.
1998	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural fields, gravel pits, and forest. Pond visible in the southern central portion of the study area.
2002	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural fields, gravel pits, and forest. Pond visible in the southern central portion of the study area. Saturated soil visible in the northern agricultural area.
2005 (March)	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. No saturation or crop stress is visible.
2005 (June)	Agricultural/ Gravel pits	Drier than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Linear drainage feature present in northern agricultural field.
2006	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. No saturation or crop stress is visible.
2007 (June)	Agricultural/ Gravel pits	Drier than normal	Same comment as above.
2007 (October)	Agricultural/ Gravel pits	Normal	Same comment as above.
2008	Agricultural/ Gravel pits	Wetter than normal	Same comment as above.
2009	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Uncropped areas visible in northern agricultural area.
2010 (June, 23)	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Saturated areas visible in northern portion of agricultural area.
2010 (June, 30)	Agricultural/ Gravel pits	Wetter than normal	Same comment as above.

Year (Month, Day)	Land Use	3-month Antecedent Precipitation Conditions	Comments
2011	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Crop stress is visible in the center of the northern agricultural area.
2012	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. No saturation or crop stress is visible.
2013	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Saturated area visible in northern portion of the agricultural area.
2015	Agricultural/ Gravel pits	Normal	Same comment as above.
2016	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Crop stress visible in the northern portion of the study area. Linear drainage feature present along northern boundary of northern agricultural area.
2017	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Saturated soil and crop stress visible throughout center of the northern agricultural area.
2018 (March)	Agricultural/ Gravel pits	Normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond appears partially filled in in the southern central portion of the study area. Slight crop stress and saturated soil visible in the northern agricultural area.
2018 (July)	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Smaller pond visible in the southern central portion of the study area. Crop stress is visible in the northern agricultural area.
2018 (October)	Agricultural/ Gravel pits	Wetter than normal	Same comment as above.
2019	Agricultural/ Gravel pits	Wetter than normal	Study area consists of cropped agricultural field, gravel pits, and forest. Pond visible in the southern central portion of the study area. Saturated soils and crop stress visible in the northern agricultural area.
2021	Agricultural/ Gravel pits	Drier than normal	Same comment as above.

Two areas of continued stunted or stressed vegetation were visible on the reviewed historic aerials. One pond was visible on the reviewed historic aerials.

Desktop Wetlands Assessment

Based on the Level 1 Wetland Delineation, Kimley-Horn identified two potential agricultural wetlands in the northern portion of the agricultural area and one pond in the southern central portion of the forested study area (see Figure 9). A level 2 (field) wetland delineation is recommended if project infrastructure is located near the two potential agricultural wetlands and one pond in the study area. If the current (as of the date of this report) project extents remain as-is, a field delineation would be needed. If project infrastructure will avoid the potential wetland features, a field delineation would not be needed. The site plan is included as Attachment D.

USFWS Federally Listed Threatened and Endangered Species

Kimley-Horn conducted a preliminary review of the potential for federally listed threatened, endangered, and proposed species to occur within the study area or be affected by the proposed project for the purposes of due diligence in compliance with the Endangered Species Act (ESA). A list of the threatened, endangered, and proposed species, and designated critical habitat that could occur in Kane County was obtained and evaluated from the USFWS Information for Planning and Consultation (IPaC) online planning tool. The resource list is not considered official USFWS correspondence for ESA consultation. Habitat descriptions for the identified species were compared to the habitat within or near the study area. The resource list obtained via the USFWS IPaC for the project identified four species that should be considered in an effects analysis. The resource list is included in Attachment B and the four identified species are reviewed below in Table 2.

Table 2. USFWS Listed Threatened and Endangered Species

Species	Status	Preferred Habitat	Findings
<i>Myotis septentrionalis</i> (Northern Long-Eared Bat [NLEB])	Endangered	During summer, NLEB roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. This bat uses tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines.	No critical habitat has been designated for this species. Suitable habitat may be present within the study area due to the presence of wooded area and human structures. Any tree trimming or removal should be completed between October 1 and March 31.
<i>Grus americana</i> (Whooping crane)	Experimental population, Non-essential	The whooping crane breeds, migrates, winters and forages in a variety of habitats, including coastal marshes and estuaries, inland marshes, lakes, open ponds, shallow bays, salt marsh and sand or tidal flats, upland swales, wet meadows and rivers, pastures, and agricultural fields.	No critical habitat has been designated for this species. The study area contains agricultural fields which are listed as habitat for the whooping crane. Due to the presence of nearby farmland, no adverse impacts are anticipated.

Species	Status	Preferred Habitat	Findings
<i>Danaus plexippus</i> (Monarch butterfly)	Candidate	The monarch butterfly requires grassland habitats where milkweed and flowers are present. North American populations of the monarch butterfly typically follow a seasonal migration pattern.	No critical habitat has been designated for this species. Minimal preferred habitat may appear within the study area. The area is primarily active farmland, forest, and gravel pits. No adverse impacts anticipated. To avoid potential impacts, reseeding with native seed mixes is recommended, although not required.
<i>Platanthera leucophaea</i> (Eastern Prairie Fringed Orchid)	Threatened	The eastern prairie fringed orchid occurs in a wide variety of habitats, from wet to mesic prairie, to wetland communities, including sedge meadow, fen, marsh and marsh edge. It can occupy a very wide moisture gradient of prairie and wetland vegetation. In general, the habitat is moist or moderately moist.	No critical habitat has been designated for this species. Minimal preferred habitat may appear within the study area. Wetlands may be on study area which are listed as habitat for the eastern prairie fringed orchid. The area is primarily active farmland, forest, and gravel pits. No adverse impacts are anticipated.

Migratory Birds

According to the IPaC resource list, 16 migratory species on the Birds of Conservation Concern (BCC) list have been identified within the study area. The BCC list was updated in 2021 by the USFWS and is an effort to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act.”

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to “take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations by the USFWS”. Typically, if active nests of bird species protected by the MBTA are identified, the USFWS recommends avoiding tree clearing or nest removal until at least the peak of the nesting season (generally March through August) has passed or until the nest is abandoned.

The U.S. Department of the Interior, Office of the Solicitor, published a memorandum (M-37050) dated December 22, 2017 regarding the MBTA and how “incidental take” is viewed by the Department. The memorandum analyzes whether the MBTA prohibits the accidental or “incidental” taking or killing of migratory birds. “Incidental take” is take that results from an activity, but is not the purpose of that activity. In this memorandum, the Department of the Interior concluded that “the MBTA’s prohibition on pursuing, hunting, taking, capturing, killing, or attempting to do the same applies only to direct and affirmative purposeful actions that reduce migratory birds, their eggs, or their nests, by killing or capturing, to human control.” Therefore, according to the Department of the Interior, the MBTA does

not prohibit “incidental take.” Courts have different opinions and decisions with respect to including or excluding “incidental take” when considering the prohibitions under the MBTA. In 2015, the Fifth Circuit in *United States v. Citgo Petroleum Corp.* issued an opinion that agreed with the Eighth and Ninth circuits that a taking is limited to deliberate acts done directly and intentionally to migratory birds. Therefore, the Fifth Circuit decided that the MBTA only prohibits intentional take and does not prohibit incidental take. This decision by the Fifth Circuit set precedent within the Fifth Circuit’s jurisdiction.

On January 7, 2021, the USFWS published a final rule (“MBTA rule”) defining the scope of the MBTA which excluded incidental take of migratory birds from being unlawful. This interpretation of the MBTA was effective as of March 8, 2021. On May 7, 2021, the USFWS proposed to revoke the January 7, 2021 final regulation and opened a public comment period which closed on June 7, 2021. On September 29, 2021, the U.S. Department of Interior announced a series of actions to unwind the most recent rulemaking in an effort “to ensure that the MBTA conserves birds today and into the future.” On October 4, 2021, the USFWS published a final rule revoking the most recent rule enacted by the Trump Administration that limited the scope of the MBTA. According to the Federal Register, the final MBTA revocation rule will go into effect on December 3, 2021.

