

Silver Banks

Wetland and Stream Mitigation Bank

Addendum No. 1 to the
WFI-B Umbrella Mitigation Banking Instrument
LKS-SB-2021-001



WFI HOLDINGS-B LLC
248 Southwoods Center
Columbia, IL 62236

August 30, 2021

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SILVER BANKS WETLAND AND STREAM MITIGATION BANK

AQUATIC AND FORESTED WETLAND

INTRODUCTION

Pursuant to its WFI-B Umbrella Mitigation Banking Instrument (**UMBI**), WFI-B is establishing mitigation bank sites in multiple watersheds throughout the USACE St. Louis District of Illinois. The proposed Silver Banks Wetland and Stream Mitigation Bank (hereinafter, **SBWSMB** or the **Bank Site**) is located in an unprotected floodplain of Silver Creek in Madison County, Illinois. The Bank Site is a total of 73.17 (+/-) acres situated on a parcel of land that consist of prior converted cropland, river channel and degraded wooded riparian corridor adjacent to Silver Creek.

The wetland mitigation bank plan will result in the restoration of emergent and forested wetlands and stream riparian corridor.

The Bank Site property was selected by WFI Holdings-B LLC (the **Sponsor**) because of its potential for beneficial water quality and wildlife habitat improvements to the watershed. Some of the attractive qualities of the Bank Site as a mitigation parcel include: the low lying existing agricultural fields and the ability to reduce fragmentation through the development of the mitigation bank.

The Bank Site is ecologically suitable for forested and emergent wetland restoration. It contains a perennial stream (Silver Creek) that has a very small riparian buffer. It is capable of supporting wetlands because there is sufficient hydrology that flows across the site which consists entirely of hydric soils. As a result, the Bank Site has great potential for increasing forested habitat along the stream system.

The Bank Site's location along Silver Creek will create important benefits for the watershed as agricultural and highway runoff will be filtered as it flows across the Bank Site. Additionally, occasional floodwaters from Silver Creek will be filtered in the established wetlands, which will also store flood waters and provide substantial wildlife benefits.

The onsite wetlands will decrease the amount of nutrients traveling to downstream waters and the expanded riparian buffers will reduce the amount of sediment moving through the system.

This area can be ecologically improved by managing early successional woody species in order to stimulate the growth of the existing and more ecologically valuable late successional woody species and by the planting of tree and shrub species to increase species richness. Restoring wetland areas will also increase habitat opportunities for species that require or frequent shallow ephemeral wetlands that include amphibians, reptiles, invertebrates, birds, and mammals.

One of the most important components of the Bank Site is its direct connectivity with Silver Creek, within the Lower Kaskaskia watershed and more specifically, the Shoal Creek/Lower Kaskaskia

Service Areas (LKS). Thus, this meets a need for sites mitigated in the regional watershed where impacts have been made and natural habitat lost due to human activity.

GUIDELINES AND RESPONSIBILITIES

The following information is to establish guidelines and responsibilities for the establishment, use, operation, and maintenance of SBWSMB. The Bank Site will be used for compensatory mitigation for unavoidable impacts to waters of the United States including wetlands, which result from activities authorized under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and other Federal, State or local wetland regulatory programs provided such use has met all applicable requirements and is authorized by the appropriate authority.

The Bank Site is proposed on a 73.17-acre (+/-) parcel situated on Silver Creek in the Lower Kaskaskia watershed, Madison County, Illinois. Wetlands Forever, Inc. will be the management company and perform the services specified herein for SBWSMB.

The Bank Site is situated and developed to address the loss of forested, emergent, and riparian wetland habitat. The Bank Site is compatible with adjacent land use, contributes to important local stream, terrestrial and wooded forest wetland functions, will be ecologically self-sustaining, and protected in perpetuity by an approved U.S. Army Corps of Engineers Conservation Easement.

BANK DEVELOPMENT

The entire property consists of hydric soils and lies within the floodplain of Silver Creek. A wetland site evaluation was conducted by a wetland biologist and determined that the soils were hydric, and the farmed portion is a prior converted cropland area. Historically, this property was and is hydrologically connected over a wide range of storm events to Silver Creek within the Lower Kaskaskia watershed. The Bank Site will be developed with multiple types of habitat features: hardwood bottomland forest, emergent habitat, and hydrologic and water quality wetland functions. The forested wetlands (multiple planting regimes) and stream riparian corridor will consist of a total of 67.89 acres of hard and soft mast trees. The vegetation types will follow elevational gradients that both exist and are to be created. Forrest Keeling Nursery, RPM trees will be used to promote a hard-mast producing hardwood bottomland forest. The emergent wetland component will consist of 2.39 acres of emergent wetland will be restored and will consist of very shallow basin in selected low elevation areas along old meander scars that will support a variety of herbaceous vegetation throughout the year and may support migratory and endemic wetland species along Silver Creek.

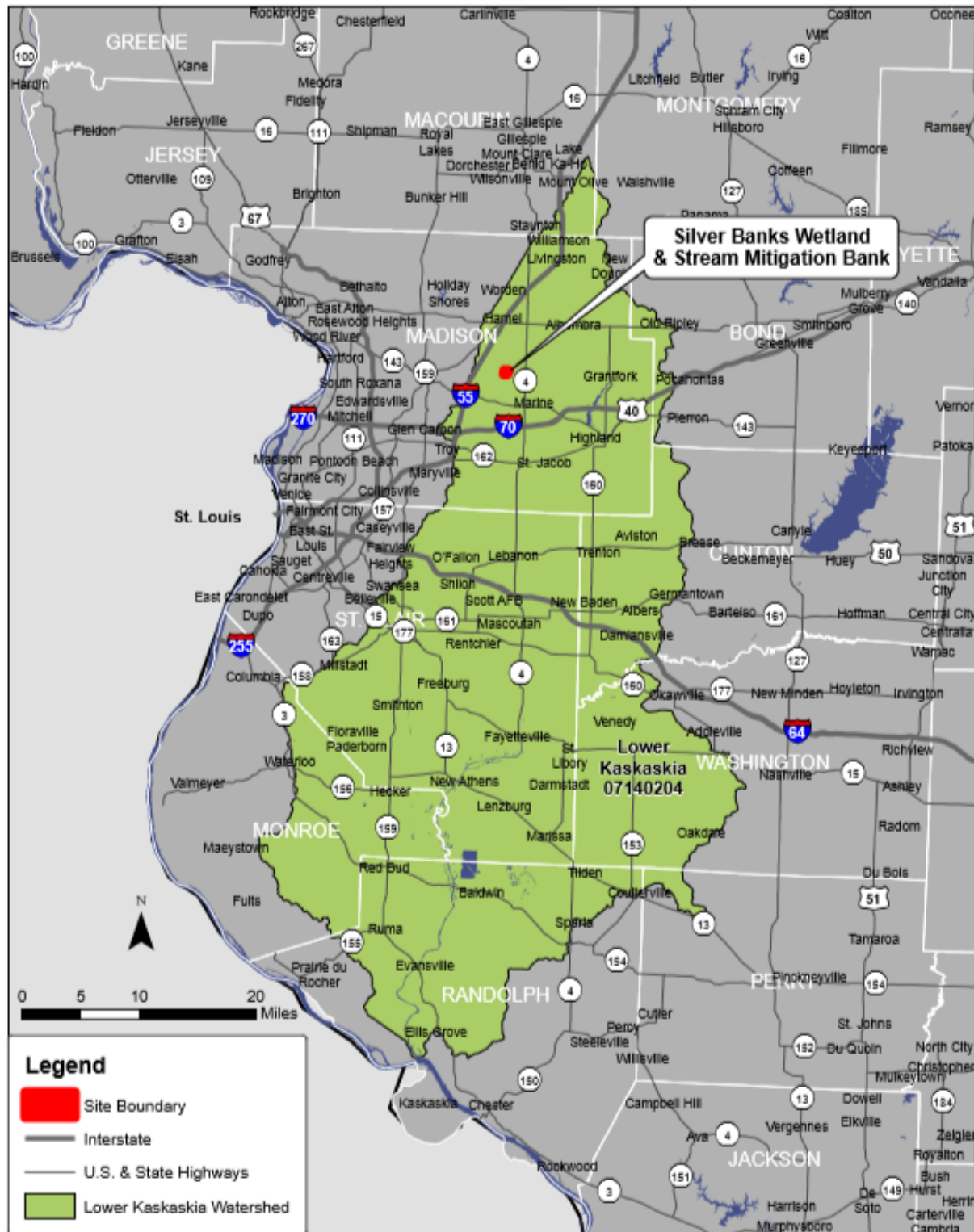
The hydrology of the Bank Site is intended to mirror the existing hydraulic regime. The depth, duration, and extent of flooding in the restored wetland will primarily be driven by flood pulses from Silver Creek and constructed ephemeral wetlands to increase the wetland hydroperiod of the area. Flood entry followed by seasonal drying through the summer and fall will sustain productivity by recycling vegetation and nutrients. The current plan will result in the re-establishment of a diverse wooded and emergent wetland adjacent to a stream riparian corridor to enhance ecological functions and values for Silver Creek.

OPERATION AND LONG-TERM MANAGEMENT

SBWSMB is considered Private commercial (Entrepreneurial). The ownership requests that SBWSMB be State of Illinois certified. The long-term management of SBWSMB will be managed by HeartLands Conservancy and is intended to be self-sustaining due to its location and design. The enhancements made to the property will aid in increasing hydrologic connectivity.

Figure 1 – Location in Lower Kaskaskia Watershed

Location in Lower Kaskaskia Watershed



WATERSHED APPROACH TO MITIGATION BANK

Silver Creek is a major tributary to the Kaskaskia River in Southern Illinois, Reference Figure 2 “Watershed”. Through the utilization of multiple documents from the State of Illinois, the USGS and the EPA, the following review has led to the identification of wetland and stream types and locations for restoration efforts associated with the Lower Kaskaskia watershed for future mitigation impacts.

A. Major Goals of the Watershed

State watershed needs identified wetland quality has likely declined statewide over the course of several decades (Stafford et al. 2010). These declines are not consistent throughout the state and among natural divisions; they are exacerbated by many factors along large rivers (Mills et al. 1966, Bellrose et al. 1979, 1983), but may impact all wetland systems. Thus, these restoration features support a more productive wetland community:

- Manage wetlands to promote native plant communities by removing, reducing or controlling invasive species, especially: Phragmites, purple loosestrife, reed canary-grass, Eurasian water milfoil, water hyacinth, narrow-leaf cattail, and others;
- Increase mast producing hardwoods (i.e., oak, hickory, pecan) within floodplain sites that will support these tree species;
- Reduction of undesirable plant species (river bulrush, cattail, perennial smartweed, etc.) in managed wetlands, manage for desirable seed producing annual plants;
- Increase historically abundant habitats, and duplicate historic habitat complexity and juxtaposition within wetlands (Stafford et al. 2010);
- Reduce sediment inputs into streams, rivers, and wetlands from row crop field through minimum tillage, vegetated waterways, buffers, and wetland restoration; and
- Maintain and increase water control in lakes and wetlands within river floodplains through managed or partial connections which will isolate habitats from growing-season floods yet allow movement of aquatic species when appropriate.

B. Mitigation Site Evaluation

The proposed SBWSMB consists of 73.17 (+/-) acres that lies within Madison County, Illinois, reference Appendix 1. The site encompasses Silver Creek which is a tributary to the Kaskaskia River.

WFI Holdings-B LLC has the property under contract. The property has multiple types of habitat management within its boundaries. Currently, the major type of management on the site is agricultural row cropping (63.8 acres +/-).

This Bank Site is well suited to support forested and emergent wetland function types. This property supports major criteria for wetland functions, they are as follows:

- Property consists of hydric soils;
- Hydrology is present from Silver Creek;
- Adjacent property (reference site) supports obligate and facultative wet vegetation; and
- Along the forested tree lines natural regeneration can be seen associated with bottomland hardwoods.

These attributes meet the goals of multiple Federal and State of Illinois watershed documents and will improve overall forested and emergent wetland habitats and water quality attributes within the region.

C. Mitigation Site Threats

The short- and long-term threats of the mitigation site are few due to the site location and planned construction techniques. The major short-term threats (1 to 10 years) to the Bank Site consist of invasive species and poor tree survivability due to potential climate change (specifically drought). The utilization of cover crops and annual maintenance over the next 5+ years will effectively reduce the possibility of invasive vegetative species establishing on the site. The potential threat of climate change, reducing survivability of the forest establishment, is slight due to the quality of the trees being planted and the construction technique of short hydroperiod wetlands being utilized in those plantings.

The mitigation area is within the floodplain of Silver Creek and the hydraulic regime is the most important factor influencing wetland type or class, including inhabitant plant species and community makeup with the occurrence of cyclical wet and dry periods.

The tree planting may incorporate the construction of mounds that trees will be planted upon. Planting on mounds will increase survivability of container trees by promoting root development due to air space associated with the mounds. Secondly, it may reduce mechanical damage caused by major precipitation events and freezing in the Fall/Winter of the year. Using container trees (app. 4 feet in height) planted on mounds will reduce the frequency and duration of seedlings being overtopping during the growing season.

Long-term threats to the site would be altered forest management and acts of God relating to natural climatic occurrences (flood, drought, fire, tornados). As the Conservation Easement holder, HeartLands Conservancy will be able to identify altered forest management that is a detriment to the mitigation area within one calendar year. Thus, this management would be addressed immediately and should reduce any long-term effects to the forested mitigation area. Through the use of high-quality plant stock and construction techniques, the natural effects of flooding and drought are reduced. The natural effects of fire and tornados are more difficult to address, however, due to natural regeneration and the utilization of preservation at the site, a natural seed source will be present.

Figure 2 – Watershed Map

Lower Kaskaskia Watershed

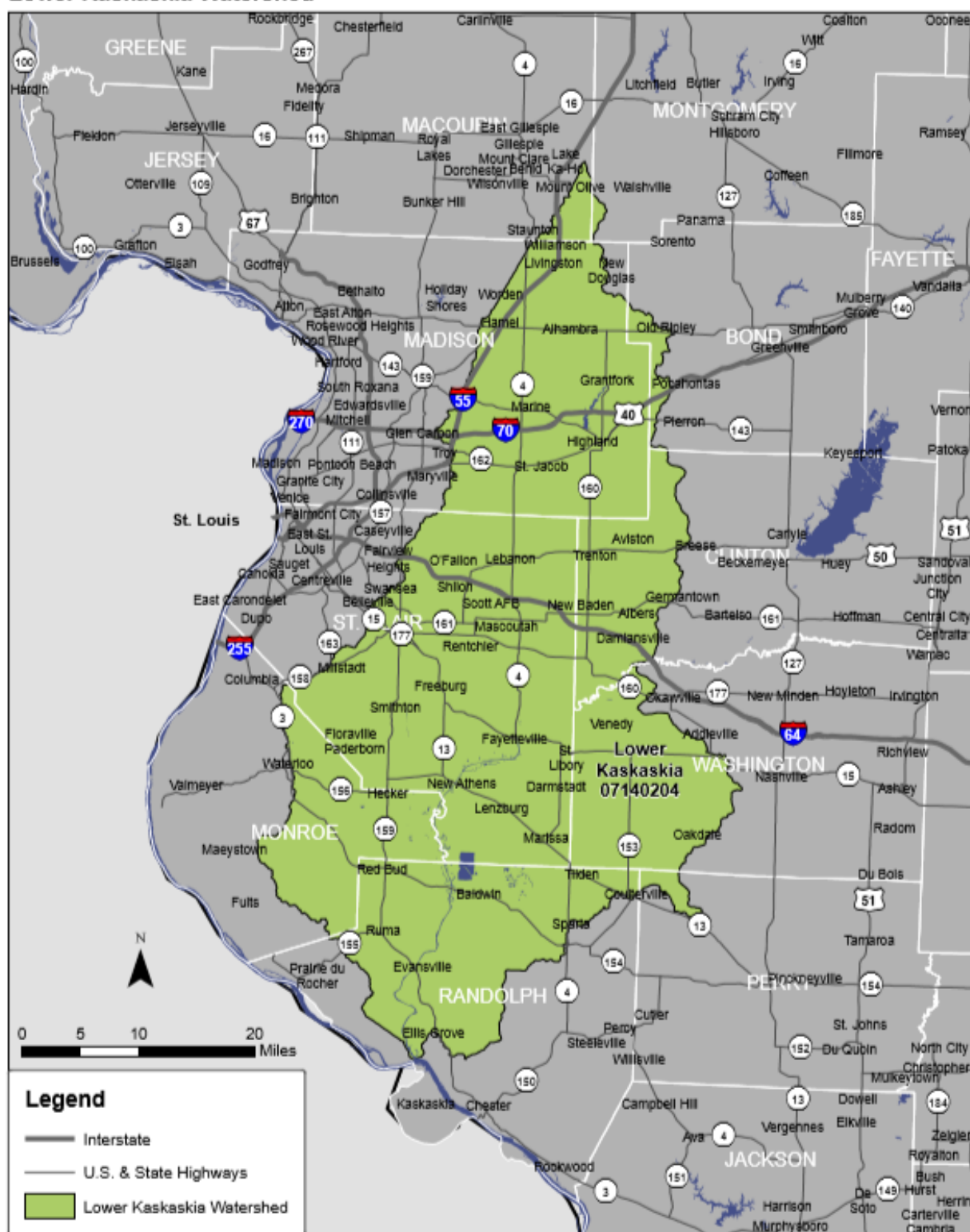
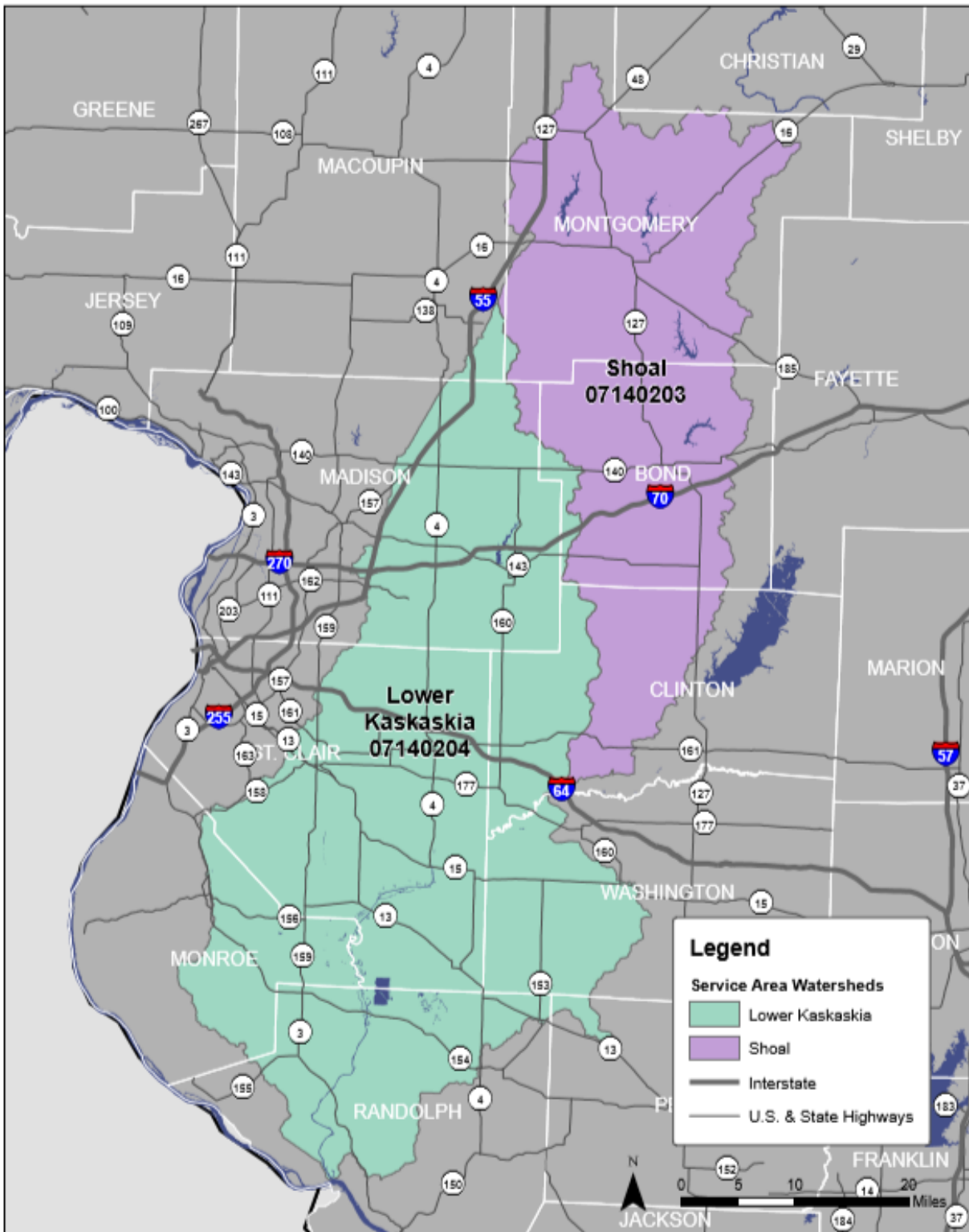


Figure 3 – Service Area

Service Area



LOWER KASKASKIA/SHOAL AND ASSOCIATED HYDROLOGIC UNIT MAPS FOR ILLINOIS

The Hydrologic River Basin Numbers “07140204” and “07140203”

Counties:

Macoupin

Madison

Bond

St. Clair

Clinton

Washington

Randolph

Monroe

Montgomery

Perry

MITIGATION PLAN REQUIREMENTS FOR SILVER BANKS SITE

SECTION A – Goals and Objectives

GOAL – Wetland and Stream Mitigation Bank

Restore wetland and stream riparian corridor habitat quality and quantity for wetland dependent wildlife and hydrophytic native plant species.

OBJECTIVE

- Increase food, shelter and breeding habitat for wildlife.
- Increase Bottomland Hardwood diversity, quality and hard mast tree dominance.
- Reduce forest fragmentation for “area sensitive” neo-tropical species.
- Maintain and enhance the wetland hydroperiod to increase wetland functions and values.