In addition, on October 4, 2021, the USFWS published an Advanced Notice of Proposed Rulemaking announcing the intent to solicit public comments and information to help develop proposed regulations that would establish a permitting system to authorize the incidental take of migratory birds in certain circumstances. The USFWS issued a Director’s Order establishing criteria for the types of conduct that will be a priority for enforcement activities with respect to incidental take of migratory birds.

It should be noted that the regulatory climate with respect to the MBTA is changing; however, it is our understanding that as of December 3, 2021 incidental take of migratory birds will be liable under the MBTA. This should be considered until a rulemaking process is complete. Kimley-Horn recommends evaluating the MBTA regulation prior to ground disturbance activities commencing.

Kimley-Horn downloaded the Trust Resources Report Migratory Bird List from the IPaC online planning tool. The IPaC results are included in Attachment B. Kimley-Horn conducted a preliminary desktop review of the potential for migratory bird habitat (focusing primarily on trees and shrubs) to occur on the proposed study area or be affected by the proposed study area for the purposes of due diligence in complying with the MBTA. The desktop review revealed the presence of potential migratory bird habitat within the study area. It is our understanding that as of December 3, 2021, incidental take would be enforceable under the MBTA.

IDNR State Listed Threatened, Endangered, and Species of Special Concern

The IDNR identified no state listed threatened or endangered species, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the study area. The IDNR identified one Illinois Natural Area Inventory site (the Nelson Lake Marsh site) within the vicinity of the study area. However, the IDNR determined that adverse effects were unlikely. The IDNR Consultation Letter is included in Attachment B.

Historic Resources Database Review

Kimley-Horn reviewed the Illinois Inventory of Archaeological Sites (IIAS) database for known historic resources within the project vicinity. According to the IIAS database, there are no previously identified archaeological sites or cemeteries within the study area (see Attachment C). However, one archaeological survey partially overlapped the study area. The archeological survey identified nine new archaeological sites, none of which are located within the study area. Within 0.5 miles of the study area, there are six previously identified archaeological sites and four additional archaeological

surveys. One Provisional National Register of Historic Places (NRHP) site is located approximately 1,000 feet southwest of the study area boundary. The site is the Stearns-Wadsworth House located on Bliss Road (CR-78).

According to the Historic and Architectural Resources Geographic Information System (HARGIS), there are no previously identified historic buildings within the study area boundary (see Attachment C). Within 0.5 miles of the study area boundary, the Stearns-Wadsworth House was identified and is listed in the NRHP. Therefore, there is one known resource listed in the NRHP within 0.5 miles of the study area. The results of the IIAS review are sensitive in nature and should not be shared publicly. Correspondence with the Illinois State Historic Preservation Office (SHPO) is ongoing and results are pending.

CONCLUSIONS AND RECOMMENDATIONS:

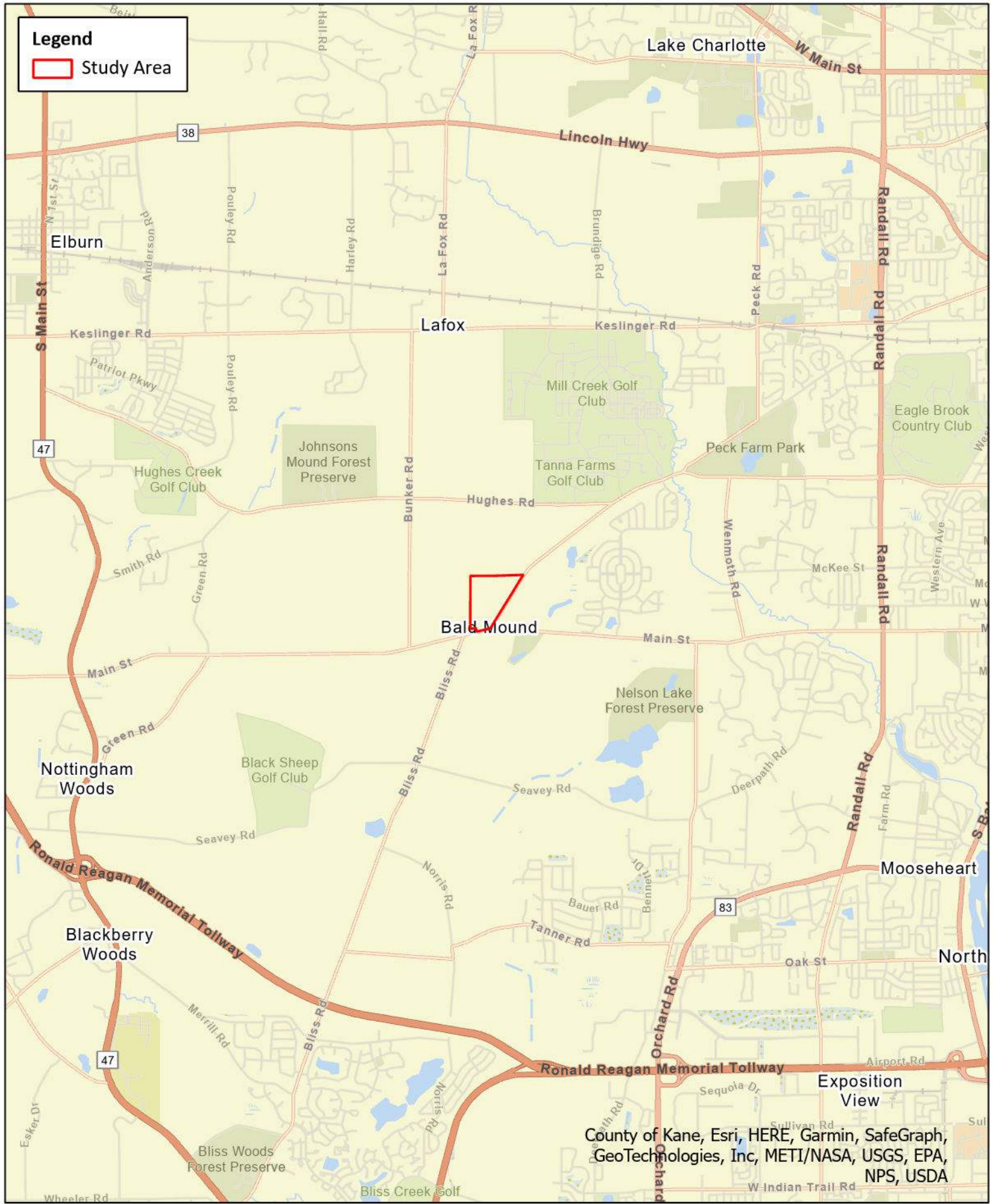
Based on the information reviewed, Kimley-Horn has identified potential environmental constraints that could require additional planning.

Based on the Level 1 Wetland Delineation, Kimley-Horn identified two potential agricultural wetlands in the northern portion of the agricultural area and one pond in the southern central portion of the forested study area (see Figure 9). A level 2 (field) wetland delineation is recommended if project infrastructure is located near the two potential agricultural wetlands and one pond in the study area. If the current (as of the date of this report) project extents remain as-is, a field delineation would be needed. If project infrastructure will avoid the potential wetland features, a field delineation would not be needed. The site plan is included as Attachment D.

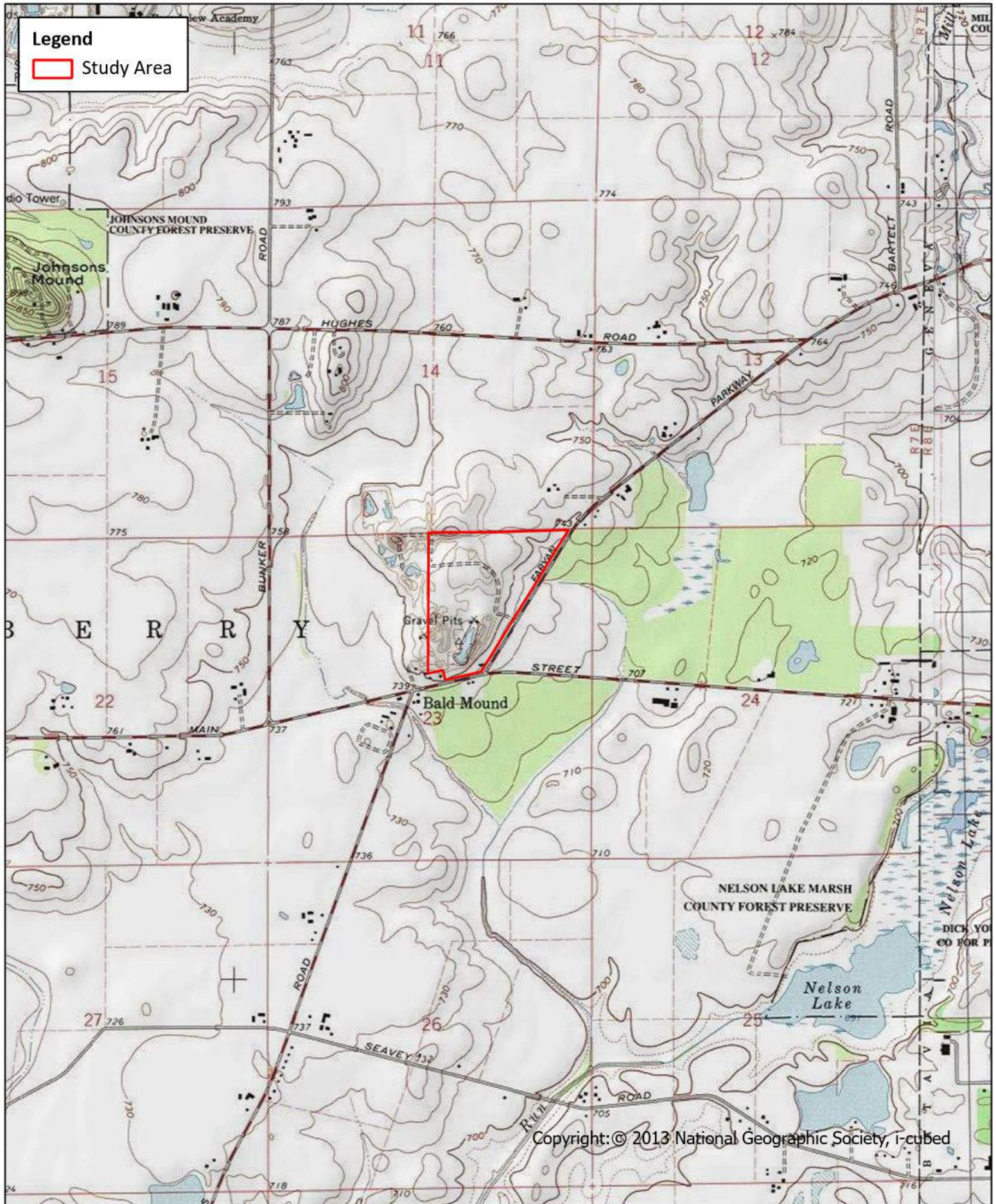
Potential suitable habitat for listed federal species may be present within the study area. If tree clearing or structure demolition is anticipated, it is recommended to be completed between October 1 and March 31, which is outside of the active bat season. The IDNR determined that adverse effects to state listed species or protected resources are unlikely.

No impacts to known IIAS-listed resources are anticipated. Correspondence with the Illinois State Historic Preservation Office (SHPO) is ongoing and results are pending.