GOAL – Wetland and Stream Mitigation Bank

Create areas of emergent and forested wetlands and forested stream riparian corridor.

OBJECTIVE

- Nutrient removal/transformation.
- Reduce nutrient loading and increase nitrate fixation.
- Provide substrate for aquatic invertebrates as well as habitat for amphibians, reptiles, birds and mammals.

GOAL – Wetland and Stream Mitigation Bank

Compensatory Mitigation Site for Wetland and Stream Areas in the Lower Kaskaskia and Shoal Watersheds.

OBJECTIVE

- An appropriate form of compensation where no feasible on-site mitigation opportunity exists.
- Where it can be clearly demonstrated that off-site mitigation would be more environmentally beneficial.
- Projects with minor impacts, and linear projects, which when considered cumulatively, would result in more than minimal impact.

GOAL – Wetland and Stream Mitigation Bank

Develop a wetland and stream mitigation site to create and improve habitat conditions favorable for area sensitive, rare, threatened and endangered species endemic to the Service Area.

OBJECTIVE

- Restore, enhance and preserve a wooded riparian corridor on each side of Silver Creek and its tributaries that are connected to the flood pulse of the Lower Kaskaskia River.
- Restore woody and herbaceous vegetation to create a continuum of plant species.

GOAL – Stream Mitigation Bank

Protection and restoration of streambank riparian corridor habitat, which contributes to the enhancement and habitat diversity of the Silver Creek, Lower Kaskaskia River, and Shoal watersheds.

OBJECTIVE

- Enhanced opportunities for wildlife and human use by elimination of existing annual row-cropped farm field and restoration of a diverse forested wetland.
- Restore and enhance the riparian stream corridor buffer.
- Reduce erosion and sedimentation, thereby improving water quality.

SECTION B – Site Selection

The SBWSMB has been sited on a 73.17-acre (+/-) parcel situated on Silver Creek in the Lower Kaskaskia watershed, Madison County, Illinois. The site lies east of Edwardsville, Illinois. Reference Figure 2. The general layout of the site consists of an area located south of Fruit Road running through Madison County, Illinois, along Silver Creek, reference Figure 4.

The Bank Site is situated and developed to address the loss of forested, emergent, and riparian wetland habitat. The Bank Site is compatible with adjacent land use (wooded wetland, agriculture, a homestead, and a golf course on the other side of Fruit Road), contributes to important local stream, terrestrial and wooded forest functions, will be ecologically self-sustaining, and will be protected in perpetuity by an approved U.S. Army Corps of Engineers Conservation Easement.

The entire property consists of hydric soils and lies within the floodplain of Silver Creek. Historically, this property was and is hydrologically connected over a wide range of storm events to Silver Creek within the Lower Kaskaskia watershed. The site will be developed with multiple types of habitat features: forested wetlands, riparian corridor, and re-establishment of meander/oxbow scars for emergent. The vegetation types will follow very gentle grades that both exist and are to be created. The hard-mast producing hardwood bottomland forest will focus on reducing fragmentation and linking multiple habitats together. Emergent wetland will be created and will consist of a higher hydrologic regime over the year and may support migratory and endemic wetland species during the fall and spring migrations during timely hydrologic events in the Lower Kaskaskia watershed.

The hydrology of the Bank Site is intended to mirror the existing hydraulic regime and utilizing mounds and meander scars would increase the duration of saturation and inundation over across the Bank Site. The depth, duration, and extent of flooding in the restored wetland will primarily

be driven by flood pulses from Silver Creek. Flood entry followed by seasonal drying through the summer and fall will sustain productivity by recycling vegetation and nutrients. The current plan will result in the re-establishment of a diverse forested, riparian corridor, and emergent wetland adjacent to a stream corridor to enhance ecological functions and values for the Lower Kaskaskia watershed.

The Bank Site will be developed to restore habitat that will support sustainability within existing site and link adjacent habitat types for an increase in habitat function and connectivity.

The siting of the SBWSMB will support aquatic habitat diversity, habitat connectivity, the existence of threatened or endangered species related to prior habitat loss, and other landscape scale functions.

SITE SOIL TYPES

The property consists of hydric soil in the floodplain of Silver Creek. The Bank Site consists of two major hydric soil types- Beaucoup Silty Clay Loam (3070A) and Wakeland Silt Loam (3333A).

Beaucoup Silty Clay Loam Series consists of fine-silty poorly drained soils formed in silty alluvium on flood plains. Slope ranges from 0-2 percent. Shrink swell potential is moderate. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches above to 2.0 feet below the surface. This soil meets hydric criteria (mapping units 3070A).

Wakeland Silt Loam Series consists of somewhat poorly drained soils formed in silty alluvium on flood plains. Slope ranges from 0-2 percent. Shrink swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 1.0 to 3.0 feet below the surface. This soil meets hydric criteria (Mapping Units 3333A).

SOIL SURVEY MADISON COUNTY, ILLINOIS – MITIGATION AREA WEB SOIL SURVEY - See Figure 4, Soil Survey Map

Figure 4 – Soil Survey Map

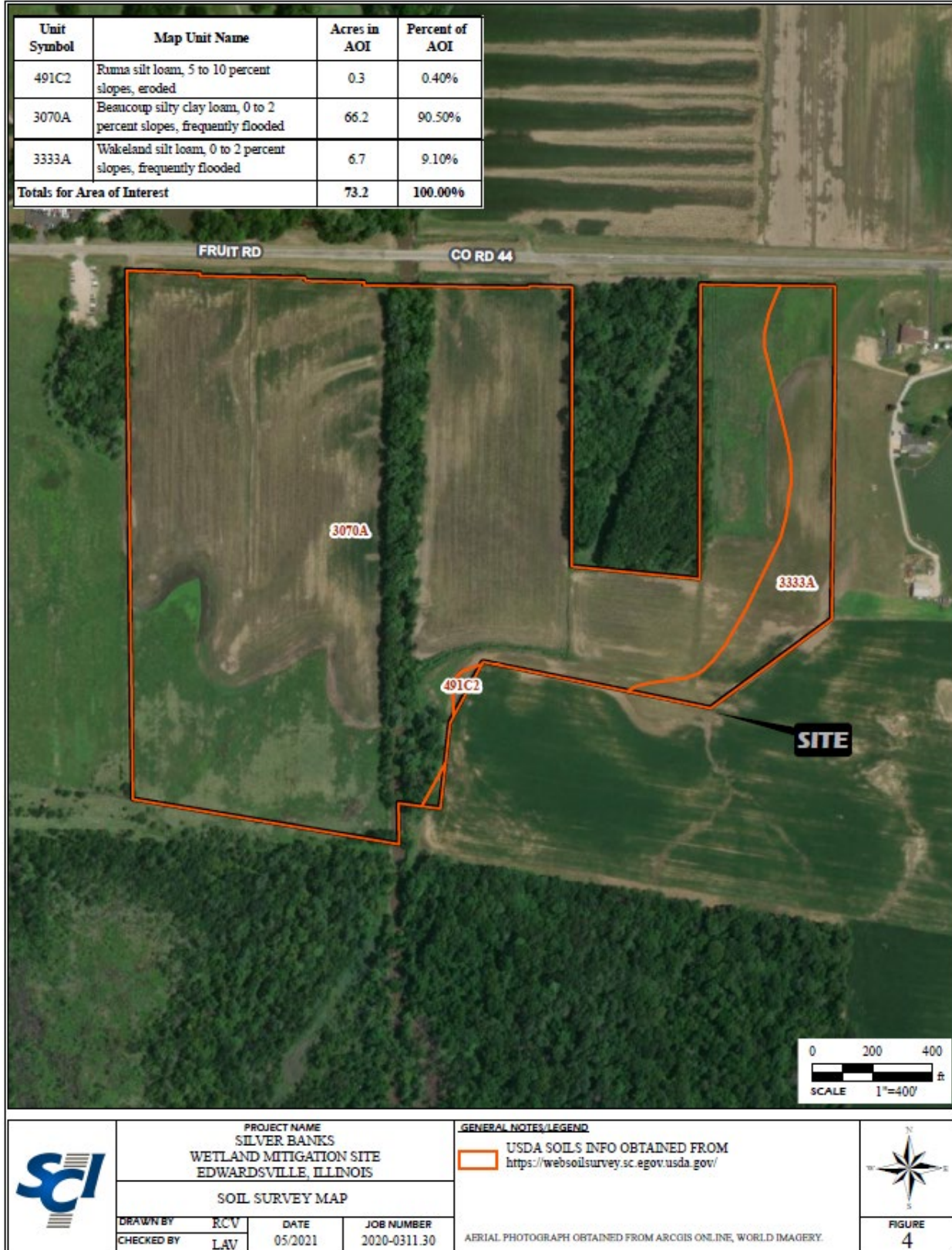


Figure 5 – Aerial of Mitigation Bank Site



SECTION C – Site Protection Instrument

Whereas, WFI Holdings-B LLC has under contract 73.17 (+/-) acres parcel of land which is situated in Madison County, Illinois. A title commitment identifying ownership and easements related to the property is located in Appendix 2.

This tract of land is located in and being a part of fractional Section 2, Township 4 North, Range 7 West of the Third Principal Meridian, Madison County, Illinois.

The Bank Site totals 73.17 (+/-) acres, it is made up of Prior Converted Cropland. The SBWSMB will have a cumulative acreage of 70.28 (+/-) acres of restricted property in perpetuity.

WFI Holdings-B LLC proposes to execute a conservation easement that has been modeled on the Corps of Engineers, Office of Counsel Approved Conservation Easement document (Appendix 3).

A signed and notarized copy of the conservation easement and associated exhibits will be sent to the St. Louis District, Corps of Engineers Regulatory Branch for review prior to commencement of any permitted work or within 60 days of the issuance of this permit whichever occurs first. The recordation record will be sent to the Corps of Engineers, St. Louis District, Regulatory Branch and to the conservation easement grantee (Third Party) – HeartLands Conservancy, Belleville, Illinois, along with a copy of the executed easement mailed to the Corps' St. Louis District Regulatory Office.

Per the COE Approved Conservation Easement, Item 3 for Permitted Activities – Reference Long Term Management Plan for specific land use management activities that are permitted.

Signage will be posted around the perimeter of the Conservation Easement with adequate frequency, visibility, and proper height for viewing. Signage will be constructed of suitable materials to withstand climatic conditions. Signs will include the following language:

*WETLAND MITIGATION AREA
DO NOT DISTURB
PERMIT NO. CE MVS-XXXX-XXX*

SECTION D – Baseline Information

OVERVIEW

The Bank Site is classified as agricultural row cropping.

Project Description: The SBWSMB will lie within a 73.17 (+/-)-acre site. The Bank Site will have a cumulative acreage of 70.28-acres (+/-) of restricted property in perpetuity. The proposed mitigation bank will consist of 58.60 acres of forested wetlands, and 9.29 acres of riparian corridor; 2.39 acres of emergent wetlands all replacing the prior converted agricultural field, reference Mitigation Bank Aerial, Figure 5.

The wetland and waterbody delineation determined that the Bank Site's soils were hydric throughout the entire area. The soils consisted of two main classifications as identified in the USDA Soil Survey, Beaucoup and Wakeland series and the sample sites were identified as Beaucoup Silty Clay Loam and Wakeland Silt Loam. Due to the agricultural activities associated with the site, there was little to no vegetation observed. However, in adjacent wetland habitats, hydrophytic vegetation was present. Sufficient hydrology was observed within the site, but the hydrology is altered by agricultural management actions consisting of ditching and linking areas together for the purpose of draining the tillable acres of the Bank Site.

Agricultural row cropping is taking place on all of the farm ground within the property, located in Madison County, Illinois. The entire 73.17 (+/-) acres of prior converted farm ground contain hydric soils. The surface area within the SBWSMB boundaries is relatively flat and low lying with an Elevation 495.0 (+/-), reference Figure 6 for topographic map.

The site was delineated outlining 21.33 acres as PEM consisting of a monotypic habitat of Reeds Canary Grass, this is an invasive species. This site has a mixed history over the past 10 years for agriculture and being a fallowed fields.

This site will be re-established to bottomland hardwood forest, riparian, and emergent wetland habitats. Reference Appendix 7 for the Wetland Delineation. The wetland determinations will identify the area that will be mapped, reference Map Figure 7 on page 19.

Environmental Site Assessment:

Based on the findings of the Phase I Environmental Site Assessment performed by ProGEA, Inc. on June 25, 2020, there are no recognized environmental conditions (RECs), as defined by ASTM in connection with the Bank Site.

Phase 1 Cultural Resource Survey:

The Phase 1 Cultural Resource Survey performed by SCI Engineering on July 24, 2020 located one cultural resource site. Site 11MS2580 is not considered significant. Therefore, SCI believes further investigations of the project area are unwarranted and recommends clearance of the project area.

RIAM Evaluation System:

The site evaluation will conduct a RIAM evaluation system used for large scale dynamics attributes and anticipated ecological lift, as detailed below.

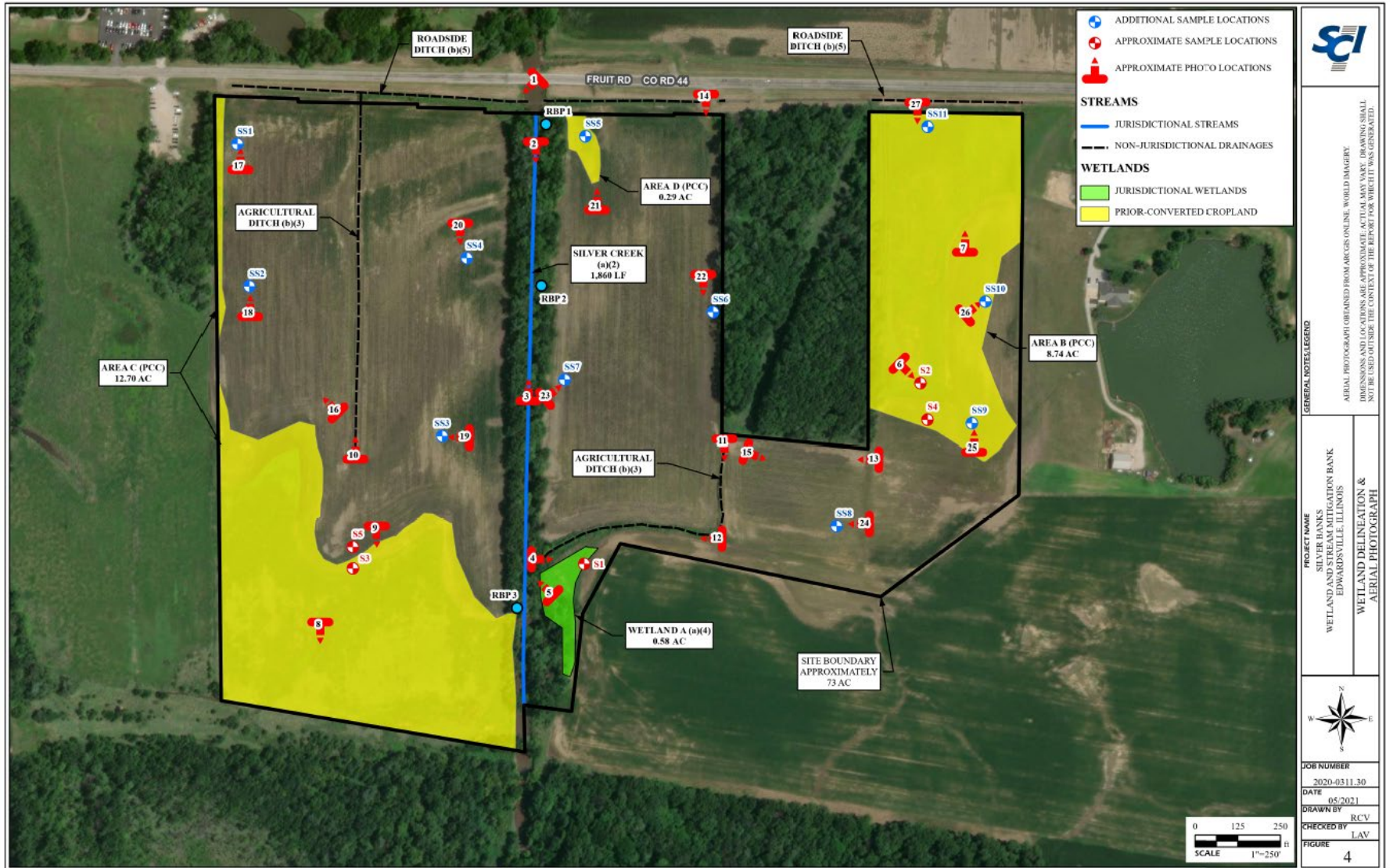
Site Easements:

The Bank Site currently has multiple easements for various uses as outlined in Appendix 2, Summary of Title Work. All easements affecting the Bank Site have been excluded from the mitigation area (see Figure 8, Mitigation Plan Map). A permanent Drainage Easement benefitting the adjacent Plocher Farm will be executed and recorded; however, it is not registered to date.

Figure 6 – Topographical Map of Mitigation Site



Figure 7 – Wetland Determination Sample Locations



BASELINE CONDITIONS EVALUATION PROCEDURE

The baseline conditions were evaluated using the Rapid Impact Assessment Method (RIAM) (Stein and Ambrose 1998). This functional assessment technique was selected because impacts to aquatic resources are assessed in a manner that is scientifically defensible, yet easy to implement by regulators, planners, and resource managers.

The six important ecological characteristics evaluated were endangered species habitat, structural diversity of habitat, spatial diversity of habitat, open space habitat, linear contiguity of habitat and adjacent habitats. The underlying goal of this ecological functional assessment technique is to evaluate the capacity of a habitat to perform a particular ecological function, such as provision of foraging or breeding habitat for birds or retention of suspended particulate matter. The goal of the impact assessment is to evaluate how a given activity has altered an ecosystem's capability to perform those functions. Impact assessment is integral to the U.S. Army Corps of Engineers regulatory program under Section 404 of the Clean Water Act of the United States. If the USACE used this Rapid Impact Assessment Method to assess the impacts of projects permitted under Section 404 it would be easy to determine if mitigation to the SBWSMB was a desirable alternative for the permittee.

Six criteria were used in evaluating existing habitat of a wetland to perform major functions to a given activity at the project site (Stein and Ambrose 1998) and given a pre- and post-project rating of A, B, C, D, or E for each evaluation criterion, with A representing site conditions similar to a reference standard and E representing the most degraded condition. The reference standards were based on conditions typically found at local unimpacted sites. Pre-project ratings were based on aerial photographs, site visits, site descriptions and biological assessments. Post project rating was based on the assumption of the result obtained, when a given activity occurred, by best professional judgment of simple indices and current site conditions. For each criterion, the pre-project ratings were compared to the post-project rating to obtain an *impact score*, which reflected the impacts of the project on that criterion. This score was obtained by counting the change in the number of indicator levels after the project was completed. Impact scores could range from negative 4 for most severe degradation to positive 4 for the most extreme enhancement. Impact scores of zero reflected site conditions that were the same following implementation of the permitted activity as they were prior to the project being done. Although a rating of A represents a higher functional level than a rating of B, the significance of this difference may be difficult to establish. To address this question of resolution, the -3 and -4 columns were combined into a *Substantial Adverse Impact* column, the -2 and -1 columns into an *Adverse Impact* column and 0 into a *Minimal Impact* column. The +1 and +2 columns are grouped into *Enhancement* column, and +3 and +4 columns into *Substantial Enhancement* column.

This example is the impact evaluation, for a 404 permit of a project, for construction of a four-lane road across a creek and installation of two 3-m by 4.3-m concrete box culverts within the creek impacting 0.6 ha of waters of the United States. Prior to construction of the road crossing, the creek consisted of well-developed riparian habitat, surrounding freshwater marsh, supported by run off from an upland source. Once installed, the culverts provided only 0.3 to 0.6 vertical clearances between the streambed and the bottom of the bridge, eliminating most riparian

vegetation from the site. The habitat that was eliminated was suitable for the federally endangered King Rail (*Rallus elegans*) and Decurrent False Aster (*Boltonia decurrens*).

EXAMPLE

	Pre Project	Post Project	Impact
Criterion	Rank	Rank	Score
Endangered species habitat	C	E	-2
Structural diversity of habitats	A	D	-3
Spatial diversity of habitats	A	E	-4
Open space habitat	A	E	-4
Adjacent habitats	B	B	0
Linear contiguity of Habitats	A	E	-4

SILVER BANKS WETLAND AND STREAM MITIGATION BANK (SBWSMB)

The following evaluation is the SBWSMB site using the Rapid Impact Assessment Method (RIAM). Current conditions (Pre Project Rank) were based on aerial photographs, site visits and biological assessment and the Post Project Rating was based on the assumption of the results obtained when a given activity occurred, by best professional judgment.

SILVER BANKS WETLAND AND STREAM MITIGATION BANK

FORESTED, RIPARIAN AND EMERGENT WETLANDS

	Pre-Project Rank	Post-Project Rank	Impact Score	
Criterion				
Endangered species habitat	E	D	+1	ENHANCEMENT
Structural diversity of habitats	D	A	+3	SUBSTANTIAL ENHANCEMENT
Spatial diversity of habitats	D	A	+3	SUBSTANTIAL ENHANCEMENT
Open space habitat	D	A	+3	SUBSTANTIAL ENHANCEMENT
Adjacent habitats	D	B	+2	ENHANCEMENT
Linear contiguity of habitat	D	B	+2	ENHANCEMENT

INDICATOR LEVELS FOR EACH EVALUATION CRITERION

Criterion: Endangered Species Habitat

- A: At least one endangered species observed or known to use the area for breeding.
- B: Multiple endangered species observed or known to use/forage in area.
- C: Suitable habitat type for multiple endangered species OR one endangered species observed or known to use area.
- D: Suitable habitat type for one endangered species, but no endangered species observed or currently known to use area.
- E: No endangered species habitat.

Criterion: Structural Diversity of Habitats

- A: Exemplary structural diversity in all vegetated areas. Riparian areas composed of three distinct strata: ground and shrub cover, understory, and canopy. Dense stands of mature willow, silver maple, green ash, oaks, and/or cottonwood, interspersed with understory and herbaceous shrubs. Little to no exotic plant species present.
- B: Two distinct strata in all vegetated areas. Dominated by wetland-type understory interspersed with herbaceous shrubs. May include interspersed, isolated willows, cottonwoods, and etc. OR Grasses and shrubs with patches of structurally diverse riparian vegetation (i.e., three distinct strata). No more than 15% of the vegetated area dominated by exotic plant species.
- C: Grasses and shrubs interspersed with isolated patches of wetland-type understory or interspersed with isolated willows and/or cottonwoods. OR Monoculture of willow and/or cottonwoods with no associated understory. No more than 35% of the vegetated areas dominated by exotic plant species.
- D: Mainly one stratum of grasses and herbaceous shrubs interspersed with common hydrophytic vegetation, such as cattails. Up to 60% coverage with exotic plant species.

E: No existing habitat value (e.g., concrete, developed, fully infested with exotic species or artificially landscaped).

Criterion: Spatial Diversity and Coverage of Habitats

A: Diverse riparian vegetation (e.g., at least 3 different genera of riparian vegetation present) covering between 75% and 100% of the site.

B: Diverse riparian vegetation covering between 30% and 75% of the site (e.g., strips or islands of riparian habitat interspersed in open space).

C: Diverse riparian vegetation covering up to 30% of the site AND/OR greater than 50% of the site covered with a monoculture of riparian vegetation.

D: Monoculture of riparian vegetation covering up to 50% of the site, interspersed among grasses, exotics, or bare ground.

E: No existing riparian vegetation (e.g., covered with upland grasses and scrub, bare ground, infested with exotics).

Criterion: Undeveloped Open Space Habitat

A: 80%-100% open space habitat of any quality

B: 60%-80% open space habitat of any quality

C: 40%-60% open space of any quality

D: 20%-40% open space of any quality

E: 0%-20% open space. Fully urbanized, concrete, developed residential or commercial cut.

Criterion: Adjacent Habitat (Floodplain Land-Use)

A: Completely surrounded by transitional upland habitat.

B: Adjacent to transitional upland habitat on one side and grassland, agriculture, or low quality open space on other side.

C: Adjacent to transitional upland habitat on one side and urban setting on the other side.

D: Surrounded by degraded grassland, agriculture, or other low-quality open space on at least

one side.

E: Completely surrounded by urban setting.

Criterion: Linear Contiguity of Habitats

A: Completely contiguous with comparable habitat on both ends of the site.

B: Contiguous with comparable habitat on one end of the site and adjacent to a different type of open space habitat on the other end of the site.

C: Contiguous with comparable habitat on one end of the site, but adjacent to urban setting on the other end of the site.

D: Isolated within a different type of open space habitat.

E: Completely isolated within an urban setting or completely urbanized site.

PARAMETERS USED TO DEVELOP EVALUATION CRITERIA

Endangered Species Habitat. Species richness and abundance is a common measure of habitat health (Harris). Fauna use of an area is often measured by surveying for presence or indications of presence (*e.g.*, tracks, burrows). However, project files seldom contained comprehensive pre-project species surveys, and surveying for existing species richness was not practical due to time constraints and temporal variability in fauna site occupation. Review of Section 404 permits requires evaluation of the potential for a project to adversely affect a federally listed or proposed endangered or threatened species or their critical habitat. Therefore, information regarding the presence of endangered species or their habitat was readily available in project files. **Most federally listed species are endangered due to loss of specialized habitat that they require; therefore, assessing the presence of endangered species or their habitat can provide a useful indicator of the demise of regionally significant ecosystem (Eng. 1984). In addition, impacts to endangered species habitat may indicate that similar impacts are occurring to other habitat specialists that use comparable areas.**

Structural Diversity of Habitats. The stratification of vegetation into layers, including shrub cover, understory, and canopy, provides a variety of different habitats. This allows a diversity of organisms representing different trophic levels to coexist in a single site, thereby supporting a more complex and resilient food web (Warner and Hendrix). For example, diverse ground cover provides habitat for many insects that form the base of the food web, allowing higher trophic level organisms to use understory and canopy habitat that may be present (Erman). Gosselink et al. report that structural diversity within a site has been correlated with faunal diversity, especially for birds. Warner reports that the presence of a floristic structure consisting of three strata indicates that appropriate soil, moisture, and topographic conditions exist to support a “healthy” riparian system. Structural diversity of the vegetated portions of the project site was used as surrogate for general habitat suitability for an assortment of common species. Conversely, exotic species such as *Arundo donax* (Hickman) and *Tamarix* spp. have minimal habitat value and prohibit natural vegetation from establishing on a site (Meents et al.). **Therefore, presence of exotics was assumed to provide limited habitat value for both the structural and spatial diversity criteria. Because riparian habitats are typically patchy (Faber and Holland), the ratings for this criterion were based on only the vegetated portions of each site.**

Spatial Diversity and Coverage of Habitats. Riparian habitats are typically patchy, with an interspersed of different ecotones (Faber and Holland). This interspersed allows the activities of animals in dry sites to be more closely coupled to those in wet sites. A mosaic of habitat types provides a richer, more continuous food source for mobile fauna than that of a homogeneous habitat. For example, Doyle found a strong correlation between the extent of herbaceous and deciduous shrub cover in riparian habitats and the abundance and diversity of small mammals. Habitat mosaics also allow animals to fulfill several life functions at a single site (*e.g.*, foraging, escape, reproduction) (Warner and Hendrix, Gosselink et al.). Alpha diversity (diversity within a site) has been correlated to the ability of a patch to support a complex food web and allow interior

species, with specific habitat requirements, to thrive in the face of competition from generalist (Harris, Klopatek). **Assessment of changes to the spatial diversity of a project site provided information about impacts to a site's capability to support a variety of different faunal species.**

Undeveloped Open Space Habitat. The structure of a landscape mosaic influences the ability of organisms to move between discontinuous habitat patches (Wiens et al.). Movement may be more difficult through certain types of landscape, thus limiting accessibility to neighboring patches. Urban land uses, such as roads, housing or commercial development, act as barriers to movement and decrease the overall regional availability of habitat (Klopatek, Harris). **Therefore, project sites that contain appreciable open space habitat can provide areas for performance of life functions may be present regardless of the site's spatial or structural diversity. In addition, the portion of a project site that remains open space habitat can provide a metric for the conversion of natural landscape to urban landscape.**

Adjacent Habitat (Floodplain Land-Use). The ecological value of riparian habitats depends on their integration as units within the surrounding landscape (Gosselink et al.). Many organisms have complex life histories in which different stages required distinct habitats within a regional landscape to meet their life requirements (Harris). Therefore, continuity between riparian and upland habitat increases use by fauna and provides safe passage between riparian areas and adjacent upland (Gosselink et al.). Furthermore, the greater the edge area between riparian habitat and developed areas, the greater the potential negative impact from adjacent upland land-use (Warner and Hendrix). Additionally, many riparian plants require adjacent uplands as a floodplain for establishment of their propagules during flooding events (Scott et al). These floodplains also provide refuge for fauna during flooding (Gosselink et al.). **Therefore, changes to adjacent land-use are an important consideration for impacts to the quality of riparian habitat.**

Linear Contiguity of Habitats. Fragmentation and habitat loss are dominant causes of the decrease in biotic diversity of wetland species (Harris). Theories of island biogeography assert that disjunct patches connected by strips of protected habitat are preferable to isolated patches, and these corridors facilitate movement between patches (Diamond, Noss). This theory has been supported by the observation that many animals have a home range that exceeds the size of an individual habitat patch and require a means to move unmolested from one habitat patch to another. Without a system of travel corridors that allows these animals passage from one refuge to another, they will probably not occur in future landscapes (Harris). Even if partially disturbed, riparian corridors are vital to the successful migration of neotropical birds and other organisms (Croonquist and Brooks). In addition, habitat connectivity helps small populations (such as endangered species) maintain demographic and genetic integrity in the face of the isolation caused by habitat fragmentation (Frankel and Soule). Changes to linear contiguity affect not only corridors but also contribute to overall habitat fragmentation and decreases in patch size. This can be detrimental for resident as well as migrant species (Harris). **Therefore, impacts to linear contiguity are key parameters when assessing the impacts of permitted projects.**

LITERATURE CITED

Stein, E.D. and R.F. Ambrose. 1998, A Rapid Impact Assessment Method for Use In A
Regulatory Context. *Wetlands* 18:379-392

LITERATURE CITED BY STEIN AND AMBROSE, 1998 FOR CRITERIA USED TO ASSESS IMPACTS FOR SECTION 404 PERMITTED PROJECTS

Croonquist, M.J. and R.P. Brooks. 1991. Use of avian and mammalian guilds as indicators of cumulative impacts in riparian wetland areas. *Environmental Management* 15:701-714.

Diamond, J.M. 1975. The island dilemma: lessons of modern biogeographic studies for the design of nature reserves. *Biological Conservation* 7:129-146.

Doyle, A.T. 1990. Use of riparian and upland habitats by small mammals. *Journal of Mammology* 71:14-23.

Eng, L.L 1984. Rare, threatened and endangered invertebrates in California riparian systems. p 915-920. *In* R.E. Warner and K.M. Hendrix (eds.) *California Riparian Systems; Ecology, Conservation, and Productive Management*, University of California Press, Berkeley, CA, USA.

Erman, M. 1984. The use of riparian systems by aquatic insects. p. 177-183. *In* R.E. Warner and K.M. Hendrix (eds.) *California Riparian Systems; Ecology, Conservation, and Productive Management*, University of California Press, Berkeley, CA USA.

Faber, P.M. and R.F. Holland. 1988. *Common Riparian Plants of California*, Pickleweed Press, Mill Valley, CA, USA.

Frankel, O.J. and M.E. Soule. 1981. *Conservation and Evolution*. Cambridge University Press, Cambridge, MA, USA.

Gosselink, J.G., M.M Brinson, L.C. Lee, and G.T. Auble, 1990b. Human activities and ecological processes in bottomland hardwood ecosystems: the report of the Ecosystem Workgroup. p. 549-598. *In* J.G. Gosselink (ed.) *Ecological Processes and Cumulative Impacts: Illustrated by Bottomland Hardwood Wetland Ecosystems*. Lewis Publishers, Chelsea, MI, USA.

Gosselink, J.G., G.P. Shaffer, L.C. Lee, D.M. Burdick, D.L. Childers, N.C. Leibowitz, S.C. Hamilton, R. Boumans, D. Cushman, S. Fields, M. Koch, and J.M. Visser. 1990c. Landscape conservation in a forested wetland watershed. *BioScience* 40:588-600.

Harris, L.D. 1984. *The Fragmented Forest; Application of Island Biogeography Principles to Preservation of Biotic Diversity*. University of Chicago Press, Chicago, IL, USA.

Klopatek, J.M. 1988. Some thoughts on using a landscape framework to address cumulative impacts on wetland food chain support. *Environmental Management* 12:703-711.

Meents, J.K., B.W. Anderson, R.D. Ohmart. 1984. Sensitivity of riparian birds to habitat loss. p. 619-626. *In* R.E. Warner and K.M. Hendrix (eds.) *California Riparian Systems; Ecology, Conservation, and Productive Management*, University of California Press, Berkeley, CA, USA.

Noss, R.F. 1987. Corridors in real landscapes: a reply to simberloff and cox. *Conservation Biology* 1:159-164.

Scott, M.L., M.A. Wondzell, and G.T. Auble. 1993. Hydrograph characteristics relevant to the establishment and growth of western riparian vegetation. p. 237-246. *In* H.J. Morel-Seytoux (eds.) *Proceeding of the Thirteenth Annual American Geophysical Union Hydrology Days*, Hydrology Days Publication, Atherton, CA, USA.

Warner, R.E. 1984. Structural, floristic, and condition inventory of Central Valley riparian systems. p.347-356. *In* R.E. Warner and K.M. Hendrix (eds.) *California Riparian Systems; Ecology, Conservation, and Productive Management*. University of California Press, Berkeley, CA, USA.

Wiens, J.A., N.C. Stenseth, B. Van Horne, and R.A. Ims. 1993. Ecological mechanisms and landscape ecology. *Oikos* 66:369-380.

SITE HYDROLOGY

The entire Bank Site is connected to all hydrologic events associated with Silver Creek within Madison County, Illinois. Hydrologic events on Silver Creek regularly flood this area. Soil properties, observations of flooding, drainage patterns, soil saturation and hydrophytic plant species all indicate that the area has the required hydrology to support a wetland community.

Though the Bank Site has hydrologic conditions available, the current management is designed to increase agricultural production. Existing ditches utilized during agricultural production will be either removed or abandoned in order to assist in restoring hydrology within the Bank Site (reference Figure 14). The Bank Site has a minimum of 4 areas utilizing ditches to remove water in an expedited manner to promote agricultural yields. In addition, during farming operations, minor flowage channels are utilized throughout the property to funnel water to these water removal ditches. The farming practices over time have leveled the agricultural acres and removed historic meander scars of historic channels. Adjacent properties provide information on the size and scope of these historic channel meanders and the Mitigation Plan will identify features to re-establish ephemeral oxbow meanders with associated natural high bank topography.

SECTION E - Determination of Credits

One of the goals of the WFI-B Umbrella Mitigation Banking Instrument is to restore ecological integrity to Bank Sites using designs that re-establish natural / historic functions to former wetlands and restore / re-establish original physical attributes to accommodate watershed effects. For the Silver Banks site specifically, this objective is informed by historical aerials, topographical maps and a historical atlas which identify the majority of the site as forested over the past 150 years. Silver Creek actually ran through the western part of the site up until the mid-1930's by all accounts; accordingly, the Bank Site Mitigation Plan proposes re-establishing creek meander scars in this portion of the Bank Site. Thus, the Sponsor proposes utilizing the process of re-establishment through positively manipulating the affected soils, vegetation and hydrology on the Bank Site. These actions will improve the physical, chemical and biological traits of the Bank Site. This site has experienced greater than 80 years of soil elevations being flattened or leveled; elimination of native vegetation (forested and wetland species) diversity; and reductions to or elimination of duration of hydrology through ditching and channelizing Silver Creek for the sole purpose of manipulating the site for improved agricultural yields. Our plan is to re-establish this site into a functioning bottomland hardwood mast producing forest with supporting habitats such as emergent and riparian corridors to increase diversity at the Bank Site.

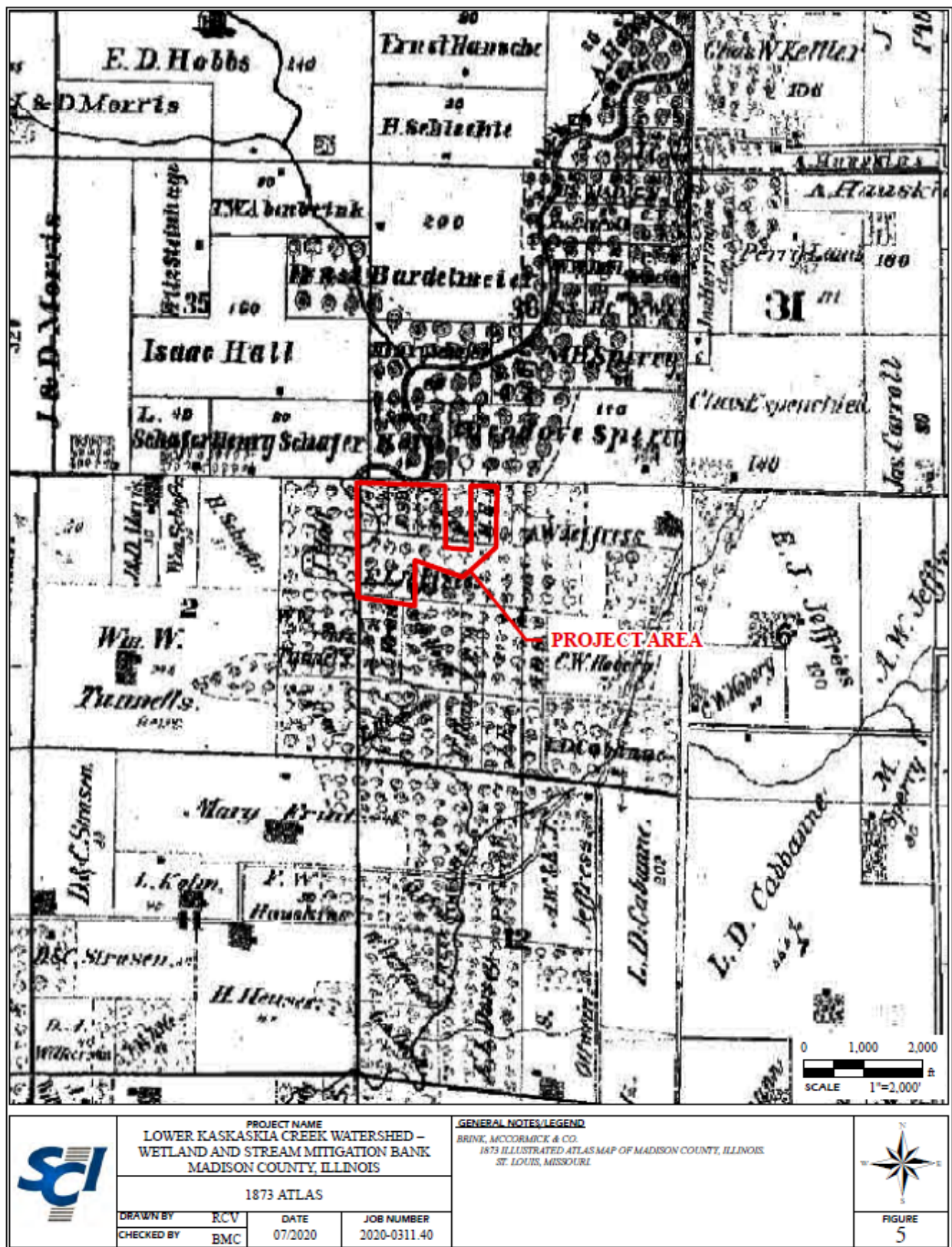
The following is a sequential history of major milestones that changed the site from a forested bottomland hardwood to a production agricultural field:

- In the Historic Atlas figure of 1873, Silver Creek was located on the western side of the existing Mitigation Bank Site with a substantial riparian corridor and forested component;
- In the topography map of 1932, Silver Creek is still located along the western boundary of the proposed Bank Site; the site is still dominated by a forested component;
- By 1945, per the aerial photos, Silver Creek was channelized to its existing location now, some 75 years ago;
- Between 1932 and 1945, is the approximate time that agricultural activities start to dominate the land use classification, moving from a predominantly forested land use to an agricultural land use;
- Into the 2000's the property was annually row cropped in what we would describe as the current conditions of the Bank Site;
- However, in the 2009 to 2011 timeframe, some event (likely flooding deposition or agricultural field leveling) had an effect on the western side of Silver Creek at the southern boundary; this is identified as the current PEM;
- This PEM was farmed and drained numerous times from 2010 through current day for agricultural row crops; typically row cropping was dependent on hydrograph for that specific calendar year.

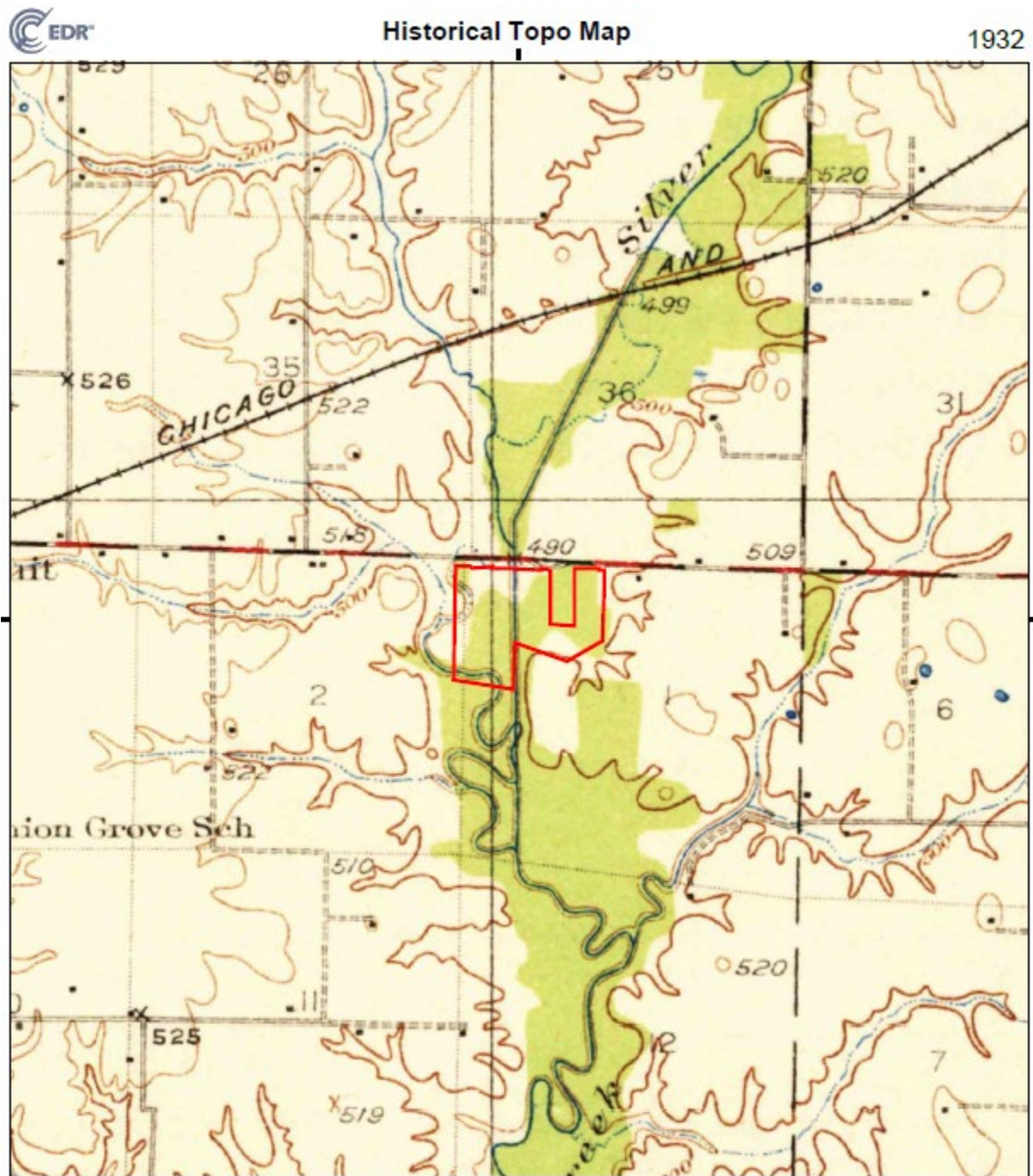
In analyzing this site over its historical changes, the proposed objectives and actions to be taken on this site depict a restoration plan that re-establishes the site to natural/historic functions along Silver Creek rebuilding this former aquatic resource to both new functional acres and an overall higher functioning wetland.