Figures





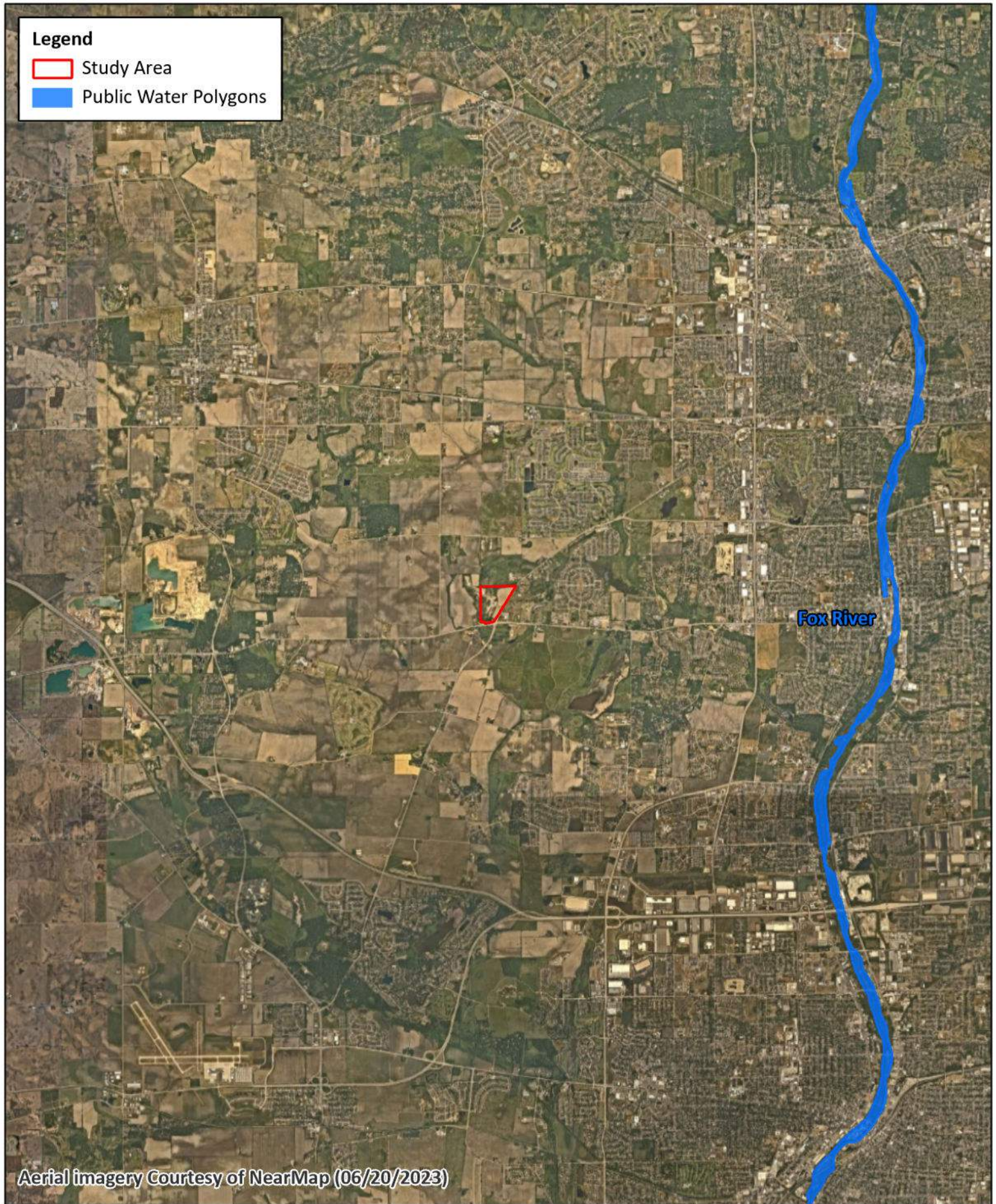


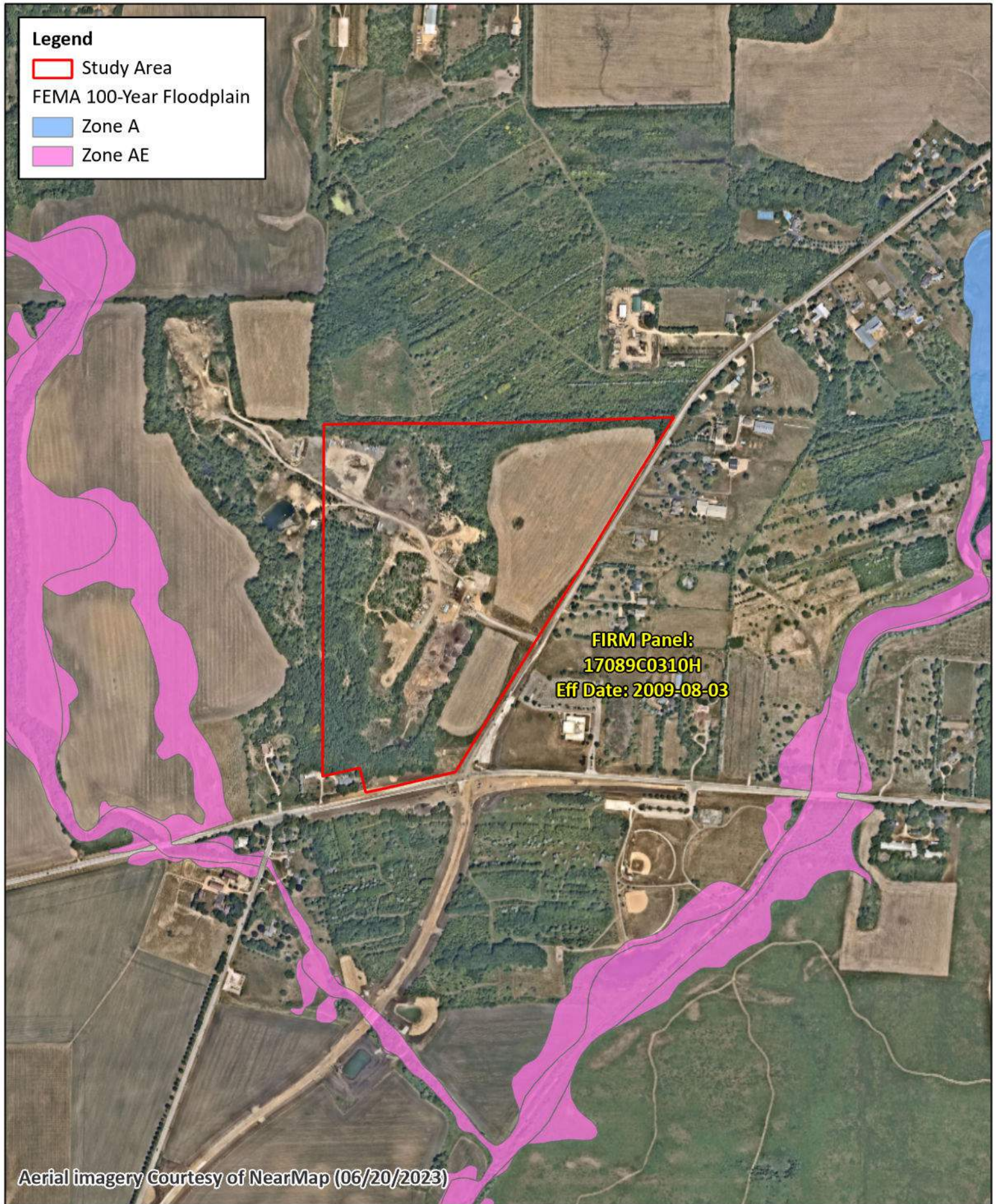




Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
59A	Lisbon silt loam, 0 to 2 percent slopes	8	1.0	1.2%
318C2	Lorenzo loam, 4 to 6 percent slopes, eroded	0	0.1	0.1%
325C2	Dresden silt loam, 4 to 6 percent slopes, eroded	4	4.5	5.5%
512B	Danabrook silt loam, 2 to 5 percent slopes	8	7.0	8.5%
512C2	Danabrook silt loam, 5 to 10 percent slopes, eroded	8	7.8	9.5%
662B	Barony silt loam, 2 to 5 percent slopes	0	2.5	3.0%
865	Pits, gravel	0	50.6	61.7%
969E2	Casco-Rodman complex, 12 to 20 percent slopes, eroded	0	8.4	10.2%
W	Water	0	0.3	0.3%
Totals for Area of Interest			82.1	100.0%








Legend
Study Area
Desktop Wetlands

Aerial imagery Courtesy of NearMap (06/20/2023)

ATTACHMENT A

Historic Aerials

Legend


 Study Area



Aerial imagery Courtesy of Google Earth



Legend

 Study Area



Aerial imagery Courtesy of Google Earth



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 Study Area



Aerial imagery Courtesy of Google Earth



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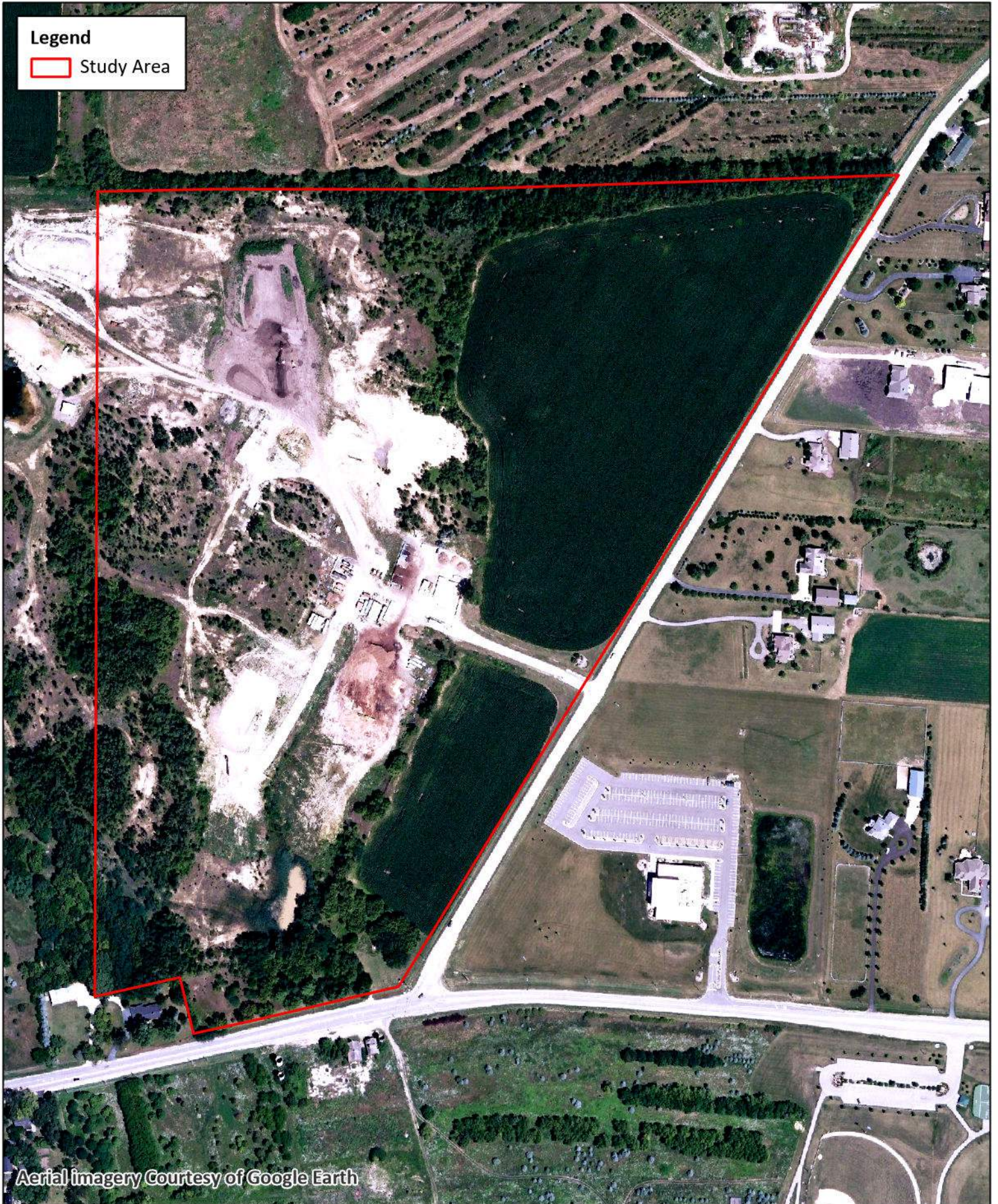