Reference historical aerials, topography maps and an historic atlas overview below (note that project boundary lines are approximate):

Atlas: 1873 (tree drawings indicated forested areas)



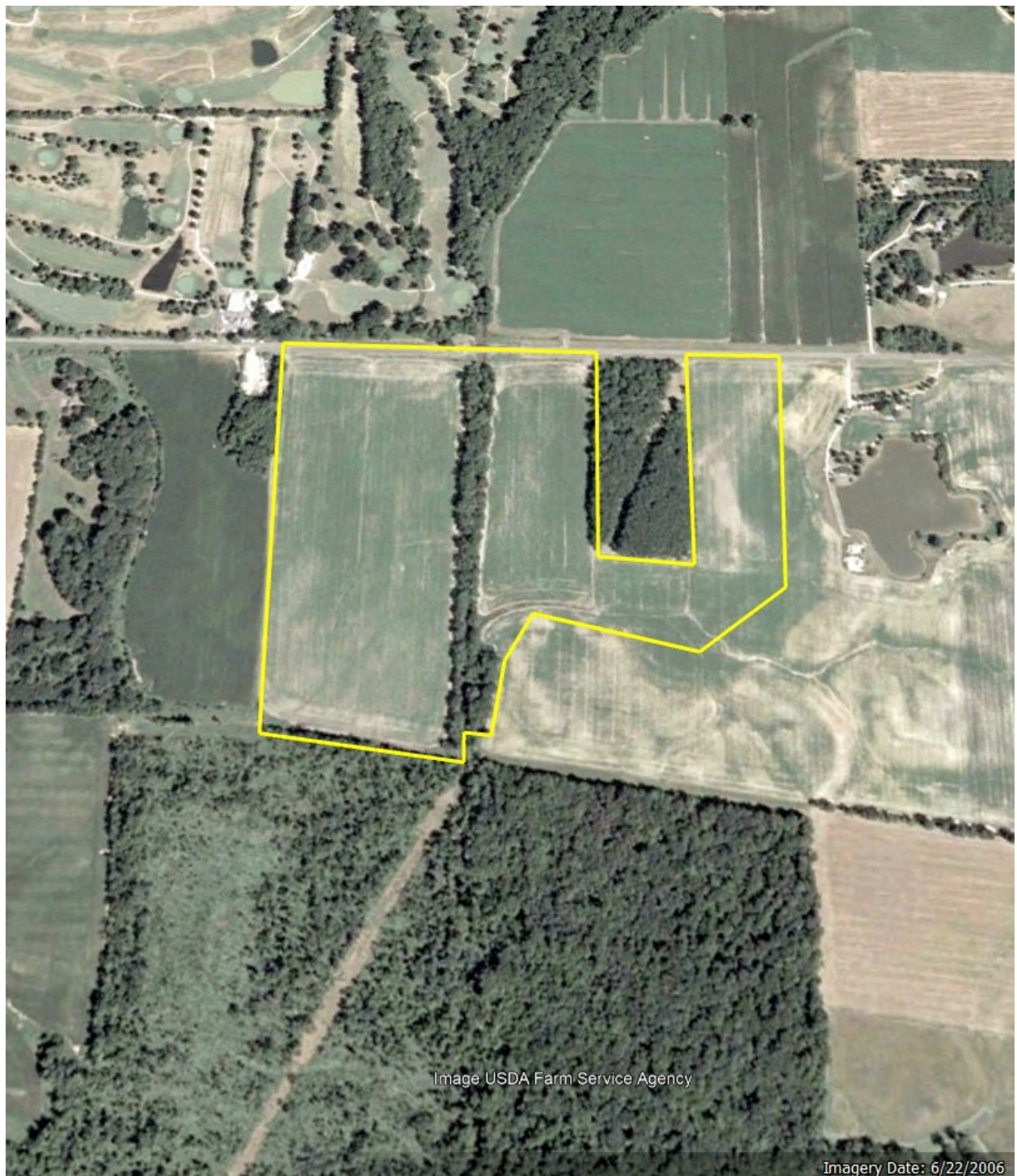
Topo: 1932 (green indicates forested areas)



Aerial: 1945



Aerial: 2006



Aerial: 2009

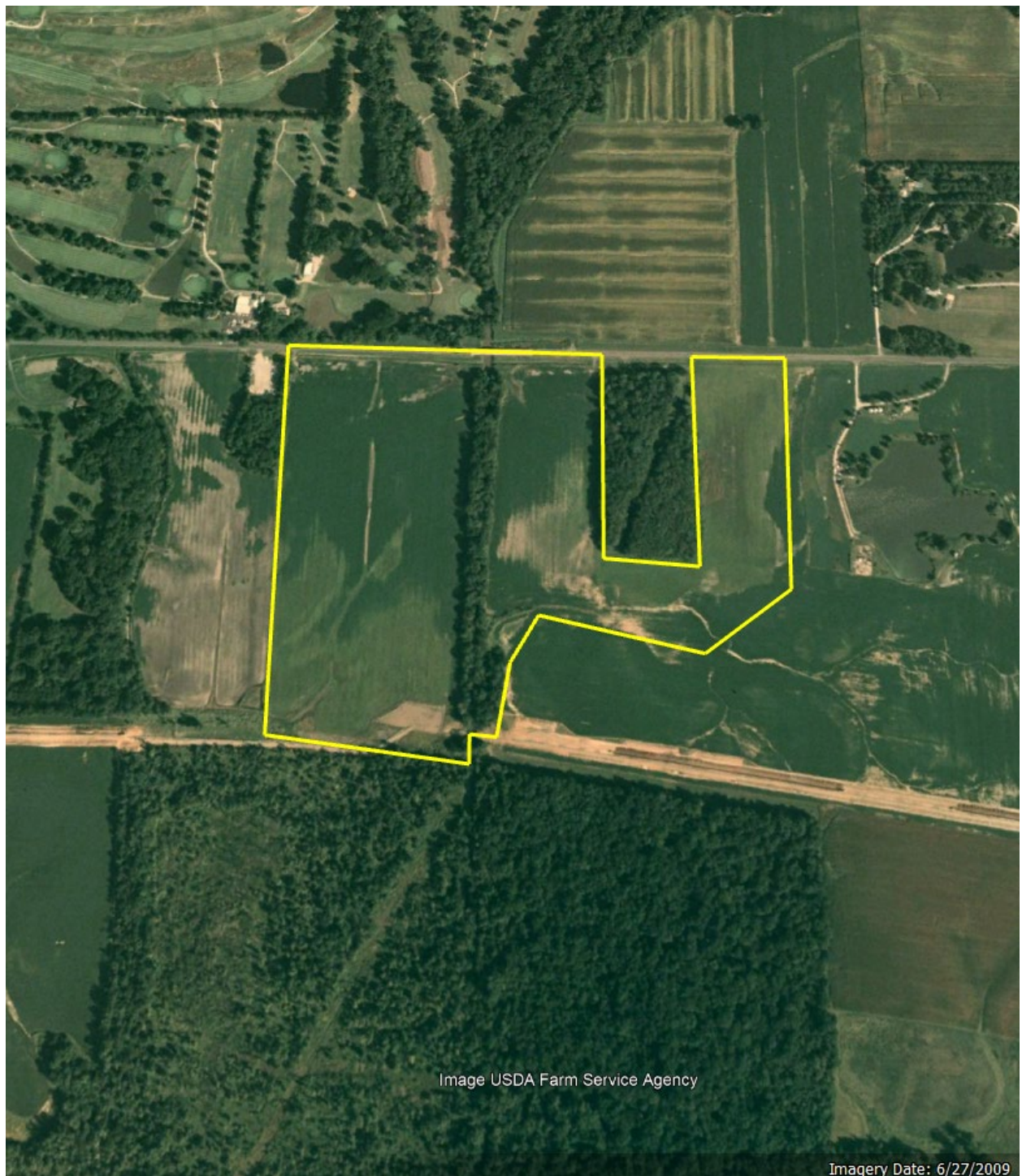
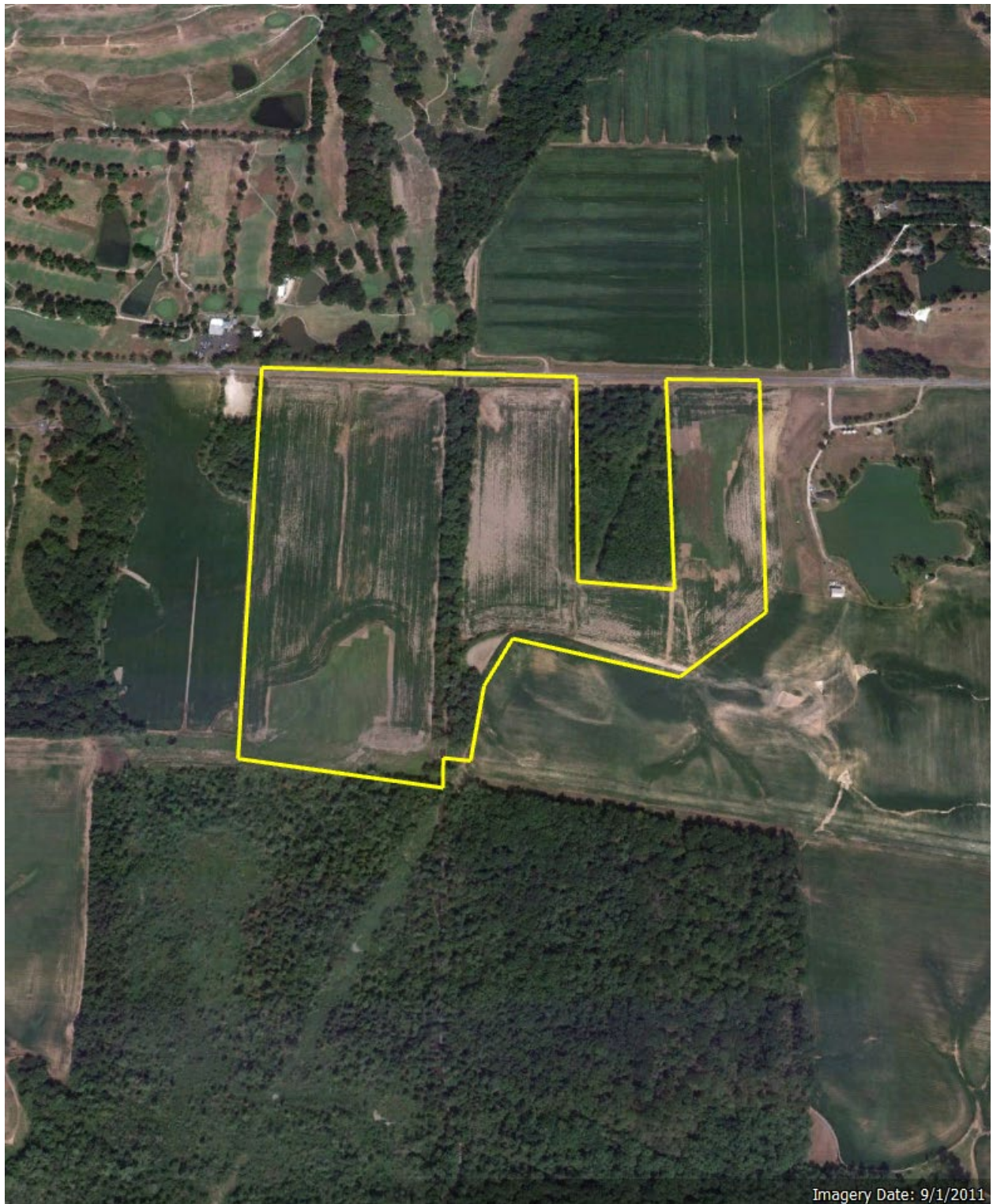


Image USDA Farm Service Agency

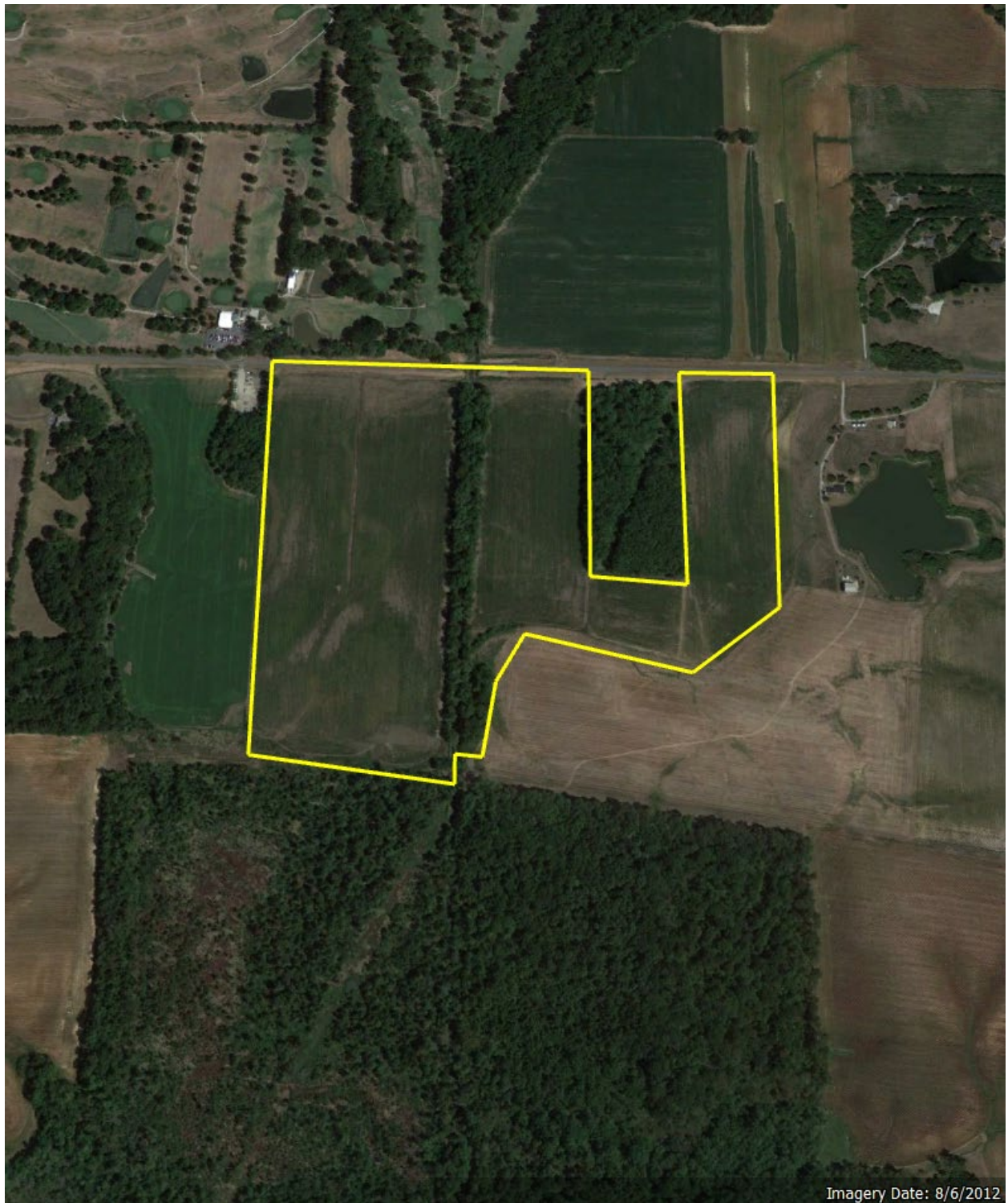
Imagery Date: 6/27/2009

Aerial: 2011



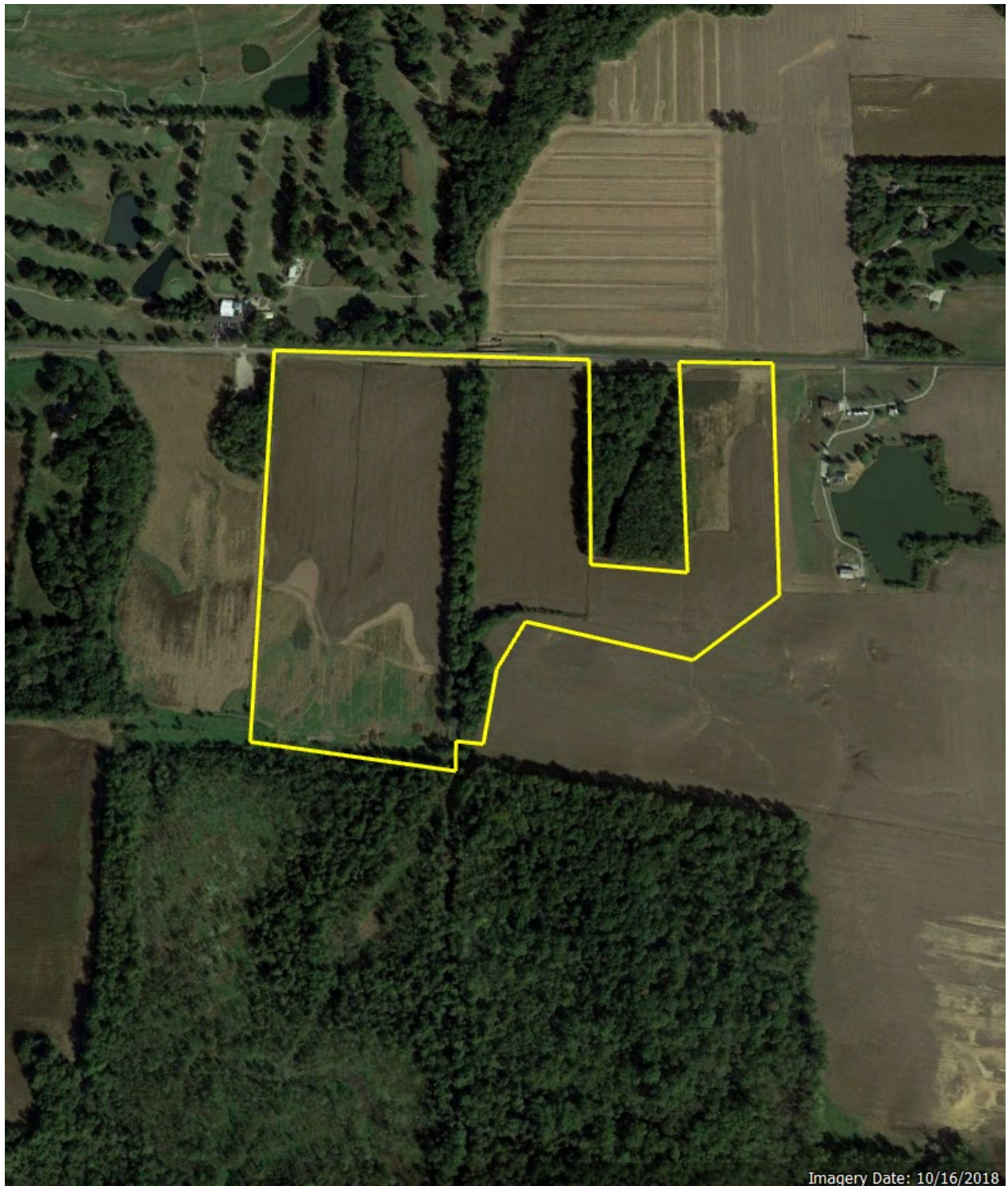
Imagery Date: 9/1/2011

Aerial: 2012



Imagery Date: 8/6/2012

Aerial: 2018



The same methodology will be used to assess both credits and debits. The Sponsor determined that an appropriate functional assessment methodology is impractical to employ, thus acreage will be used as a surrogate for measuring function for the wetland habitats in concert with the Bank Site's Performance Standards. The stream riparian corridor will employ an assessment methodology utilized within the region.

The number of credits (acres/credits) reflect the difference between historic site conditions from 80 plus years ago to conditions with re-establishment actions of the Bank Site.

SBWSMB will have 70.28 (+/-) total acres that equate to 60.99 wetland credits and 9,025 stream credits. Reference Figure 8.

The aquatic resources restored will receive the following credits:

Forested Wetland and Forested Remnant Meander Scar – 45.81 wetland credits via Re-establishment (1:1)

Forested – Hard/Soft Mast Wetland – 12.79 wetland credits via Re-establishment (1:1)

Emergent Wetland – 2.39 wetland credits via Re-establishment (1:1)

Riparian Corridor – 9.29 acres of riparian corridor equate to 9,025 stream credits per Illinois Stream Method via Establishment/Creation and Re-establishment (1:1)

BREAKDOWN OF CREDIT RATIO

FORESTED AND FORESTED - MEANDER SCAR

1:1 acres to credit = 45.81 acres or 45.81 credits

Total 45.81 Credits

Justification: The credit justification is based on the agricultural acreage being removed from row cropping, planting native vegetation at a greater than 51% of the area with bottomland hardwoods and modifications to increase hydrologic conditions at the site. Hydrology will be modified through remnant channel scar re-establishment that provides added elevation thus modifying hydrology as it is associated with forested restoration. Secondly, hydrology will be modified through both installation of ditch checks, remnant meander scars and raised berms that will provide longer inundation and microhabitat on the Bank Site. This planting increases the Floristic Quality Index (FQI) of the acres and reduces forest fragmentation along Silver Creek. When complete, this activity will result in a net gain in aquatic resource area and function.

FORESTED – HARD/SOFT MAST

1:1 acres to credit = 12.79 acres or 12.79 credits

Total 12.79 Credits

Justification: The credit justification is based on the agricultural/PEM acreage being removed from row cropping. The forested – hard/soft mast areas will consist of 12.79 acres converted to forested wetlands and removed from agricultural row cropping and a highly impacted site of reeds canary grass/monotypic invasive. A combination of mowing, chemical applications, increased hydrology, and forested plantings will modify this area through installation of ditch checks and raised berms or mounds that will provide higher quality hard mast trees and soft mast trees habitat on the Bank Site. This planting increases watershed acres for forested habitat while eradicating reeds canary grass from the landscape. Further, this planting will increase the FQI of the Bank Site and provide a successional strategy that will reduce both habitat fragmentation and invasive species along Silver Creek.

Particularly in severe disturbances, rapidly growing invasive species with widely dispersed seed are the most abundant species as is the case in the forested – hard/soft mast planting area (reed canary grass). As with many early successional plants this invasive species (reed canary grass) are intolerant of shade, hence their seedlings do not survive and grow beneath an established canopy; in the absence of disturbance the early successional community does not perpetuate itself. Forested wetlands represent a successional stage leading to a thicket classification of forested wetland. When complete, this activity will result in a net gain in aquatic resource area and function.

EMERGENT

1:1 acres to credit = 2.39 acres or 2.39 credits

Total 2.39 Credits

Justification: The credit justification is based on the agricultural acreage being removed from row cropping. The emergent areas will be converted to 2.39 acres of historic meander scars and removed from agricultural row cropping. The modification of these areas will result in growth of native vegetation species and modified hydrograph in these areas. When complete, this activity will result in a net gain in aquatic resource area and function.

RIPARIAN

1:1 acres to credit = 9.29 acres or 9,025 credits

Total 9,025 Credits

Justification: The credit justification is based on the agricultural acreage being removed from row cropping, re-establishment by the planting of native species at a greater than 51% of the area with bottomland hardwoods, and modifications to increase hydrologic conditions at the site. Hydrology will be modified through both installation of ditch checks, remnant meander scars and raised berms both along and within the riparian corridor that will provide longer inundation and microhabitat on the Bank Site. When complete, this activity will result in a net gain in aquatic resource area and function.

TOTAL CREDITS GENERATED FOR SBWSMB:

Wetland Credits: 60.99

Stream Credits: 9,025

SECTION F – Mitigation Work Plan

Project Description: SBWSMB will lie within a 73.17-acre (+/-) site made up of prior converted cropland. The Bank Site will have a cumulative acreage of 70.28 (+/-) acres of restricted property in perpetuity.

Whereas, under this Banking Instrument, the Sponsor will establish and/or maintain 70.28 (+/-) acres of wetland and stream habitat in accordance with the provisions of this Banking Instrument and the Bank Mitigation Work Plan and shall then maintain the Bank in such condition for 7 years in accordance with the Bank Closure Procedures. The Bank Site shall consist of a total of 70.28 (+/-) acres. This prior converted site will be re-established to Bottomland Hardwoods Forested Wetlands (45.81 acres), Forested Hard/Soft Mast Wetlands (12.79 acres), Emergent Wetlands (2.39 acres), and Riparian Corridor (9.29 acres).

Excluded easement areas (2.89 acres) associated with pipelines and road rights-of-way will have no adverse impacts to the Bank Site. In general, the easement areas will look to maintain the existing hydrology regime on the site, thereby not affecting the hydrology on the easements.

In Appendix 4 there are various construction maps and features for this project.

FORESTED WETLANDS

To prepare for unpredictable flooding the plan calls for a mix of vegetation that can tolerate a wide range of water levels. The proposed plan for improving hydrology across the Bank Site is to re-establish historic meander scars within the tree planting areas of the site. This will be accomplished through minor excavation along an alignment of connected meander scars that will replicate a natural high bank and associated oxbows that will allow less flood tolerant bottomland hardwood species to survive and regenerate on an elevated high bank. The proposed improved hydrology plan for the farmed area is to increase hydroperiod with low meander scar excavations. Secondly, the construction of berms in the forested wetland planting will support less flood-tolerant species' ability to survive and regenerate. The berms will be constructed using a rice levee plow that will till the soil into a mound/berm approximately seven (7) feet wide. The berms will be spaced approximately forty (40) feet apart to allow for flood flowage in and around the forested planting. Other features in managing hydrology may consist of removing agricultural drainage ditches and the construction of rock weirs to manage water depth in emergent areas. Spring and fall rainfall plus annual flooding of Silver Creek will provide soil saturations to support hydrophytic vegetation without mechanical means or intervention by the Sponsor. These actions focus on providing a streamlined approach to reach a climax forest status in a shorter timeframe than the typical 180 years (+) normal successional model. The total forested wetland footprint on the site will be approximately 45.81 acres.

FORESTED HARD/SOFT MAST WETLANDS

The Forested Hard/Soft Mast Wetlands component of the plan will consist of two different areas designed to mimic the typical flood pulse of the site as it relates to elevation in historical low areas around the Bank Site. These areas will be converted to forested hard/soft mast wetlands through eradication of reed canary grass/monotypic invasive via multiple management strategies and planting regimes as identified below and reference NRCS Management Table 1 – Management Practice below Figure 10:

Sequence of management actions and plantings on monotypic reeds canary grass area:

- Construct rice levee berms/mounds within their boundaries on forty (40) foot centers;
- Mowing and Chemical activities – mowing will be completed prior to chemical applications. Mowing reduces height and biomass and nutrients. Chemical following mowing activities depletes rhizome reserves and suppresses grass growth;
- Woody planting – when woody species overtop reeds canary grass, shade slows growth. This woody planting would consist of bottomland hard mast targeted wetland trees (50 per acre) and a soft mast trees (> 200 trees per acre) component to promote a overtop strategy;
- Maintenance and management will consist of chemical in the short term (1-3 years to reduce reed canary grass height), the goal is to establish soft mast species that out competes the reeds canary grass and generate a thicket forested habitat. The thicketed forested habitat will potentially out compete the bottomland hard mast component of the planting regime. Therefore, a maintenance component for hard mast tree targets should be implemented;
- Bottomland Hard Mast Tree maintenance will consist of Timber Stand Improvement activities in years 3-5-7 to targeted on hard mast tree releases within the thicketed timber stand.

This strategy is targeted at providing a forested habitat component that will strive for successional model towards a bottomland hardwood forest. The total forested footprint on the site will be approximately 12.79 acres.

EMERGENT WETLANDS

The Emergent Wetlands component of the plan will consist of a new feature to extend saturation and standing water in historical low areas around the Bank Site. The first feature will be created through improving hydrology across the site; the restoration of historic meander scars within the tree planting areas of the site will generate an emergent wetland feature from the excavation. In the Bank Site there are two historic meanders. The minor excavation along an alignment will generate an emergent wetland feature that provides extended inundation for the Bank Site. The total emergent footprint on the site will be approximately 2.39 acres.

RIPARIAN CORRIDOR

To prepare for unpredictable flooding the plan calls for a mix of vegetation that can tolerate a wide range of water levels. The proposed plan for improving hydrology across the Bank Site is to re-establish the forested area on the Bank Site which includes the riparian corridor. The construction of berms in the riparian forested wetland planting will support less flood-tolerant species' ability to survive and regenerate. The berms will be constructed using a rice levee plow that will till the soil into a mound/berm approximately seven (7) feet wide. The berms will be spaced approximately forty (40) feet apart to allow for flood flowage in and around the forested planting. Spring and fall rainfall plus annual flooding of Silver Creek will provide soil saturations to support hydrophytic vegetation without mechanical means or intervention by the Sponsor. The total riparian corridor footprint on the site will be approximately 9.29 acres.

MITIGATION PLAN

PROPERTY SIZE: 73.17-acres (+/-)

WETLAND MITIGATION BANK: 70.28 - acres (+/-)

EXCLUDED ACRES: 2.89 – acres (+/-)

Bottomland Hardwood Forest – 45.81 – acres (+/-)

Carya illinoensis (Northern Pecan), *Carya aquatica* (Water Hickory), *Quercus bicolor* (Swamp White Oak), *Quercus palustris* (Pin Oak), *Quercus nuttallii* (Nuttall Oak), *Quercus lyrata* (Overcup Oak), *Crataegus viridis* (Green Hawthorne), *Carya laciniosa* (Shellbark Hickory), *Platanus occidentalis* (Sycamore), *Celtis laevigata* (Sugar Berry), *Cephalanthus occidentalis* (Button Bush), *Forestoiera acuminata* (Swamp Privet), *Quercus phellos* (Willow Oak), *Diospyros virginiana* (Persimmon), *Betula nigra* spp. (River Birch), *Taxodium distichum* (Bald Cypress), *Gymnocladus dioica* (Kentucky Coffee)

Forested Hard/Soft Mast Forest Wetland – 12.79 - acres

Quercus lyrata (Overcup Oak), *Quercus phellos* (Willow Oak), *Quercus palustris* (Pin Oak), *Quercus bicolor* (Swamp White Oak), *Carya illinoensis* (Northern Pecan), *Taxodium distichum* (Bald Cypress), *Acer saccharinum* (Silver Maple), *Betula nigra* (River Birch), *Platanus occidentalis* (Sycamore), *Salix nigra* (Willow), *Populus deltoides* (Eastern Cottonwood)

Riparian Bottomland Hardwood Forest – 9.29 - acres

Carya illinoensis (Northern Pecan), *Carya aquatica* (Water Hickory), *Quercus bicolor* (Swamp White Oak), *Quercus palustris* (Pin Oak), *Quercus nuttallii* (Nuttall Oak), *Quercus lyrata* (Overcup Oak), *Carya laciniosa* (Shellbark Hickory), *Platanus occidentalis* (Sycamore), *Celtis laevigata* (Sugar Berry), *Cephalanthus occidentalis* (Button Bush), *Forestoiera acuminata* (Swamp Privet), *Quercus phellos* (Willow Oak), *Diospyros virginiana* (Persimmon), *Betula nigra* spp. (River Birch), *Taxodium distichum* (Bald Cypress), *Gymnocladus dioica* (Kentucky Coffee)

Emergent Wetland – 2.39 - acres

Botanical Name	Common Name	PLS Oz/Acre
Permanent Grasses/Sedges		
<i>Bolboschoenus fluviatilis</i>	River Bulrush	1.00
<i>Carex comosa</i>	Bristly Sedge	2.50
<i>Carex lacustris</i>	Common Lake Sedge	0.50
<i>Carex lurida</i>	Bottlebrush Sedge	4.00
<i>Carex stricta</i>	Common Tussock Sedge	1.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge	2.00
<i>Eleocharis palustris</i>	Great Spike Rush	1.00
<i>Juncus effusus</i>	Common Rush	1.00
<i>Leersia oryzoides</i>	Rice Cut Grass	3.00
<i>Schoenoplectus acutus</i>	Hard-Stemmed Bulrush	2.50
<i>Schoenoplectus pungens</i>	Chairmaker's Rush	1.50
<i>Schoenoplectus tabernaemontani</i>	Great Bulrush	6.00
	Total	26.00
Temporary Cover		
<i>Avena sativa</i>	Common Oat	512.00
	Total	512.00
Forbs/Shrubs		
<i>Acorus americanus</i>	Sweet Flag	1.00
<i>Alisma subcordatum</i>	Common Water Plantain	2.00
<i>Asclepias incarnata</i>	Swamp Milkweed	1.00
<i>Boehmeria cylindrica</i>	False Nettle	1.00
<i>Cephalanthus occidentalis</i>	Buttonbush	6.00
<i>Decodon verticillatus</i>	Swamp Loosestrife	0.50
<i>Eutrochium maculatum</i>	Spotted Joe-Pye Weed	0.50
<i>Hibiscus spp.</i>	Rose Mallow Species	4.00
<i>Iris virginica v. shrevei</i>	Blue Flag	6.00
<i>Lobelia cardinalis</i>	Cardinal Flower	0.25
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.25
<i>Lycopus americanus</i>	Common Water Horehound	1.00
<i>Mimulus ringens</i>	Monkey Flower	1.00
<i>Peltandra virginica</i>	Arrow Arum	16.00
<i>Penthorum sedoides</i>	Ditch Stonecrop	0.50
<i>Persicaria spp.</i>	Pinkweed Species	2.00
<i>Pontederia cordata</i>	Pickereel Weed	4.00
<i>Sagittaria latifolia</i>	Common Arrowhead	2.00
<i>Sparganium eurycarpum</i>	Common Bur Reed	6.00
<i>Verbena hastata</i>	Blue Vervain	1.00
	Total	56.00