Aerial imagery Courtesy of Google Earth

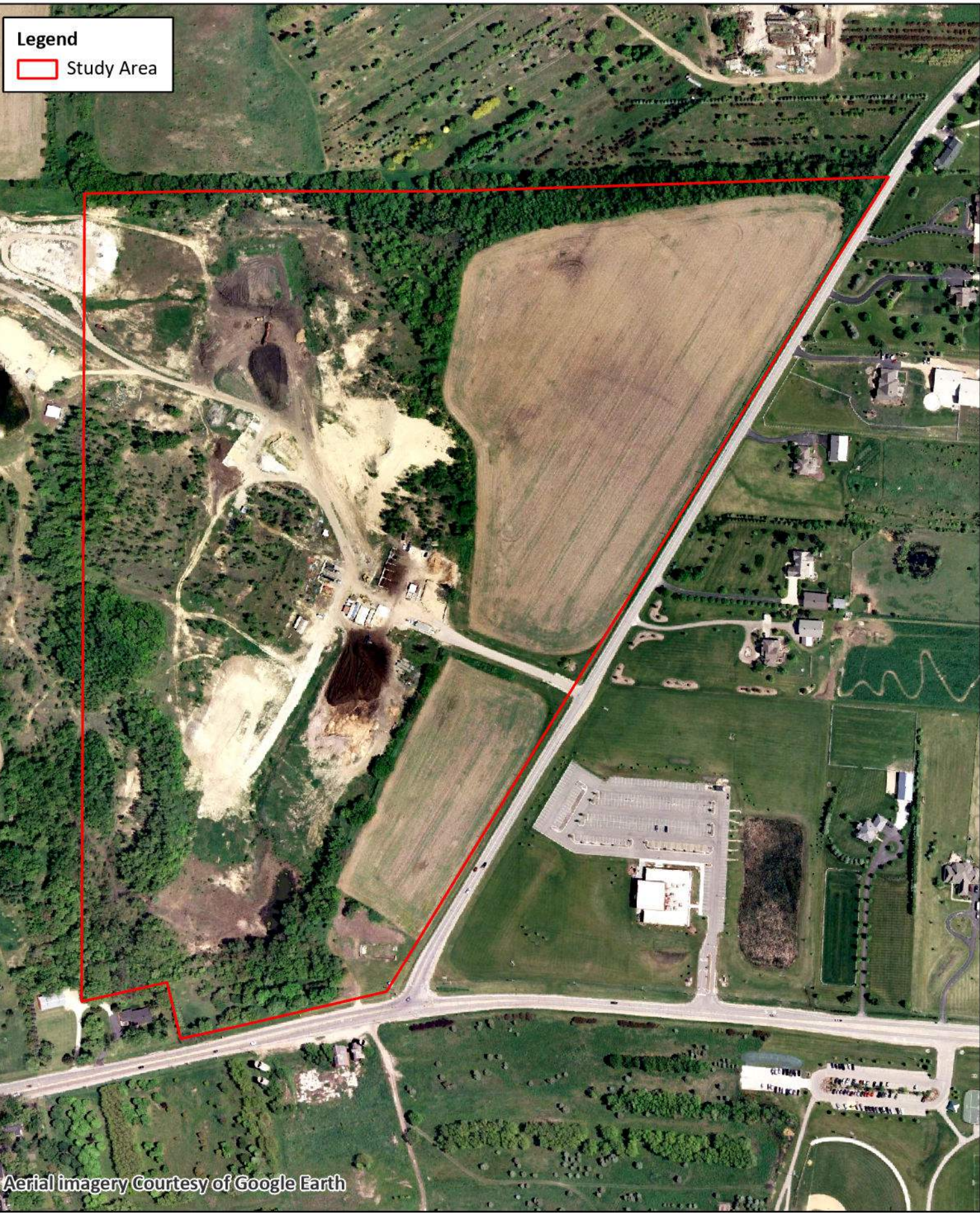


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Aerial imagery Courtesy of Google Earth




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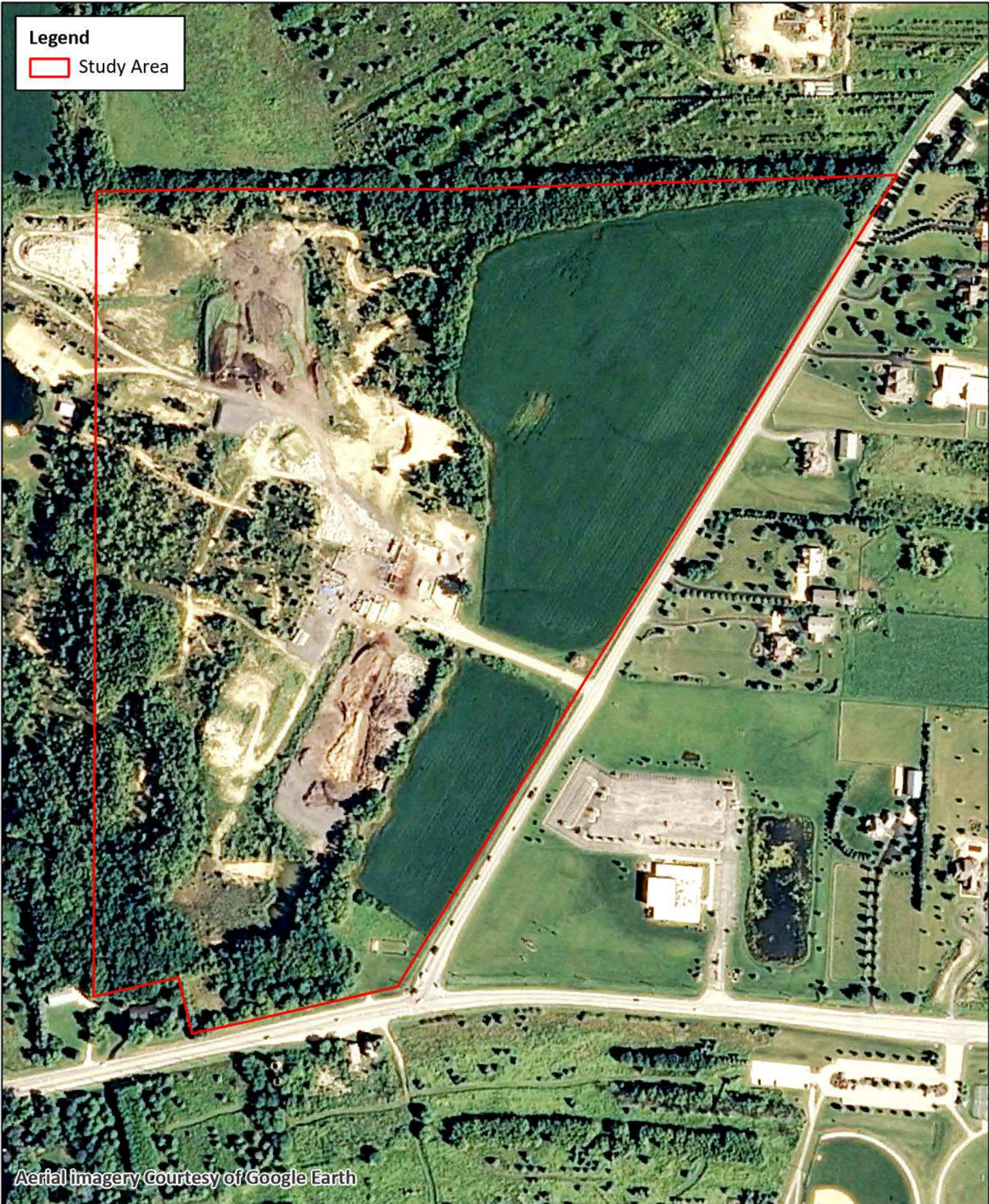
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Aerial imagery Courtesy of Google Earth