Figure 8: Mitigation Plan Map

Silver Banks Habitat Plan

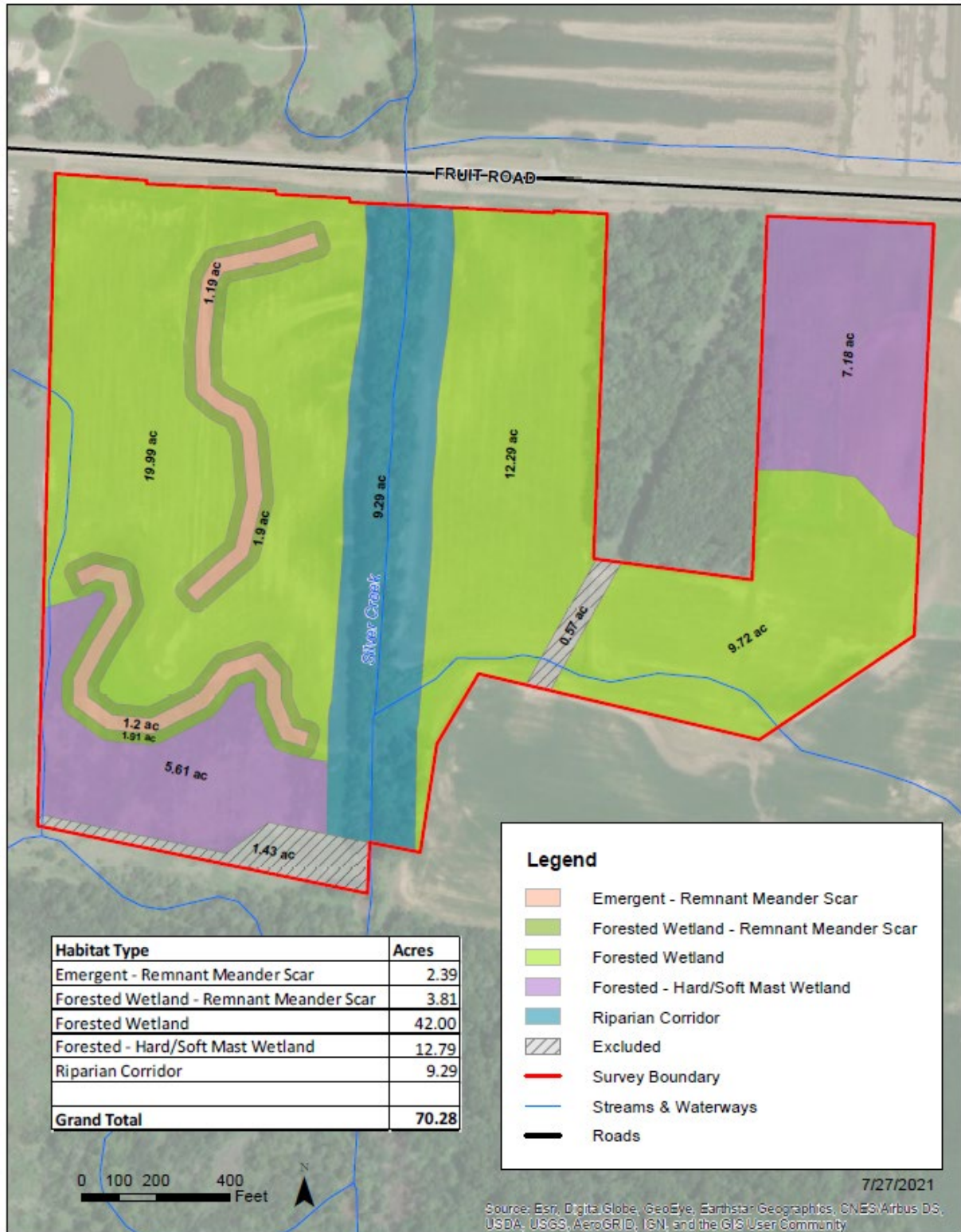


Figure 9: Forested Wetland Area

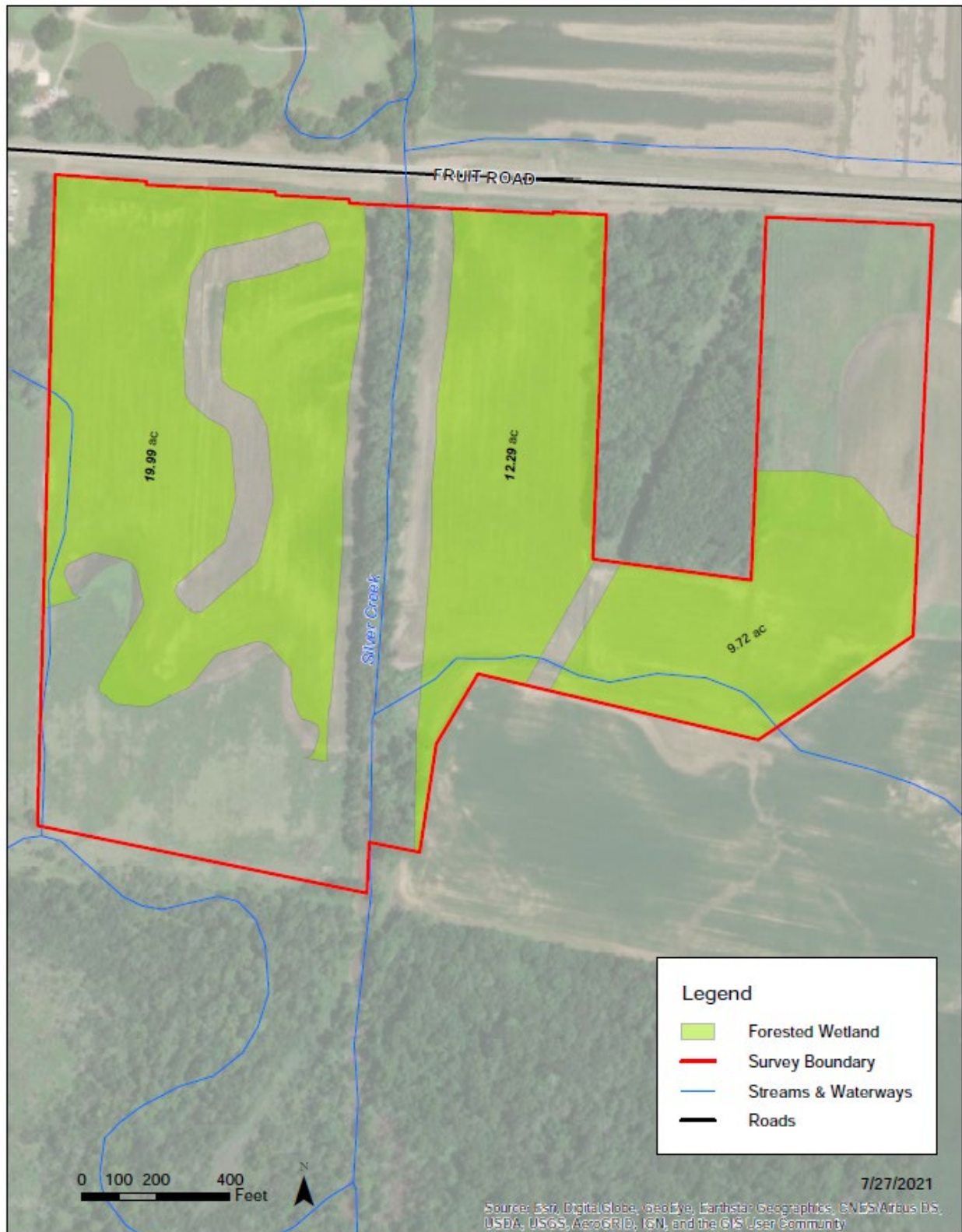


Figure 10: Forested – Hard/Soft Mast Wetland Area

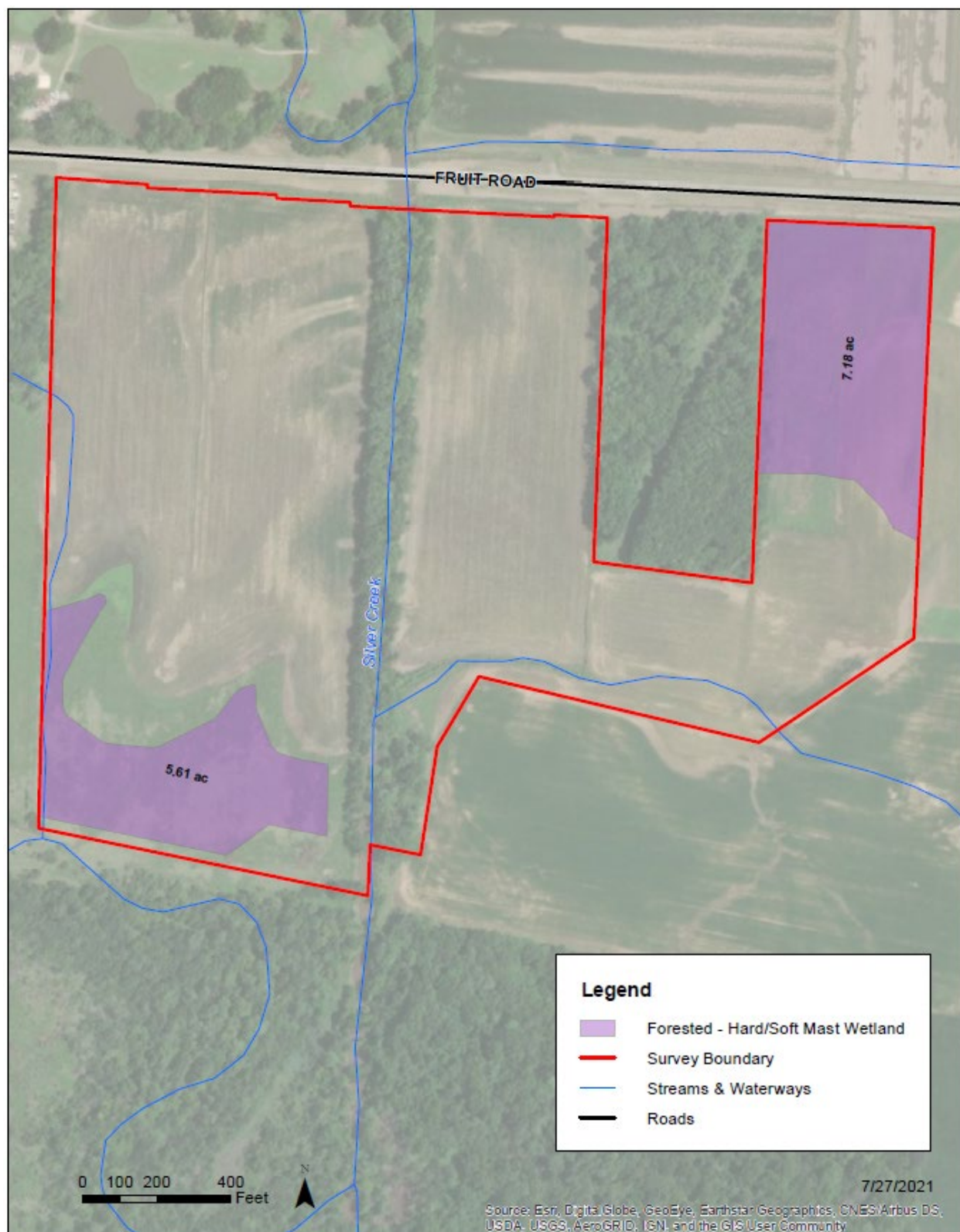


TABLE #1 – Management Practices					
Treatment	Effect	Should use	Could use	Should not use	Comments
	- Removes biomass and litter; may kill seeds on soil - Reduces available nitrogen over multiple burns - Releases seed bank of desirable/undesirable species - Stimulates dormant buds of RCG; rhizomes re-sprout - Can jumpstart growing season by warming soil	- To reduce RCG in late spring after RCG is active but before natives break dormancy - To force RCG to re-sprout and use reserves from rhizomes - Use in combination with other practices	- To remove thatch prior to a planting/seeding of desirable natives - To remove thatch and prompt early spring sprouting of RCG, which can then be treated with glyphosate or sethoxydim	- In fall to control RCG in short term; RCG benefits from high light conditions after fire - In early spring in mixed vegetation sites; RCG growth is encouraged by increased light, unless you plan to combine with another treatment - On organic sites if very dry	- Jumpstart occurs if burn done in fall or spring - No research on critical density of RCG that can be controlled by burning alone - Early burns will stimulate RCG; timing and frequency critical
	- Removes rhizomes and seed bank - Removes sediment and nutrients - Alters hydrology	- Where material can be pushed to fill drainage ditches or where it can be moved off site; where deeper water is desired - During winter, to reduce soil compaction - During summer when wet sites are dry	To remove alluvium over native wetland soils	- If there is no soil disposal site. - If compaction is an issue - If you don't want a deep-water marsh. - If there is a high-quality remnant plant community in area	- May cause soil compaction - RCG will rapidly re-colonize disposed soil; use caution when selecting a disposal site - Additional treatments will be necessary on drier sites - Seed with natives afterwards, except in the deepest water, or if a rich native seed bank exists - May require special permits
	- When woody species overtop RCG, shade slows its growth - May change plant community - Adds structure to habitat	Where herbaceous vegetation cannot gain a competitive advantage	- Where landscape is receiving RCG seed inputs - Where inflows can't be diverted - To connect existing woody patches	Where management goal is to maintain grassland habitat	- Apply herbicide/mulch around newly planted trees/shrubs - Conifers may be the most effective at shading RCG - Need to control RCG for 3-5 years to allow trees to establish
	- Reduces biomass in spring - Causes disturbance - Allows seedling establishment (good/bad) - Adds nutrients to system	- In highly disturbed sites to reduce RCG biomass - In fall, after a prescribed burn (RCG regrowth more palatable)	- To reduce biomass and height before herbicide treatment - To reduce seed production - Lightly, to sustain diversity	- During wet conditions in spring where trampling and compaction can damage a site - If there is a high-quality remnant plant community in area	- Effective at suppression only - Use proper stocking rates to prevent overgrazing of desirable species
	- Removes biomass and nutrients - Reduces RCG height - Similar to fire (promotes seed establishment, stimulates plant growth by increasing light)	- To reduce biomass before herbicide treatment - To remove P from site - Before RCG seed heads appear - To prepare for herbicide application	- As a substitute for fire (though not quite the same) - To change fire behavior by reducing fuel height	- Where tussocks and microtopography will be damaged - When grassland bird nesting habitat will be impacted. - If site is too wet for equipment	- On high quality sites, avoid use during growing season - Mow before RCG seed heads appear (boot to late boot stage)* to prevent seed production
	- Reduces RCG height - Increases light—promotes competition - Depletes rhizome reserves - Creates dry biomass for fire	- To prepare for herbicide application - To stress RCG - When harvesting equipment is unavailable	To change fire behavior by reducing fuel height	- Where tussocks and microtopography will be damaged - When grassland bird nesting habitat will be impacted. - If site is too wet for mower	- Mow before RCG seed heads appear (boot to late boot stage)* to prevent seed production - May impede establishment of natives, due to remaining mat of vegetation

Herbicide: broad spectrum (i.e. glyphosate, imazapyr) 	- Reduces plant height - Increases light—promotes competition - Depletes rhizome reserves - Creates dry biomass for fire	- On sites without native plants prior to reseeding. - To dry out RCG in order to burn - In late summer for maximum translocation to roots	- For treating clones within areas of natives - As an initial herbicide treatment on monotypic stands of RCG - If RCG height precludes use of other herbicides - In early spring or late fall, when RCG is live, but other plants dormant - On wet sites, with a surfactant approved for aquatic use	- On sites with desirable native plants actively growing - Soon after mowing/burning - When amphibians are on site (unless using Rodeo + a surfactant approved for aquatic use, as Roundup formulation can have negative effects on amphibians)	- Should be part of a continued control strategy, where natives are later introduced - Multiple treatments may be necessary - May need a permit for application on wetlands - Rhizome translocation less effective if temperature >70°F - Other treatments may influence herbicide effectiveness - Add ammonium sulfate to tank mix if water is hard
Herbicide: grass-specific (i.e. sethoxydim or fluzafop)	- Suppresses growth of most grasses - Releases native plant community (except for grasses)	- On sites with desirable, native, non-grass species - When active growth resumes after burning/mowing, when RCG is 6-12" tall	Following other herbicide treatments to control residual or re-emerging RCG	- For immediate eradication - If standing water is present - On sites with desirable grasses - When RCG is >12" tall	- Apply with surfactant/crop oil > one treatment required - Effectiveness of sethoxydim is reduced by UV light - Add a water conditioner or acidifier if water is hard
Tillage 	- Exposes rhizomes to light; might activate dormant buds - Fragments rhizomes and may increase RCG density - Can contribute to erosion	- In combination with herbicide treatment (makes dormant rhizome buds respond to chemical control) - On monotypic, damaged sites to prepare for crop production	- To prepare a seedbed - To reduce RCG seed bank	- Where microtopography must be maintained. - Where RCG is mixed with desirable natives - On wet sites, where soil could become compacted, or equipment can get stuck - If offsite impacts are possible (sedimentation/erosion)	- For most effective control, combine with another treatment - Depth should be 4-6" to target RCG rhizomes - Till in spring or early summer - Repeated tillage can be effective if conducted every four weeks.
Altering hydrology 	- Prolongs/increases water levels - Prevents RCG seed germination - Kills RCG rhizomes	- If new water depth is > 12" - If high water can be maintained through the growing season.	To promote the growth of emergent plants such as native cattail, burr-reed and bulrush species	- If new water depth is < 12" or site seasonally dries out - If other invasives are nearby (<i>Typha x glauca</i>, <i>Phragmites</i>)	- High water can promote growth of other invasives (<i>Typha x glauca</i>, <i>Phragmites</i>) if present in the area - May require special permits
Mulching / solarization with plastic or fabric 	- Non-selective treatment; shades out all plants - Kills adult plants - Kills RCG rhizomes	- For small, isolated RCG clones - For 1-3 consecutive years - On patches with high edge:area ratio, to facilitate recolonization by soil fauna	To facilitate seeding or planting of natives	- Where desirable natives are mixed with RCG - For abatement on large sites - If native species are present - In areas with microtopography	- Resurgence from seedbank may occur when tarping removed - May have adverse effects on soil microorganisms - May alter soil chemistry - Not always an effective treatment

RCG= Reed canarygrass * For a description of growth stages see the bulletin, *Growth and Staging of Wheat, Barley and Wild Oat* at <http://plantsci.missouri.edu/cropsys/growth.html>

Figure 11– Meander Scar Area

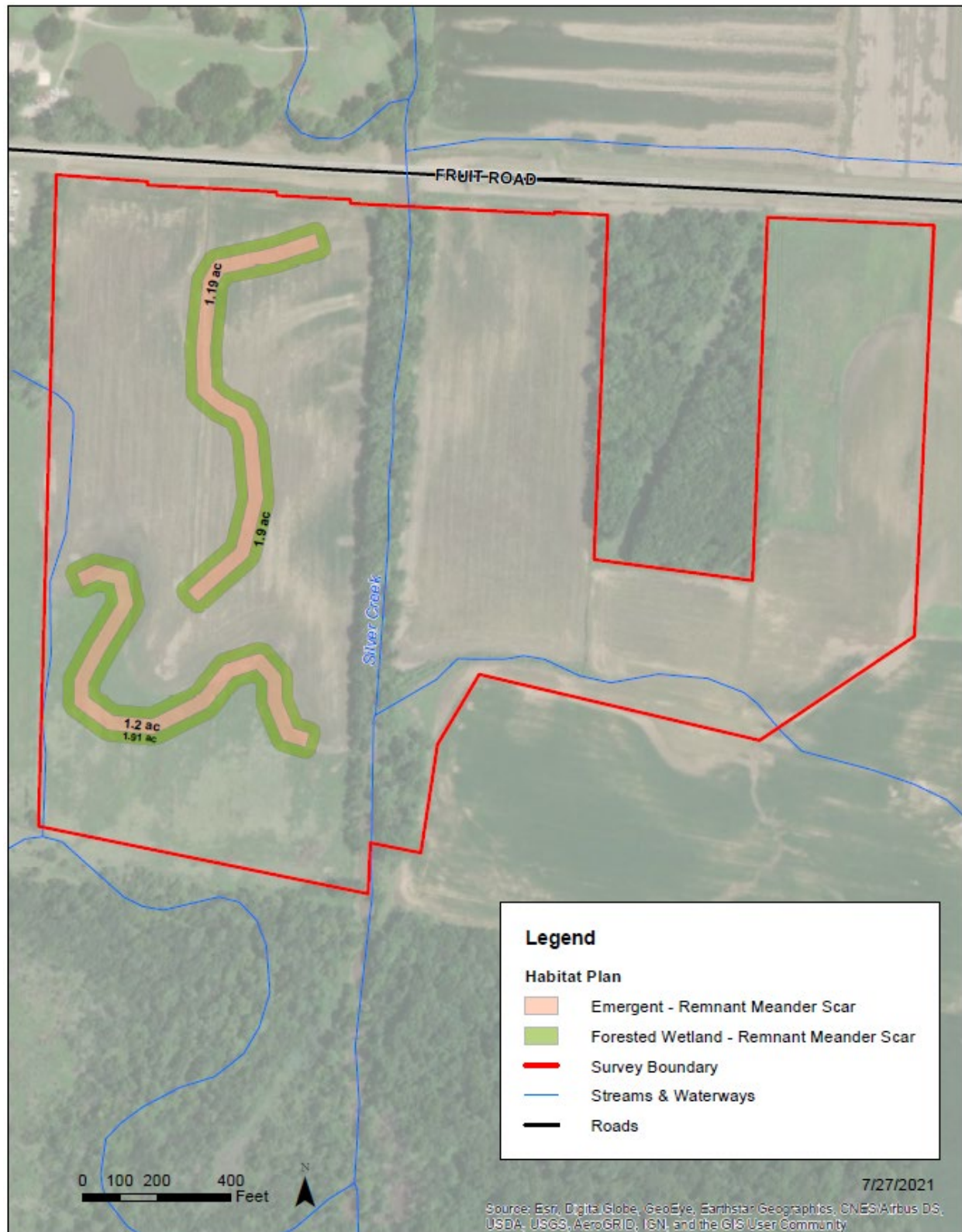


Figure 12: Riparian Area

Habitat Plan - Riparian Zone

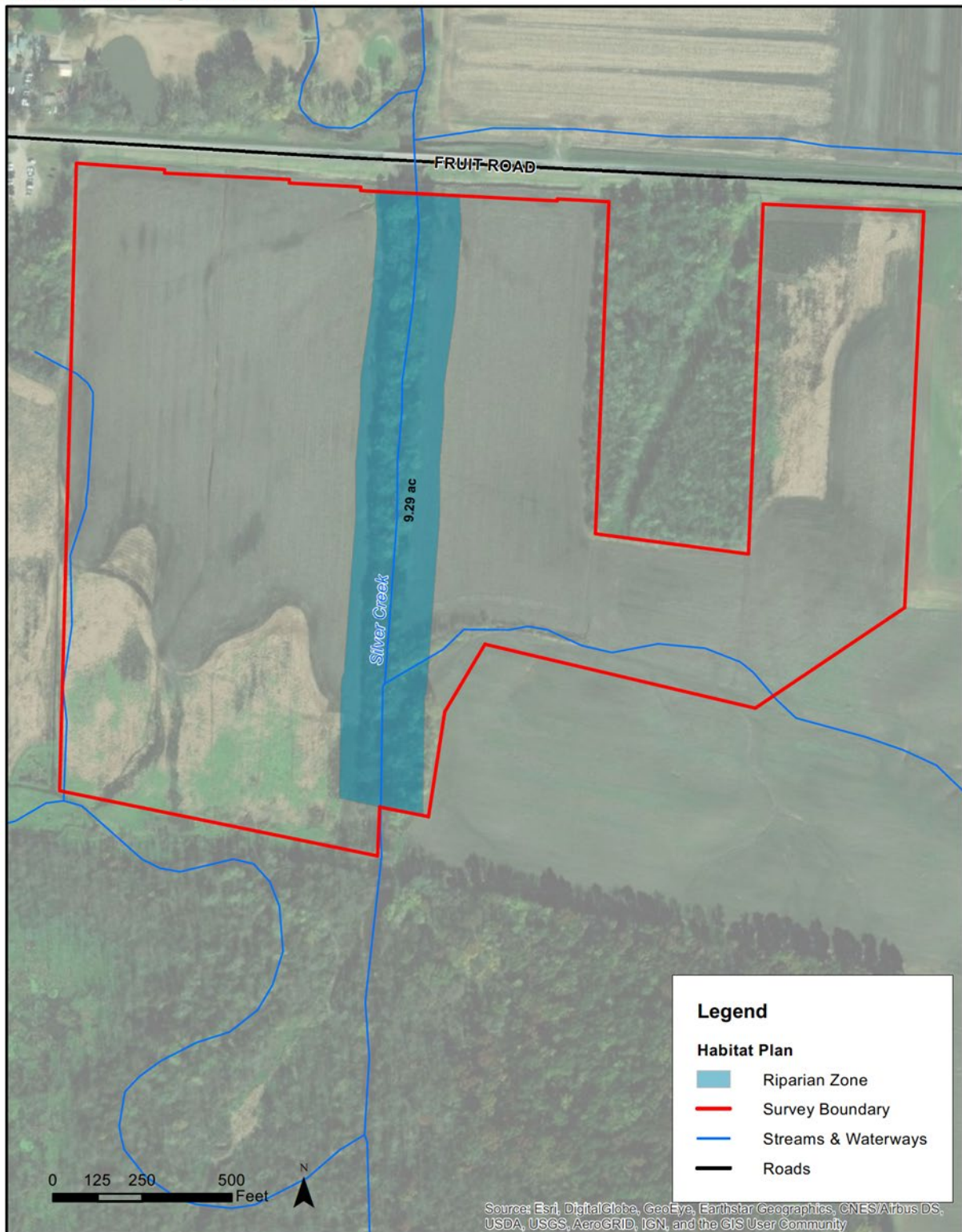


Figure 13 – Berm Construction Features for Tree Planting



Figure 14 – Ditch Locations and Actions

Ditch Locations and Actions

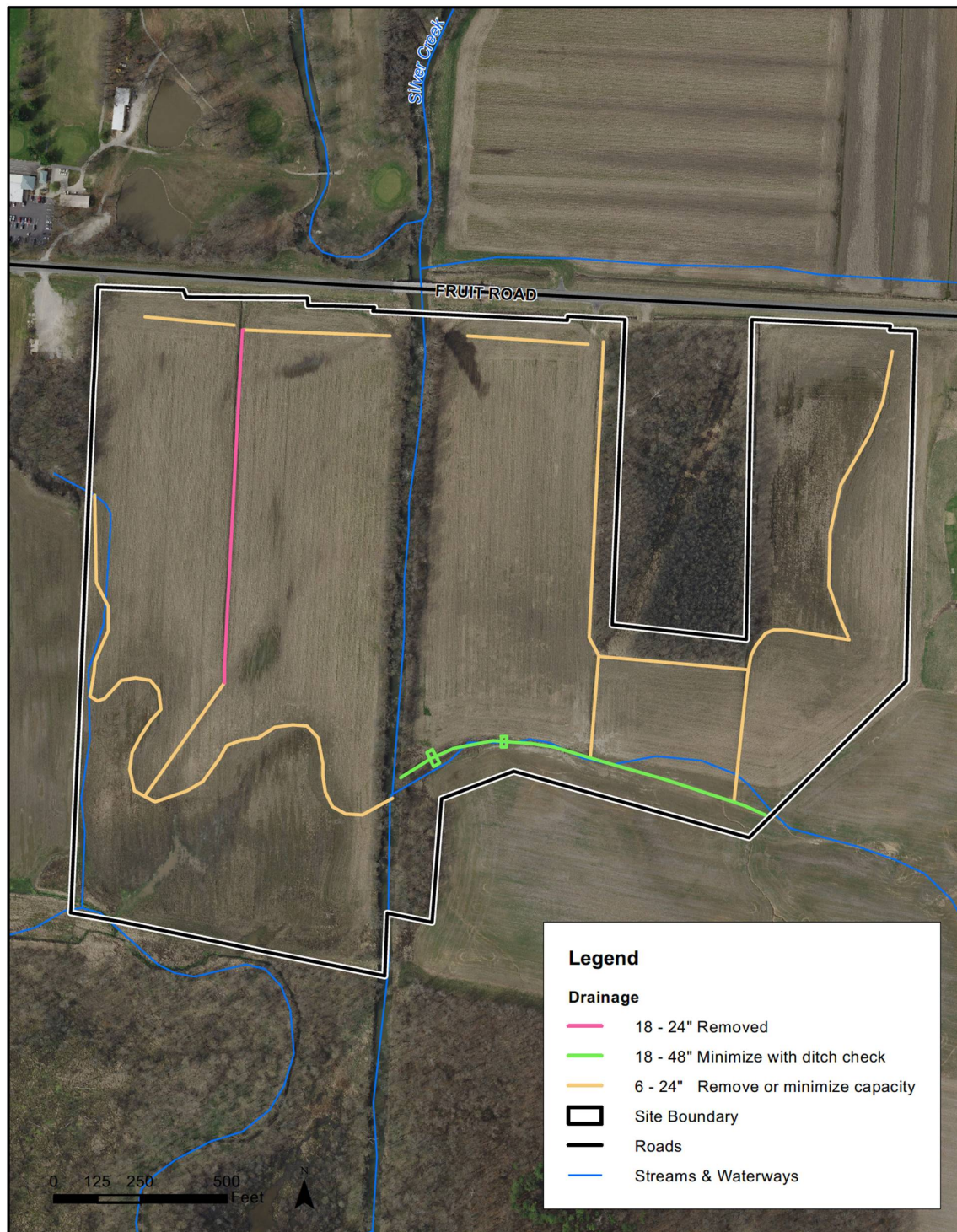
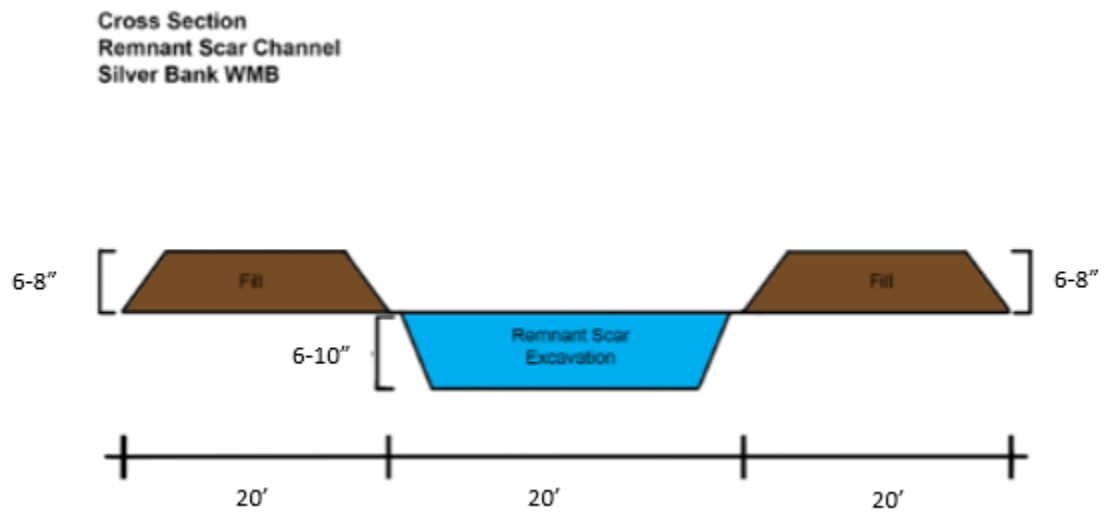


Figure 15 – Meander Scar Construction Cross Section



Tree Plantings

MAST BOTTOMLAND HARDWOOD PLANTINGS

This area will follow all recommendations outlined in the WFI-B Umbrella Mitigation Banking Instrument (**UMBI**) for tree planting requirements. This area consists of approximately 55.0- acres of forested wetlands and riparian area. The forested planting equates to twenty foot by twenty foot (20 ft x 20 ft) spacing equaling 109 trees/acre.