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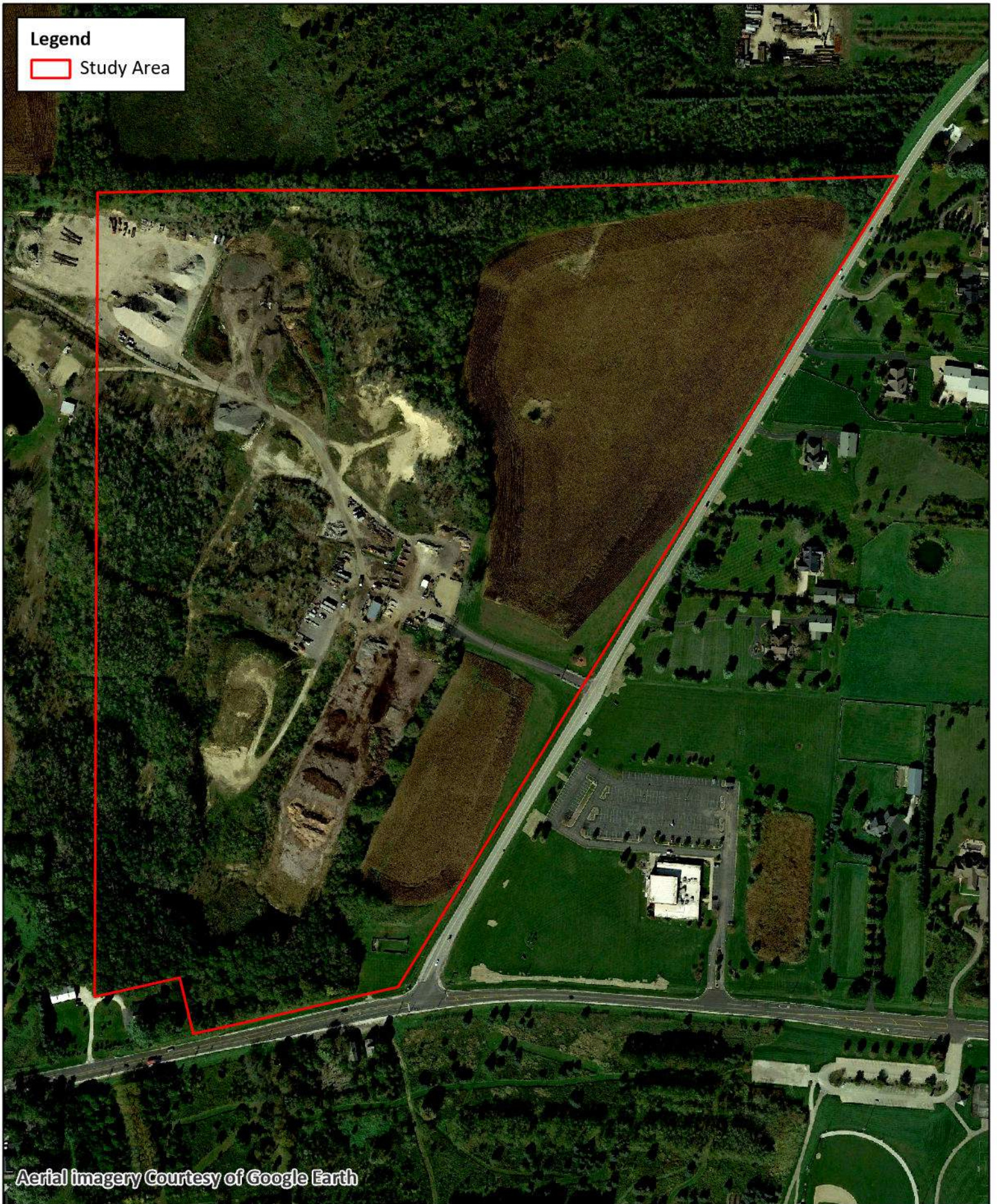


Aerial imagery Courtesy of Google Earth



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Aerial imagery Courtesy of Google Earth



ATTACHMENT B

Species Resources



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Chicago Ecological Service Field Office
U.s. Fish And Wildlife Service Chicago Ecological Services Office
230 South Dearborn St., Suite 2938
Chicago, IL 60604-1507
Phone: (312) 485-9337

In Reply Refer To:
Project Code: 2023-0103242
Project Name: KN216

July 11, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Additionally, please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S. District Court for the District of Columbia has ordered the Service to complete a new final listing

determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to be addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and

recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
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OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chicago Ecological Service Field Office

U.s. Fish And Wildlife Service Chicago Ecological Services Office

230 South Dearborn St., Suite 2938

Chicago, IL 60604-1507

(312) 485-9337

PROJECT SUMMARY

Project Code: 2023-0103242

Project Name: KN216

Project Type: Power Gen - Solar

Project Description: Development of solar array and associated utilities.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.8500347,-88.40229916715253,14z>



Counties: Kane County, Illinois

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non- Essential

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i>	Threatened
No critical habitat has been designated for this species.	
This species only needs to be considered under the following conditions:	
<ul style="list-style-type: none">▪ Follow the guidance provided at https://www.fws.gov/midwest/endangered/section7/s7process/plants/epfos7guide.html	
Species profile: https://ecos.fws.gov/ecp/species/601	

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jacob Ackerman
Address: 767 N Eustis St #100
City: St. Paul
State: MN
Zip: 55114
Email: jake.ackerman@kimley-horn.com
Phone: 6122949738

Applicant: TPE IL KN216, LLC
Contact: Keller Leet-Otley
Address: 3720 S Dahlia St
Denver, CO 80326

IDNR Project Number: 2316691
Date: 06/14/2023

Project: TPE IL KN216, LLC
Address: 40 W 234 Fabyan Pkwy, Elburn

Description: Construction of solar farm with associated access roads and utilities.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

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

Nelson Lake Marsh INAI Site

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

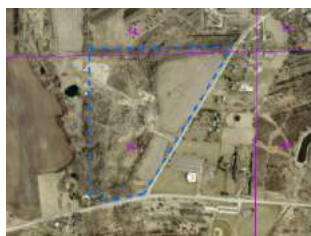
The applicant is responsible for the accuracy of the location submitted for the project.

County: Kane

Township, Range, Section:

39N, 7E, 14

39N, 7E, 23



IL Department of Natural Resources

Contact

Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction

IL Environmental Protection Agency
Terri LeMasters
1020 North Grand Avenue East
Springfield, Illinois 62894 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

JB Pritzker, Governor

Natalie Phelps Finnie, Director

June 14, 2023

Keller Leet-Otley
TPE IL KN216, LLC
3720 S Dahlia St
Denver, CO 80326 1018

RE: TPE IL KN216, LLC
Project Number(s): 2316691
County: Kane

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project 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.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

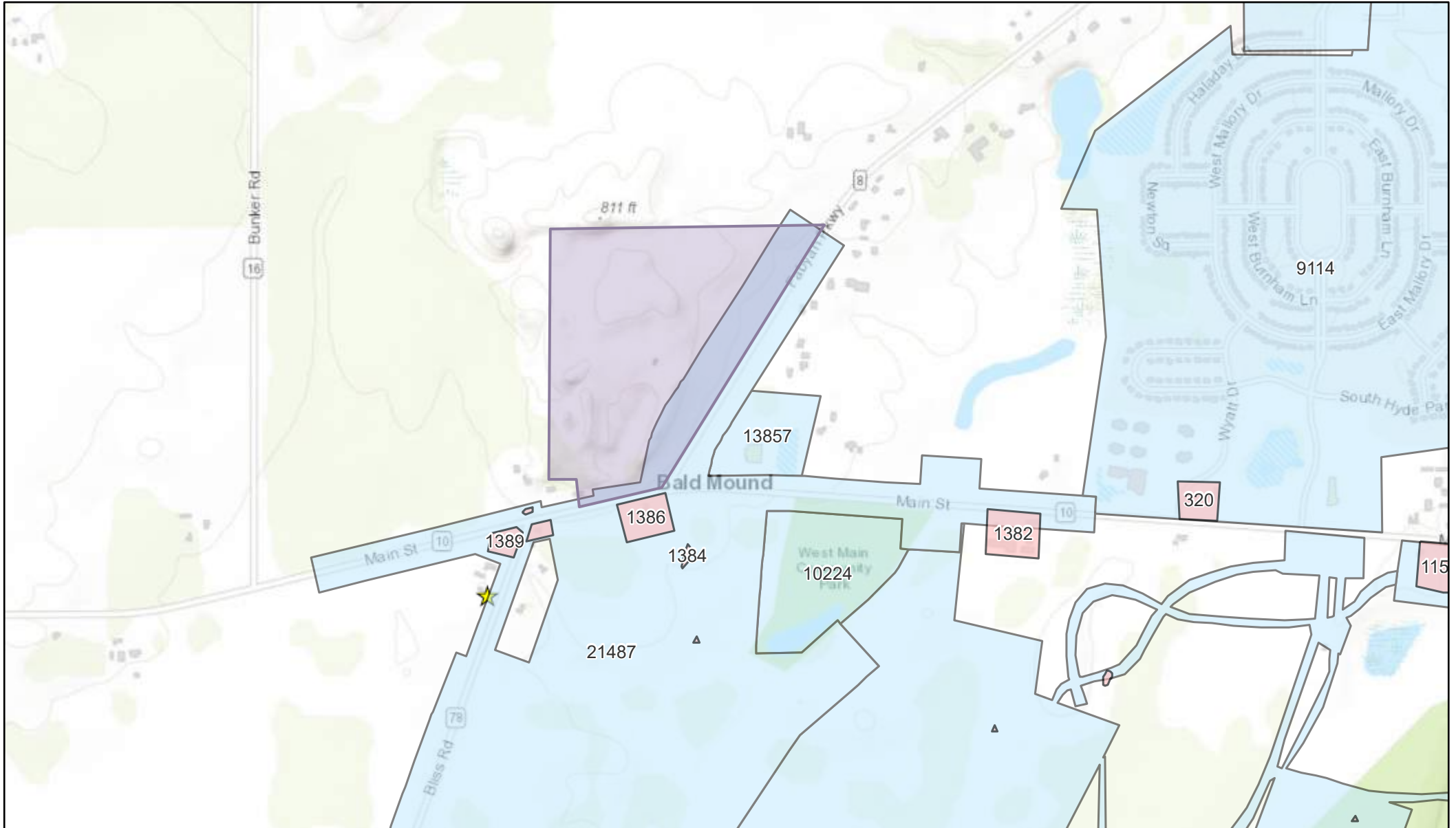
Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500