Silver Banks Planting Acres:

- Forested Wetland and Riparian Area = 55.00-acres x 109 trees/acre = 5,995 (+/-)

FORESTED HARD/SOFT MAST PLANTINGS

This area will be a Bank Site project-specific planting and will not follow WFI-B **UMBI** for planting requirements. This area consists of approximately 12.79 acres of agricultural prior converted acres that has a monotypic habitat of Reeds Canary Grass. The forested planting will consist of 50 bottomland hardwood tree species adapted to increased hydrology. In addition, a minimum of 240 soft mast tree species will be planted (bare root) or seeded to counteract the monotypic habitat of reeds canary grass.

Silver Banks Planting Acres:

- Forested Hard/Soft Mast Wetland = 50 hard mast plants/acre x 12.79 acres = 640 (+/-)
- Forested Hard/Soft Mast Wetland = 240 soft mast plants/acre x 12.79 acres = 3,070 (+/-)

Silver Banks Forested Wetland and Riparian Area Tree Planting

*Tree Varieties	Trees per Acre	Acres Planted	Total Number of Trees for Bank Site
Pin Oak (<i>Quercus palustris</i>)	15	55	825
Sycamore (<i>Platanus occidentalis</i>)	5	55	275
Willow Oak (<i>Quercus phellos</i>)	5	55	275
Northern Pecan (<i>Carya Illinoensis</i>)	10	55	550
Swamp White Oak (<i>Quercus bicolor</i>)	5	55	275
Green Hawthorne (<i>Crataegus viridis.</i>)	5	55	275
Shellbark Hickory (<i>Carya laciniosa</i>)	5	55	275
Button Bush (<i>Cephalanthus occidentalis</i>)	10	55	550
Persimmon (<i>Diospyros virginiana</i>)	4	55	220
Overcup Oak (<i>Quercus lyrata</i>)	10	55	550
Water hickory (<i>Carya aquatic</i>)	4	55	220
Sugarberry (<i>Celtis laevigata</i>)	4	55	220
Nuttall Oak (<i>Quercus nuttallii</i>)	10	55	550
Swamp Privet (<i>Forestiera acuminata</i>)	4	55	220
Bald Cypress (<i>Taxodium distichum</i>)	5	55	275
River birch (<i>Betula nigra, spp</i>)	4	55	220
Kentucky coffee (<i>Gymnocladus dioicus</i>)	4	55	220
Totals	109	55	5,995

***Hard mast trees for berm planting**

Silver Banks Forested Hard/Soft Mast Tree Planting

*Tree Varieties	Trees per Acre	Acres Planted	Total Number of Trees for Bank Site
Pin Oak (<i>Quercus palustris</i>)	10	12.79	128
Overcup Oak (<i>Quercus lyrata</i>)	10	12.79	128
Willow Oak (<i>Quercus phellos</i>)	10	12.79	128
Northern Pecan (<i>Carya Illinoensis</i>)	10	12.79	128
Swamp White Oak (<i>Quercus bicolor</i>)	10	12.79	128
Silver Maple (<i>Acer saccharinum</i>)	40	12.79	512
Sycamore (<i>Platanus occidentalis</i>)	40	12.79	512
Bald Cypress (<i>Taxodium distichum</i>)	40	12.79	511
River Birch (<i>Betula nigra</i>)	40	12.79	511
Eastern Cottonwood (<i>Populus deltoids</i>)	40	12.79	512
Willow (<i>Salix nigra</i>)	40	12.79	512
Totals	290	12.79	3,710

***Hard mast trees**

EXCAVATION DEVELOPMENT PLAN

Bottomland Hardwood Planting:

The excavation plan for the bottomland hardwood tree planting will focus on re-creating historic stream meander scars and a natural high bank system. This will involve the excavation of in-situ soils at existing ground level to a depth of 6-10 inches and a width of 20 feet. The soil generated from this shallow excavation will be placed adjacent to the meander scar at a height of 6-8 inches and width of 20 feet on average. The use of mounds or unconnected berms in other areas of the forested plantings may be utilized. The construction method for historic meander scars will employ either a heavy equipment excavator (trackhoe) or a tractor pulled scraper. The construction method for mound/berm will be a tractor pulled rice levee plow or excavator to manage the in-situ material into unconnected mounds/berms in tree planting areas.

Reference Appendix 4 for maps and features to be constructed.

Berm Construction:

Should they require beds (berms), the trees shall be planted in raised planting beds (berms), constructed of existing soil materials, 8 to 10 inches in height after being compacted with a roller or a two gang roller of which has a minimum combined weight of 200 pounds per foot of ground contact length (e.g., 8 foot of working width double gang rolling seeder must weigh a minimum of 1600 lbs.). The base of the raised bed (berm) shall have an approximate minimum width of 7 feet with a flat crown being approximately 3 feet in width. The berms shall be constructed in such a manner that restriction of the natural drainage of the site or impound water during high rainfall periods of flooding does not occur.

SECTION G – Operation and Maintenance Plan

The SBWSMB restoration area is designed to be self-sustaining once the mitigation work plan is complete. The SBWSMB's Operation and Maintenance will reflect the approved UMBI plans for the WFI-B UMBI.

Bank Site Specific Planting of Forested Hard/Soft Mast wetlands will follow a performance standard of a minimum of 90 plants per acre. In addition, this area will employ a timber stand improvement strategy to focus on bottomland hardwood mast trees (target trees at 50/acre) on a schedule of Years 3-5-7 for the TSI management and maintenance actions.

WFI Holdings-B LLC will be responsible for maintenance activities until wetland performance standards are determined to be met.

SECTION H – Ecological Performance Standards

The SBWSMB's Ecological Performance Standards will reflect the approved UMBI plans for the WFI-B UMBI.

The performance standards listed below will be used to measure or assess whether the Bank Site is developing into the desired resource type and providing the expected functions. These performance standards will be applied to determine the success of this compensatory mitigation activity.

Bank Site Specific Planting of Forested Hard/Soft Mast wetlands will follow a performance standard of a minimum of 90 plants per acre. In addition, this area will employ a timber stand improvement strategy to focus on bottomland hardwood mast trees (target trees at 50/acre) on a schedule of Years 3-5-7 for the TSI management and maintenance actions.

The Bank Site should meet the standards for vegetative cover and hydrology outlined in Table 1 below. Please note that Table 1 details the performance standards for multiple resource types as approved in the UMBI. Those resource types specific to this Bank Site are highlighted in blue.

Table 1. Performance Standards

Target	1-3-year Performance Standards	4-7 (further) -year Performance Standards
Vegetative Success for Wetland Areas: Emergent (PEM)	At least 75% of the vegetative cover consists of native hydrophytic vegetation suitable for the proposed areas water regime and site potential. No single occurrence of invasive species shall exceed 0.25 contiguous acre in area even if the overall abundance of invasive species is less than 25%. Hydrology: No more than 5% of the wetland shall consist of a contiguous “unvegetated open water” area measured no later than September 15th of each monitoring year.	At least 75% of the vegetative cover consists of native hydrophytic vegetation suitable for the proposed areas water regime and site potential. Minimum of 10 hydrophytic plant species per acre. The 10 species must also be native perennial species. In addition, no single occurrence of invasive species shall exceed 0.10 contiguous acre in area even if the overall abundance of invasive species is less than 10%. Hydrology: No more than 5% of the wetland shall consist of a contiguous “unvegetated open water” area measured no later than September 15th of each monitoring year
Vegetative Success for Wetland Areas: Scrub-Shrub (PSS)	Performance standards for this habitat type will be proposed on a site-by-site basis and will generally mirror either the Emergent or Forested, depending upon site-specific parameters. No single occurrence of invasive species shall exceed 0.10 contiguous acre in area even if the overall abundance of invasive species is less than 10%.	
Vegetative Success for Wetland Areas: Forested (PFO)	Sponsor will comply with the St. Louis District Mitigation Tree Planting Guidance, Estimated Guidance from 2017. Note that only 20% of the surviving trees after monitoring may be from natural recruitment. In addition, trees re-planted within the previous two years will not count towards the survivability metric. No single occurrence of invasive species shall exceed 0.10 contiguous acre in area even if the overall abundance of invasive species is less than 10%. Hydrology: No more than 5% of the wetland shall consist of a contiguous “unvegetated open water” area measured no later than September 15th of each monitoring year	
Stream- In-Stream	Monitoring will include the establishment of eight fixed photo stations (pins) along the bank, 2 per reach. These pins will be measured in relationship to the current position of the bank toe or top of bank, which will show any erosion or deposition. Monitoring reports will note the presence of toe undercutting, lateral bank movement, and overall rock structure stability. Due to the method of stabilization and the existing bank conditions, some changes in bank conditions may continue to occur as the bank establishes a stable slope. The stabilization will be determined successful if the rock structures remain functionally in place following high flow events, and the bank line does not move beyond what would reasonably be expected for normal stream dynamics and morphology. To assess the performance of the grade control structures, a channel cross section will be taken at each photo station, when stream conditions allow, to monitor any changes in the shape of the stream channel.	Performance for the stream structures will be evaluated by the stability of the structures. Sites deemed not to create any instability for the stream channel shall the considered to meet performance standards for stream stability. A Rapid Bioassessment Protocol (RBP) determination will be utilized to determine overall ecologic lift for the in stream reaches. The RBP will be performed every year and be compared to the baseline RBP for the project. The RBP will be the main criteria for ecological performance. Specific stream performance standards beyond what are proposed in this document may be developed on a site-by-site basis as bank sites are proposed. A macroinvertebrates analysis may be conducted for each project, a baseline and at year 4 analysis can be evaluated for overall lift of macroinvertebrates.

Target	1-3-year Performance Standards	4-7 (further) -year Performance Standards
Stream- Riparian Area	Sponsor will comply with the St. Louis District Mitigation Tree Planting Guidance, Estimated Guidance from 2017. Note that only 20% of the surviving trees after monitoring may be from natural recruitment. In addition, trees re-planted within the previous two years will not count towards the survivability metric. No single occurrence of invasive species shall exceed 0.10 contiguous acre in area even if the overall abundance of invasive species is less than 10%.	
Buffer Areas	No single occurrence of invasive species shall exceed 0.10 contiguous acre in area even if the overall abundance of invasive species is less than 10%. Additional buffer performance standards may be added on a site by site basis depending upon site-specific parameters.	
RIAM	Between years five to seven, verify if pre-project assessment in Section D meets post project ranking as determined by best professional judgment.	

PLANTING PERFORMANCE STANDARDS

The SBWSMB's Planting Performance Standards will reflect the approved UMBI plans for the WFI-B UMBI.

SECTION I – Monitoring Requirements

The SBWSMB's Monitoring Requirements will reflect the approved UMBI plans for the WFI-B UMBI.

A seven (7) year monitoring program will be initiated after installation of the planting material for each phase. The WFI Holdings-B LLC, Environmental Scientist shall conduct all monitoring.

SECTION J – Long-Term Management Plan

The SBWSMB's Long-Term Management Plan will reflect the approved UMBI plans for the WFI-B UMBI.

The Bank Site will have a long-term management plan that focuses on the survival and success of the forested, scrub shrub, emergent, and riparian wetlands being restored. Long-term management will be implemented after the performance standards are met.

Landowner: WFI Holdings-B LLC

Long Term Steward for SBWSMB: HeartLands Conservancy

Conservation Easement Holder for USACE: HeartLands Conservancy

STRUCTURE OF LONG-TERM FINANCING

Long-term financing for HeartLands Conservancy's services are referenced in Appendix 6. An endowment in the amount of thirty-seven thousand five hundred dollars (\$37,500) will be used for any maintenance requirements once the performance standards have been met after submittal of the closeout report. Based upon financing and anticipated forested management action, the non-diminishing endowment will have financial stability in perpetuity.

PROVISIONS FOR LONG-TERM MANAGEMENT AND MAINTENANCE LONG-TERM CARE

The Bank Site has been designed to be self-sustaining, therefore, long-term care is deemed to be minimal once the project has met the specified performance standards. However, a management and maintenance plan is located in Appendix 5 to address the minimal management requirements of the project.

SECTION K – Adaptive Management Plan

The SBWSMB's Adaptive Management Plan will reflect the approved UMBI plans for the St. WFI-B UMBI.

SECTION L – Financial Assurances

The SBWSMB's Financial Assurances will reflect the approved UMBI plans for the WFI-B UMBI.

The Bank Site will have a plan of financial assurances and long-term management that focuses on the survival and success of the forested, scrub shrub, emergent, and riparian wetlands being restored. Financial Assurances will support the project during construction and monitoring while long-term management will be implemented after the performance standards are met.

CONSTRUCTION FINANCIAL ASSURANCES

The Sponsor agrees to provide the following financial assurances for the work described in the Banking Instrument and in Appendix 6, Financial Assurances.

The Sponsor will be the responsible party for the financial assurances of the Bank Site. These assurances will be of sufficient substance to ensure the proposed compensatory mitigation will be successfully completed in a manner consistent with the performance standards agreed upon by the MBRT and the Sponsor. Any financial instrument will be in place prior to commencement of any permitted activity associated with the Bank Site.

As seen in Appendix 6, the total construction and monitoring cost of the Bank Site through the monitoring period is anticipated to be \$192,000, which includes forested, scrub shrub, emergent and, riparian wetland construction expenses and yearly monitoring. To provide financial assurance protection for these costs, the Sponsor will purchase a casualty insurance policy to protect the Bank Site in the event of non-compliance. This policy will ensure sufficient funds are available to a third party should the Bank Site be deemed non-compliant and declared in default by the USACE. Funds would be made available to a third party to restore the Bank Site's compliance once a claim has been filed by the USACE. Upon execution of the MBI, the Sponsor will purchase this policy through Conservation United to meet the short-term financial assurance requirements. A draft policy of this insurance can be found in Appendix 6.

STRUCTURE OF LONG-TERM FINANCING ENDOWMENT

HeartLands Conservancy has been identified as the long-term manager/steward.

An endowment in the amount of Thirty-Seven Thousand Five Hundred Dollars (\$37,500.00) will be completely funded to an interest accruing account at Project Close-out of SBWSMB. Based upon financing and anticipated forested management action, the non-diminishing endowment will have financial stability in perpetuity.

Long-term financing for HeartLands Conservancy's services are outlined above and referenced in Appendix 5.

- An Endowment will be established along with Financial Assurances component of the project;
- The Total Endowment funding at Project Close-Out will be \$37,500.00 at an estimated return rate of 6% which generates \$29,650.00/ten years.
- WFI Holdings-B LLC recommends a stepped funding strategy for this project's Endowment. The strategy will consist of two major activities; 1) A Fixed Annual Payment and 2) A Final Endowment Funding at Project Close-Out.
- Fixed Annual Payments in the amount of \$2,000.00 per year
 - Timing of Annual Payment: within 90 days of beginning of calendar year for prior calendar year (example: annual payment for 2023 to be made by end of March 2024).
- Final Endowment Funding action to fund the remainder of Endowment
 - Timing of Final Endowment: Project Close-Out
 - Amount: equal to an amount to bring the endowment to a total of \$37,500.00.
 - Total Endowment Funding (\$37,500.00), less sum of Fixed Annual Payments, less sum of interest earned
 - Shall not exceed a maximum of Total Endowment Funding (\$37,500.00) less sum of Fixed Annual Payments
- Total Endowment funding at time of Project Close-Out: \$37,500.00;
- WFI Holdings-B LLC will fund a TSI/Pruning Management action at Close-out;

PROVISIONS FOR LONG-TERM MANAGEMENT AND MAINTENANCE LONG-TERM CARE

The Bank Site has been designed to be self-sustaining, therefore, long-term care is deemed to be minimal once the Bank Site has met the specified performance standards. However, a management and maintenance plan is located in Appendix 5 to address the minimal management requirements.

SECTION M – Credit Release Schedule for the Bank Site

The SBWSMB's Credit Release Schedule will reflect the approved UMBI plans for the WFI-B UMBI. The SBWSMB generates 60.99 wetland credits and 9,025 stream credits.

Description	Release %	Wetland Credits
Bank Approval	15%	9.15
Construction Complete	25%	15.24
Hydrology Confirmation	15%	9.15
Year 3 Performance Standards	15%	9.15
Year 4 Performance Standards	15%	9.15
Year 5-7 Performance Standards	15%	9.15
Total	100%	60.99

Description	Release %	Stream Credits
Bank Approval	15%	1,353.75
Construction Complete	25%	2,256.25
Year 3 Performance Standards	20%	1,805.00
Year 4 Performance Standards	20%	1,805.00
Year 5-7 Performance Standards	20%	1,805.00
Total	100%	9,025.00

The Sponsor shall submit a statement to the Corps St. Louis District each time credits are debited, or additional credits are approved. If requested, the Corps will distribute the statement to other members of the MBRT. At a minimum, the Sponsor shall submit an annual ledger to the Corps for distribution to all members of the MBRT, showing all transactions at the SBWSMB for the previous year.

Please see below for example tracking logs.

Silver Banks Wetland and Stream Mitigation Bank

Managed By: WFI Holdings-B LLC

INDIVIDUAL CREDIT DEBIT LOG

USACE Permit Number: CE-MVS-2020-xxxx

WFI Holdings-B LLC Tracking Code: LKS-SILVER BANKS(SB)-2021-001

Type	Approved Credits	Debits this Transaction	Total Debits to Date	Balance of Credits
Wetland	60.99	0.0	0.0	60.99
Stream	9,025	0.0	0.0	9,025
Total	--	0.0	0.0	60.99 / 9,025

Silver Banks Wetland and Stream Mitigation Bank

Managed By: WFI Holdings-B LLC

WETLAND AND STREAM CREDITS YEARLY BALANCE LOG

Credits Yearly Balance	Name of Debtor and DA Permit Number	Wetland Credits Debited	Stream Credits Debited	WFI Holdings-B Tracking Code
2021	Company ABC	2.1	0.0	LKS-SB-2021-001
2021	Company XYZ	0.0	150	LKS-SB-2021-001
2022	Company 123	1.1	1,250	LKS-SB-2021-001
2022				
2023				
2024				

Lower Kaskaskia/Shoal Service Area

Managed By: WFI Holdings-B LLC

WETLAND AND STREAM CREDITS YEARLY BALANCE LOG

Credits Yearly Balance	Name of Debitor and DA Permit Number	Wetland Credits Debited	Stream Credits Debited	WFI Holdings-B Tracking Code
2021	Company ABC	2.1	0.0	LKS-SB-2021-001
2021	Company XYZ	0.0	150	LKS-SB-2021-001
2021	Company Bravo	2.2	0.0	LKS-??-2021-001
2022	Company 123	1.1	1,250	LKS-SB-2021-001
2022				
2023				
2024				

WFI-B UMBI

Managed By: WFI Holdings-B LLC

WETLAND AND STREAM CREDITS YEARLY BALANCE LOG

Credits Yearly Balance	Name of Debtor and DA Permit Number	Wetland Credits Debited	Stream Credits Debited	WFI Holdings-B Tracking Code
2021	Company ABC	2.1	0.0	LKS-SB-2021-001
2021	Company XYZ	0.0	150	LKS-SB-2021-001
2021	Company Bravo	1.2	0.0	LKS-??-2021-001
2021	Company Charlie	0.0	2.8	BM-??-2021-001
2022	Company 123	1.1	1,250	LKS-SB-2021-001
2022				
2023				
2024				

SECTION N – Default and Closure Provisions

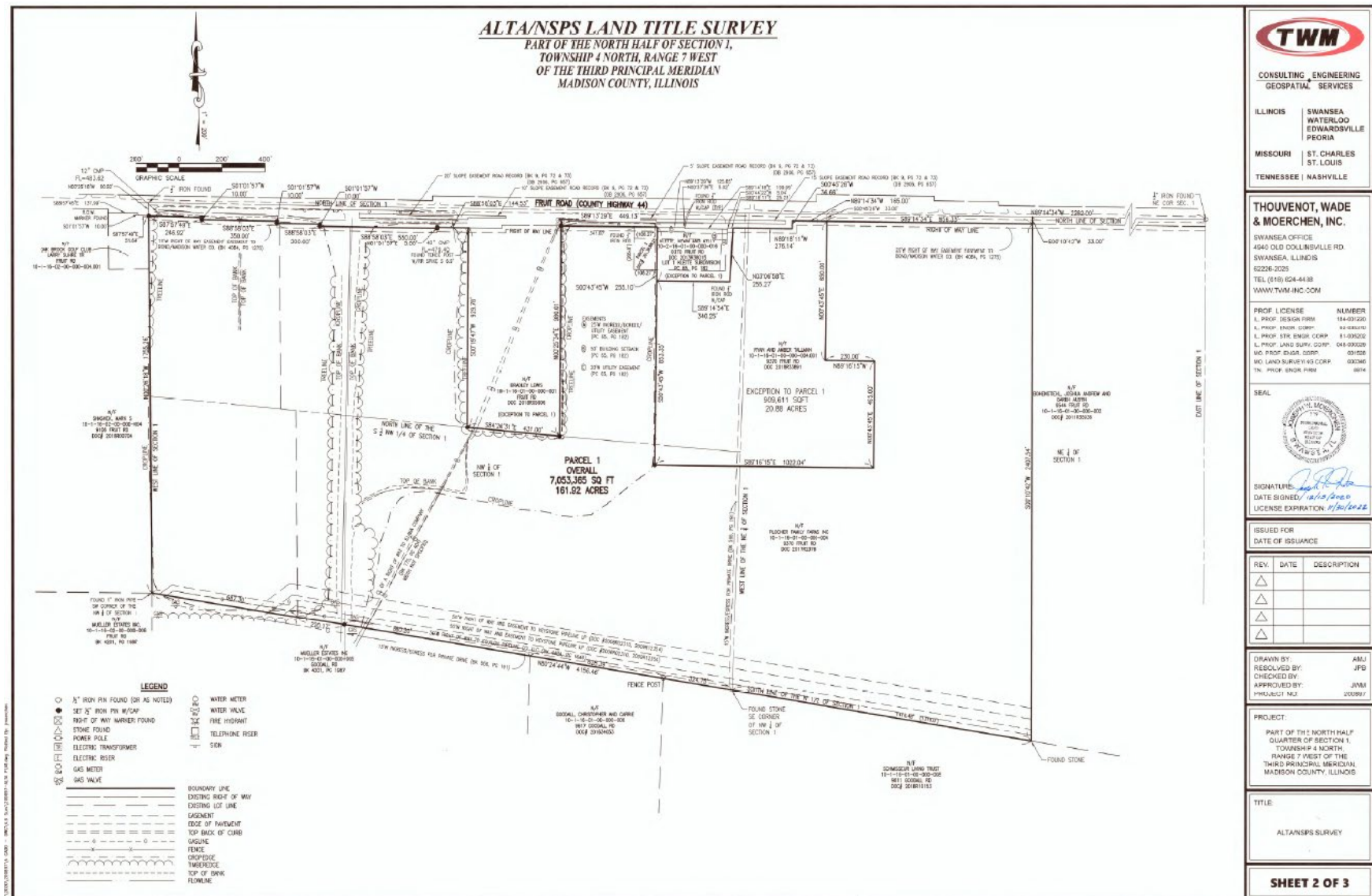
The SBWSMB's Default and Closure Provisions will reflect the approved UMBI plans for the WFI-B UMBI.