ATTACHMENT C

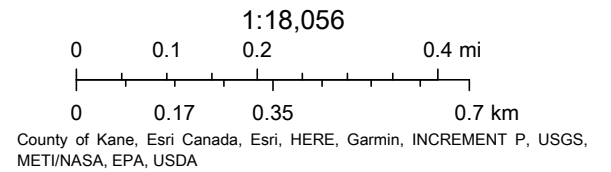
Historic Resources

TPE KN216 Solar

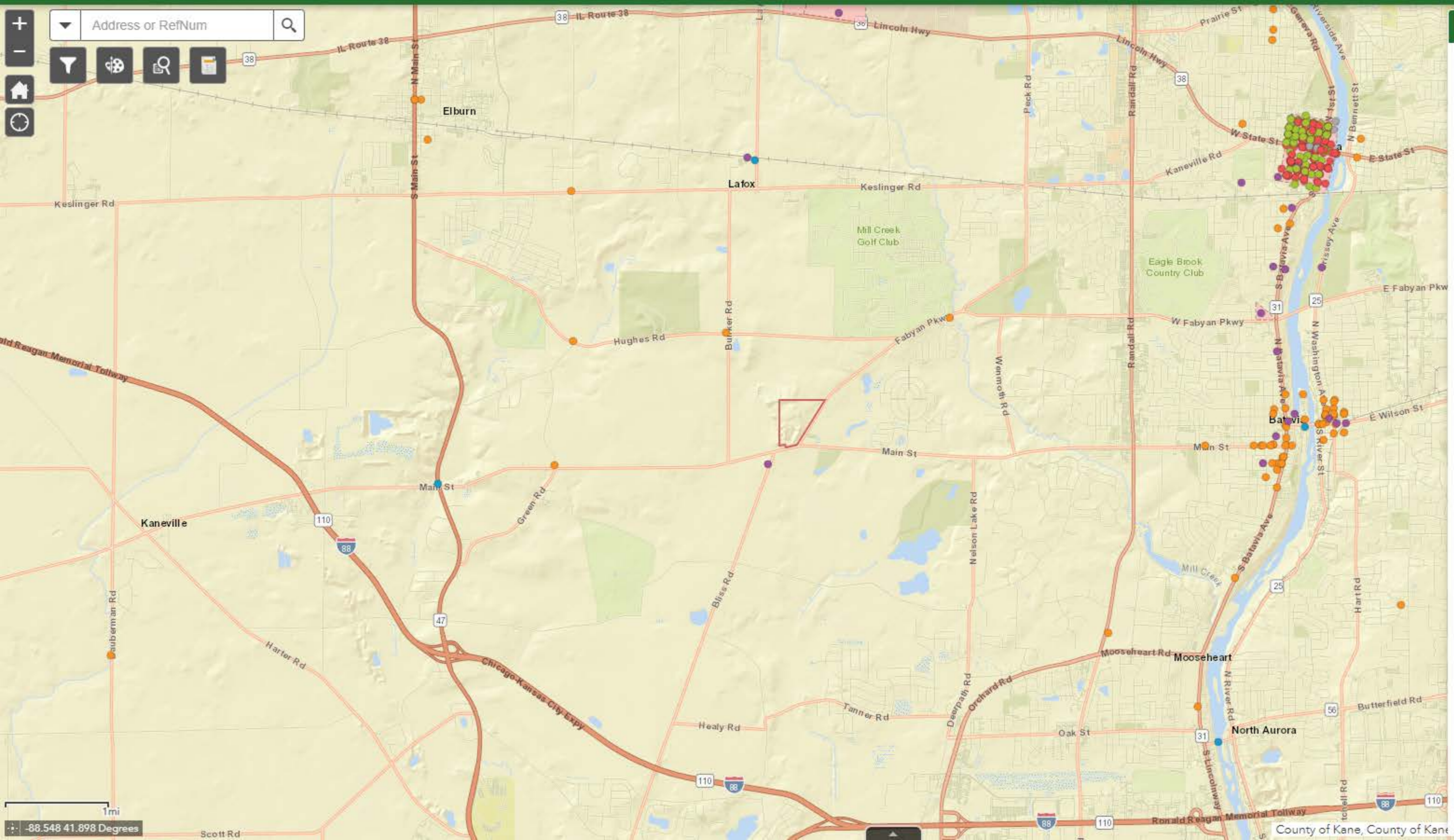


6/16/2023, 9:06:08 AM

-  Study Area
-  Surveys
-  IAS Sites
-  Provisional National Register Sites



Address or RefNum

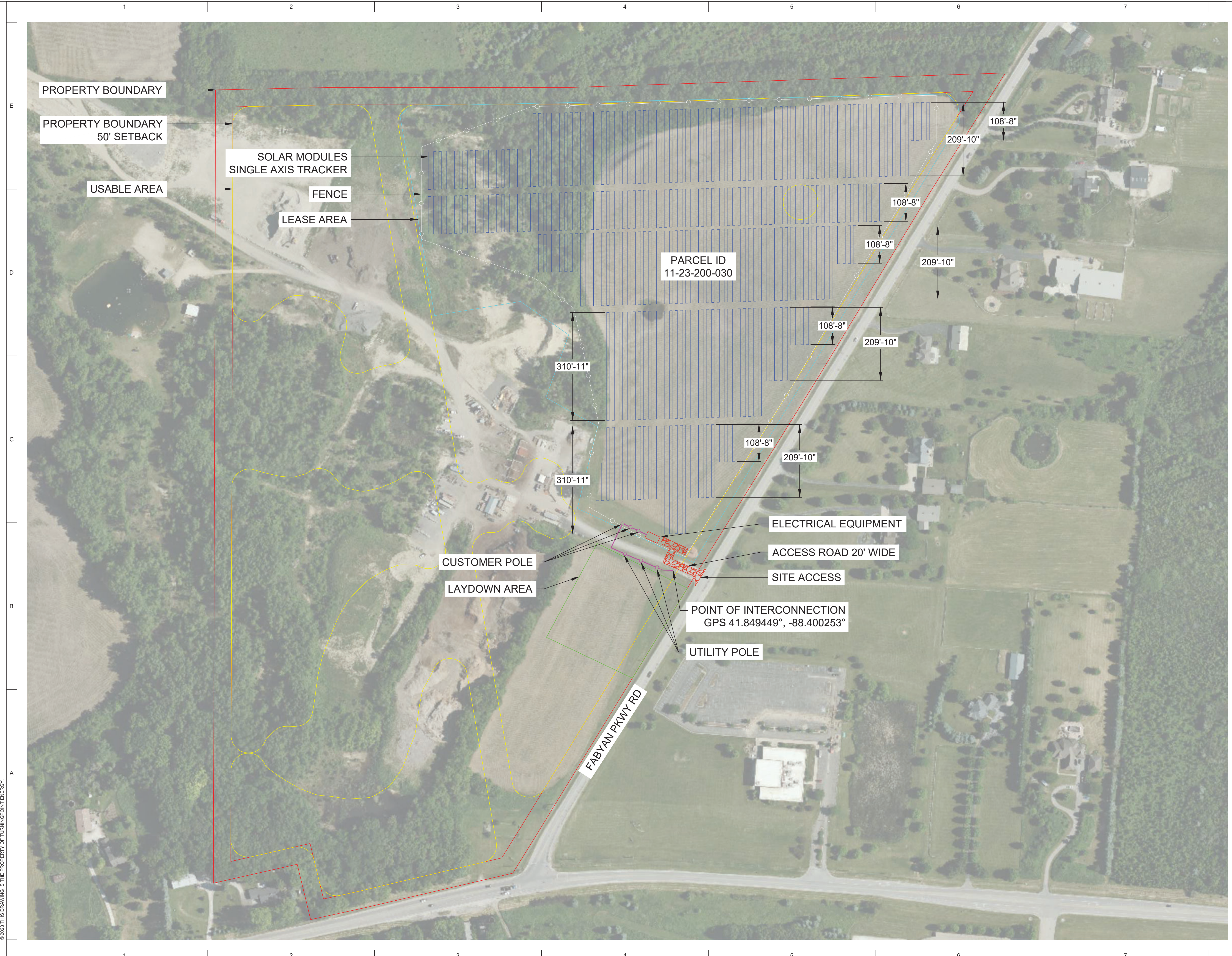


Layer List

- Layers
- Areas
 - National Register Properties
 - NR Evaluation - Undetermined
 - IL Boundary
 - National Register Districts
 - CLG Districts
 - Survey Areas
 - County Boundaries
 - IL Cities Boundaries
 - IL Cities
 - Interstate
 - Local Governments
 - Railroads
 - NR Undetermined - PhotoIndex
 - NR Undetermined - PDF_Index
 - National Register - PhotoIndex
 - National Register - PDF_Index

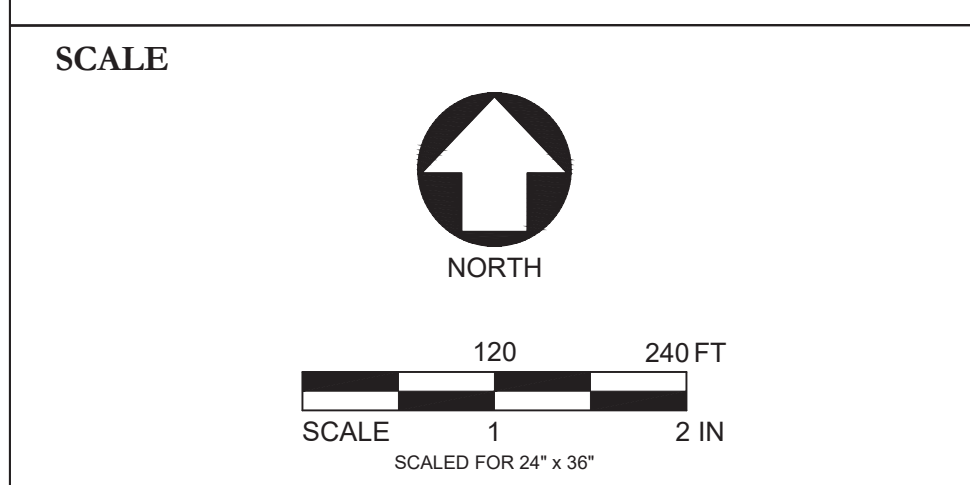
ATTACHMENT D

Site Plan



SYSTEM SUMMARY

AC SYSTEM SIZE	4.99MW _{AC}
DC SYSTEM SIZE	7.41MW _{DC}
OVERALL SITE AREA	82.07 ACRES
LEASE AREA	28.49 ACRES
TOTAL LOD	25.96 ACRES
FENCE AREA	24.81 ACRES
ARRAY AREA	19.43 ACRES
GEN-TIE LENGTH	345 FEET
TOTAL NEW ROADS LENGTH	250 FEET
TOTAL NEW ROADS AREA	4,711 SQFT
TOTAL FENCE LENGTH	4,680 FEET
TREE CLEARING AREA	6.50 ACRES
TOTAL NEW LANDSCAPING	0 FEET
GCR	50%
MODULE STC RATING	545 W
MODULE QUANTITY	13,598
STRING SIZE (# PANELS)	26
STRING QUANTITY	523
NUMBER OF TRACKERS	1 STRINGS TRACKER- 133 2 STRINGS TRACKER- 141 3 STRINGS TRACKER- 36
RACK TYPE	SINGLE AXIS TRACKER
ARRAY AZIMUTH	180°
TILT ANGLE	60° TO 60°
TOTAL LAYDOWN AREA	1.97 ACRES
PARCEL ID	11-23-200-030
MODULE MFR	LONGI SOLAR
MODULE MODEL	LR5-72HBD-545M BIFACIAL
INVERTER MFR	CPS SCH125KTL-DO/US-600
INVERTER MODEL	CHINT POWER SYSTEMS
INVERTER QUANTITY	40
INVERTER AC OUTPUT	125kW _{AC}



PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT **ILKN216** LAND OWNER **ARIOLA, JAMES J**
 ADDRESS **FABYAN PKWY ELBURN, IL 60119**

REV	DESCRIPTION	DATE

PROJECT # **ILKN216** DRAWN BY **EQ**
 DATE **2023-05-29**

SHEET NAME **SITE PLAN** SHEET NUMBER **A.1**