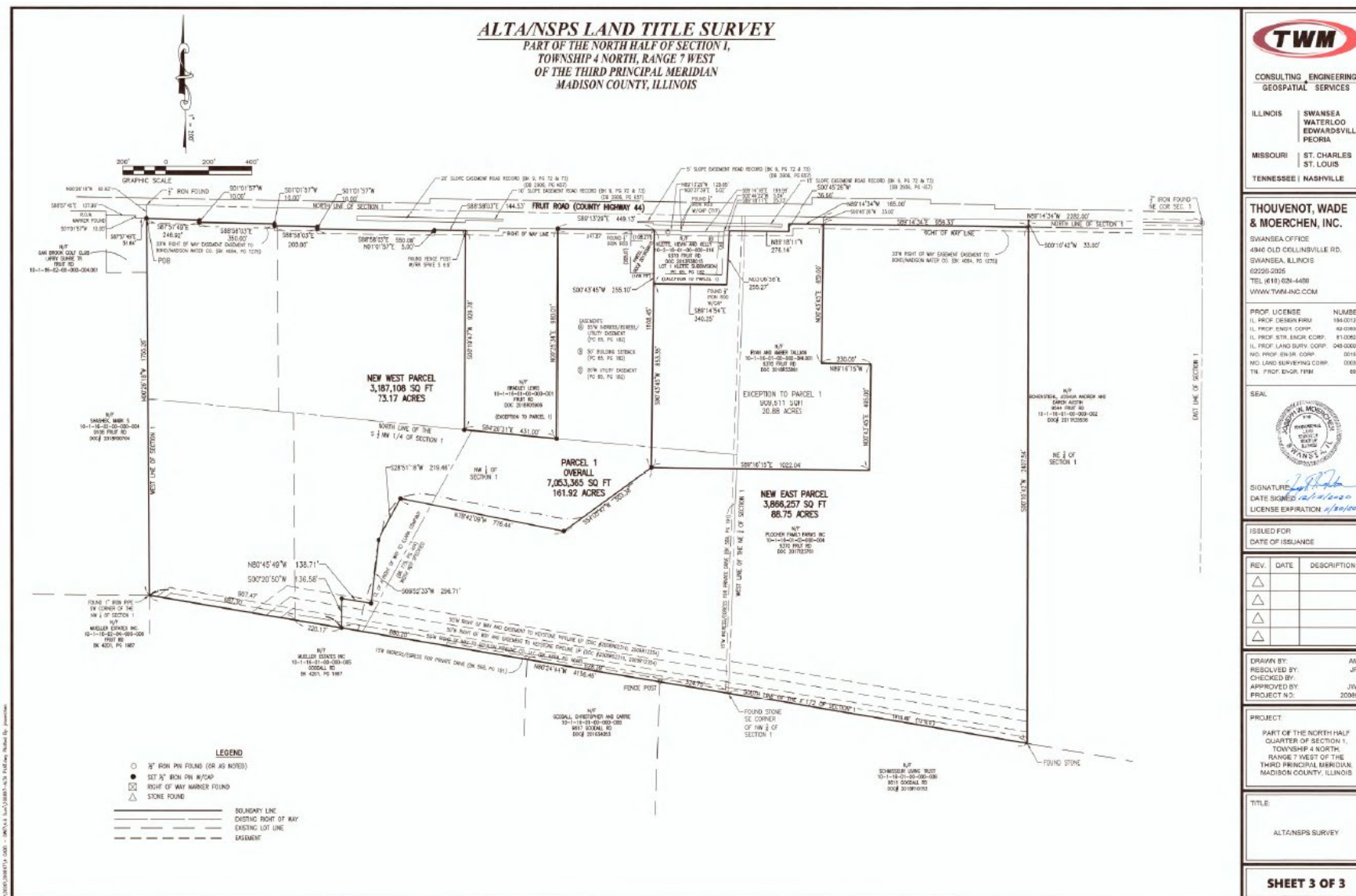
SECTION O – FORCE MAJEURE

The SBWSMB's Force Majeure will reflect the approved UMBI plans for the WFI-B UMBI.

Appendix 1

Survey – Plat





Appendix 2

Title Commitment, Chain of Title, and Summary

 First American Commitment	ALTA Commitment for Title Insurance ISSUED BY First American Title Insurance Company File No: NCS-1017039-MAD
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COMMITMENT FOR TITLE INSURANCE

Issued By
FIRST AMERICAN TITLE INSURANCE COMPANY
NOTICE

IMPORTANT-READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, **First American Title Insurance Company**, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

First American Title Insurance Company



Dennis J. Gilmore, President



Greg L. Smith, Secretary

If this jacket was created electronically, it constitutes an original document.

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COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

- (a) the Notice;
- (b) the Commitment to Issue Policy;
- (c) the Commitment Conditions;
- (d) Schedule A;
- (e) Schedule B, Part I—Requirements;
- (f) Schedule B, Part II—Exceptions;

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I—Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

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6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <http://www.alta.org/arbitration>.

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First American

Schedule A

ALTA Commitment for Title Insurance

ISSUED BY

First American Title Insurance Company

File No: NCS-1017039-MAD

Transaction Identification Data for reference only:

Commitment No.: NCS-1017039-MAD

Issuing Office: 25 West Main Street, Suite 400, Madison, WI 53703

Property Address: Vacant Land/APN 10-1-16-01-00-000-004, Customer Reference:
Madison County, IL

Revision Date:

Title Inquiries to:

Escrow Inquiries to:

SCHEDULE A

1. Commitment Date: June 12, 2020
2. Policy to be issued:
 - (a) ☐ 2006 ALTA® Owner's Policy
Proposed Insured: WFI Holdings-B LLC
Proposed Policy Amount: \$329,265.00
 - (b) ☐ 2006 ALTA® Owner's (Leasehold) Policy
Proposed Insured: Heartlands Conservancy
Proposed Policy Amount: \$TBD
3. The estate or interest in the Title described or referred to in this Commitment and covered herein is Fee Simple and Title to the estate or interest in said Land is at the effective date hereof vested in:

Plocher Family Farms

4. The Land referred to in this Commitment is described as follows:

A tract of land being part of the North Half of Section 1, Township 4 North, Range 7 West of the Third Principal Meridian, located in Madison County, Illinois and being more particularly described as follows:

Beginning at the intersection of the South right of way line of Fruit Road also known as County Highway 44 and the West line of said Section 1, thence easterly on said South right of way line the following (9) nine courses and distances, 1) South 87 degrees 57 minutes 49 seconds East, 246.92 feet; 2) South 01 degrees 01 minutes 57 seconds West, 10.00 feet; 3) South 88 degrees 58 minutes 03 seconds East, 350.00 feet; 4) South 01 degrees 01 minutes 57 seconds West, 10.00 feet; 5) South 88 degrees 58 minutes 03 seconds East, 200.00 feet; 6) South 01 degrees 01 minutes 57 seconds West, 10.00 feet; 7) South 88 degrees 58 minutes 03 seconds East, 550.00 feet; 8) North 01 degrees 01 minutes 57 seconds East, 5.00 feet; 9) South 88 degrees 58 minutes 03 seconds East, 144.53 feet; thence South 00 degrees 19 minutes 47 seconds West, 929.78 feet; thence South 84 degrees 26 minutes 31 seconds East, 431.00 feet; thence North 00 degrees 25 minutes 34 seconds East, 980.01 feet to the South right of way line of said Fruit Road variable width; thence South 89 degrees 13 minutes 29 seconds East on said South right of way line, 449.13 feet; thence South 00 degrees 43 minutes 45 seconds West, 1108.45 feet; thence South 54 degrees 05 minutes 47 seconds

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West, 503.38 feet; thence North 78 degrees 42 minutes 09 seconds West, 776.44 feet; thence South 28 degrees 51 minutes 18 seconds West, 219.46 feet; thence South 06 degrees 52 minutes 33 seconds West, 296.71 feet; thence North 80 degrees 45 minutes 49 seconds West, 138.71 feet; thence South 00 degrees 20 minutes 50 seconds West, 136.58 feet to the northerly line of a tract of land recorded in Deed Book 4201, on page 1987; thence North 80 degrees 24 minutes 44 seconds West, 907.47 feet to the West line of said Section 1; thence North 00 degrees 26 minutes 18 seconds West on said West line, 1,755.26 feet to the Point of Beginning.

BEING A PART OF THE FOLLOWING DESCRIBED LAND:

PARCEL 1: 70.92 ACRES, BEING THE WEST PART OF THE NORTHEAST QUARTER OF SECTION 1; ALSO, 49.84 ACRES, BEING THE EAST PART OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 1; ALSO, 20 ACRES OFF OF THE EAST END OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 1; (EXCEPTING FROM THE LAST TWO DESCRIBED TRACTS OF LAND, A STRIP OF LAND 6 FEET WIDE CONVEYED BY ALEXANDER W. JEFFRESS, UNMARRIED, TO THE COMMISSIONERS OF HIGHWAYS OF THE TOWN OF PIN OAK, MADISON COUNTY, ILLINOIS, BY WARRANTY DEED DATED MARCH 23, 1903 AND RECORDED IN BOOK 297 PAGE 53; DESCRIBED AS FOLLOWS: A STRIP OF LAND OF THE UNIFORM WIDTH OF 6 FEET OFF OF A TRACT OF LAND DESCRIBED AS 20 ACRES OFF OF THE EAST END OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 1 IN TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN. SAID STRIP TO BE OFF OF THE WEST SIDE OF SAID 20 ACRE TRACT AND IS ALSO TO EXTEND ALSO FROM THE SOUTH LINE OF SAID TRACT, A DISTANCE OF 5 RODS, AND NO FURTHER) IN MADISON COUNTY, ILLINOIS. ALSO, 33 ACRES OFF OF THE WEST END OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 1, (EXCEPT 13 ACRES OFF THE WEST END THEREOF); ALSO, 13 ACRES OF TIMBERED LAND IN THE NORTHWEST CORNER OF SECTION 1 IN TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A STONE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN AND RUNNING THENCE SOUTH ALONG THE WEST LINE OF SAID SECTION 1 A DISTANCE OF 903 FEET TO A STONE AT THE SOUTHWEST CORNER OF SAID 13 ACRE TRACT; SAID LAST MENTIONED STONE ALSO MARKS THE NORTHWEST CORNER OF A CERTAIN 15 ACRE TRACT CONVEYED BY ALEXANDER W. JEFFRESS TO EDWARD J. JEFFRESS BY WARRANTY DEED DATED FEBRUARY 3, 1874 AND RECORDED IN BOOK 147 PAGE 419; THENCE FROM SAID LAST MENTIONED STONE RUNNING EASTERLY ALONG THE NORTH LINE OF ABOVE MENTIONED 15 ACRE TRACT, A DISTANCE OF 615 FEET TO A ROD; THENCE NORTH A DISTANCE OF 915 FEET TO A ROD IN THE NORTH LINE OF SAID SECTION 1; THENCE WEST ALONG THE NORTH LINE OF SAID SECTION 1 A DISTANCE OF 613 FEET TO THE STONE AT THE PLACE OF BEGINNING; ALSO, 15 ACRES OFF THE WEST END OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN CONVEYED BY ALEXANDER W. JEFFRESS TO EDWARD J. JEFFRESS BY WARRANTY DEED DATED FEBRUARY 3, 1874 AND RECORDED IN BOOK 147 AT PAGE 419; ALL OF THE ABOVE DESCRIBED REAL ESTATE BEING SITUATED IN SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, IN MADISON COUNTY, ILLINOIS. (ALSO EXCEPTING FROM PARCEL 1 THE FOLLOWING DESCRIBED TRACT CONVEYED TO MADISON COUNTY BY WARRANTY DEED RECORDED AUGUST 27, 1982 IN BOOK 3227 PAGE 1430 DESCRIBED AS FOLLOWS: A PART OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, THE LAND HEREIN CONVEYED BEING DESCRIBED AS FOLLOWS: ALL THAT PART OF THE ABOVE DESCRIBED LAND LYING WITHIN THE LIMITS OF THE RIGHT OF WAY FOR A HIGHWAY KNOWN AS SECTION 79-00140-00-BR. COUNTY HIGHWAY 44 (LOCALLY KNOWN AS FRUIT ROAD) AS SAID HIGHWAY IS LOCATED AND SURVEYED BY THE SUPERINTENDENT OF HIGHWAYS OF MADISON COUNTY, ILLINOIS, AS SAID SURVEY IS SHOWN BY PLAT RECORDED IN ROAD RECORD BOOK 11 PAGE 114 OF THE RECORDS OF THE RECORDER OF DEEDS OF MADISON COUNTY, ILLINOIS, CONTAINING 2.50 ACRES, MORE OR LESS, EXCLUSIVE OF THE RIGHT OF WAY OF THE EXISTING

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HIGHWAY AND ALSO EXCEPTING FROM PARCEL 1 THAT PART PLATTED AS KLETTE'S SUBDIVISION RECORDED IN PLAT CABINET 65 PAGE 182 AND ALSO EXCEPTING FROM PARCEL 1 THAT PART CONVEYED TO KEVIN KLETTE AND KELLY KLETTE RECORDED IN DOCUMENT NO. 2013R36634 AND RERECORDED IN DOCUMENT NO. 2013R38016 DESCRIBED AS FOLLOWS: PART OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, MADISON COUNTY, ILLINOIS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON ROD AT THE NORTHEAST CORNER OF LOT 1 OF KLETTE'S SUBDIVISION AS SHOWN BY PLAT RECORDED IN PLAT CABINET 65 ON PAGE 182 OF THE MADISON COUNTY RECORDS; THENCE NORTH 0 DEGREES 24 MINUTES 43 SECONDS EAST ALONG THE SOUTH RIGHT OF WAY LINE OF FRUIT ROAD 5.00 FEET; THENCE SOUTH 89 DEGREES 35 MINUTES 17 SECONDS EAST ALONG SAID SOUTH RIGHT OF WAY LINE 25.23 FEET; THENCE SOUTH 2 DEGREES 48 MINUTES 18 SECONDS WEST 255.22 FEET; THENCE NORTH 89 DEGREES 35 MINUTES 17 SECONDS WEST 340.25 FEET; THENCE NORTH 0 DEGREES 24 MINUTES 43 SECONDS EAST 50.00 FEET TO THE SOUTH LINE OF SAID LOT 1; THENCE SOUTH 89 DEGREES 35 MINUTES 17 SECONDS EAST ALONG SAID SOUTH LINE 317.32 FEET TO AN IRON ROD AT THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTH 2 DEGREES 48 MINUTES 18 SECONDS EAST ALONG THE EAST LINE OF SAID LOT 200.17 FEET TO THE POINT OF BEGINNING, CONTAINING 0.51 ACRE, AND ALSO EXCEPTING FROM PARCEL 1 COAL AND OTHER MINERALS UNDERLYING SAID PREMISES WITH THE RIGHT TO MINE AND REMOVE SAME), IN MADISON COUNTY, ILLINOIS.

EXCEPTING THEREFROM:

A TRACT OF LAND BEING PART OF THE NORTH HALF OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, MADISON COUNTY, ILLINOIS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT AN IRON ROD AT THE NORTHEAST CORNER OF SAID SECTION; THENCE ON AN ASSUMED BEARING OF NORTH 89 DEGREES 14 MINUTES 34 SECONDS WEST, ON THE NORTH LINE OF SAID SECTION, 2,282.00 FEET; THENCE SOUTH 00 DEGREES 45 MINUTES 26 SECONDS WEST, LEAVING SAID NORTH LINE 33.00 FEET TO THE SOUTH RIGHT OF WAY LINE OF FRUIT ROAD, VARIABLE WIDTH AND THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED; FROM SAID POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 43 MINUTES 45 SECONDS WEST, 650.00 FEET; THENCE SOUTH 89 DEGREES 16 MINUTES 15 SECONDS EAST, 230.00 FEET; THENCE SOUTH 00 DEGREES 43 MINUTES 45 SECONDS WEST, 495.00 FEET; THENCE NORTH 89 DEGREES 16 MINUTES 15 SECONDS WEST, 1,022.04 FEET; THENCE NORTH 00 DEGREES 43 MINUTES 45 SECONDS EAST, 853.35 FEET TO THE SOUTH LINE OF AN EXCEPTION TO A DEED RECORDED IN DOCUMENT 2007R55887; THENCE SOUTH 89 DEGREES 14 MINUTES 54 SECONDS EAST ON SAID SOUTH LINE, 340.25 FEET TO THE SOUTHEASTERLY CORNER OF SAID EXCEPTION; THENCE NORTH 03 DEGREES 06 MINUTES 58 SECONDS EAST ON THE EAST LINE OF SAID EXCEPTION, 255.27 FEET TO THE SOUTH RIGHT OF WAY LINE OF SAID FRUIT ROAD; THENCE THE FOLLOWING 3 COURSES AND DISTANCES ON SAID RIGHT OF WAY LINE; 1.) SOUTH 89 DEGREES 18 MINUTES 11 SECONDS EAST, 276.14 FEET; 2.) NORTH 00 DEGREES 45 MINUTES 26 SECONDS EAST, 36.66 FEET; 3.) SOUTH 89 DEGREES 14 MINUTES 34 SECONDS EAST, 165.00 FEET TO THE POINT OF BEGINNING, SAID TRACT OF LAND CONTAINING 909,611 SQUARE FEET OR 20.88 ACRES, MORE OR LESS IN MADISON COUNTY, ILLINOIS.

PARCEL 2: PART OF THE LOT 1 OF KLETTE'S SUBDIVISION LOCATED IN THE NORTHWEST QUARTER OF SECTION 1 TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, MADISON COUNTY, ILLINOIS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON ROD AT THE NORTHWEST CORNER OF LOT 1 OF KLETTE'S SUBDIVISION AS SHOWN BY PLAT RECORDED IN PLAT CABINET 65 ON PAGE 182 OF THE MADISON COUNTY RECORDS; THENCE SOUTH 89 DEGREES 35 MINUTES 17 SECONDS EAST ALONG THE SOUTH RIGHT OF WAY LINE OF FRUIT ROAD 108.27 FEET; THENCE SOUTH 0 DEGREES 24 MINUTES 43 SECONDS WEST 205.00 FEET TO THE SOUTH LINE OF SAID LOT; THENCE NORTH 89 DEGREES 35 MINUTES 17 SECONDS WEST ALONG THE SOUTH LINE OF SAID LOT, 108.27 FEET TO AN IRON ROAD AT THE

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SOUTHWEST CORNER THEREOF; THENCE NORTH 0 DEGREES 24 MINUTES 43 SECONDS EAST
ALONG THE WEST LINE OF SAID LOT 205.00 FEET TO THE POINT OF BEGINNING, CONTAINING
0.51 ACRE (EXCEPT COAL AND OTHER MINERALS UNDERLYING SAID PREMISES WITH THE RIGHT
TO MINE AND REMOVE SAME), IN MADISON COUNTY, ILLINOIS.

THIS COMMITMENT IS VALID ONLY IF SCHEDULE B IS ATTACHED.

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 First American Schedule BI & BII	ALTA Commitment for Title Insurance ISSUED BY First American Title Insurance Company File No: NCS-1017039-MAD
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SCHEDULE B, PART I

Requirements

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
2. Pay the agreed amount for the estate or interest to be insured.
3. Pay the premiums, fees, and charges for the Policy to the Company.
4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
5. The Land is located within Cook, DuPage, Grundy, Jackson, Kane, Kankakee, Lake, La Salle, Logan, McDonough, McLean, Madison, Marion, Ogle, Peoria, Rock Island, Sangamon, Tazewell, Whiteside, Winnebago or Woodford counties which use the MyDec system for the completion of the state and county transfer tax forms. As of January 1, 2016, The City of Chicago Transfer Tax declaration must be completed in the MyDec system. The form and instructions can be found at https://mytax.illinois.gov/MyDec/_/.

Note: If the county is listed in MyDec, but the municipality is not, you may prepare your State and County Declaration with this site. However, you must contact the municipality for their current procedures and requirements.

6. Partial Release of Mortgage dated September 7, 2017 and recorded September 13, 2017 as 2017R30929, made by Plocher Family Farms LLC, to National Bank, to secure an indebtedness in the amount of \$500,000.00, and the terms and conditions thereof.

Assigned to Security National Bank by assignment recorded February 21, 2020 as document number 2020R06057.

(Affects both parcels and other property)

7. We should be furnished either (a) an affidavit from the owner indicating that there is no property manager employed; or (b) a final lien waiver from the property manager acting on behalf of the owner.
8. Relative to the deletion of Standard Exceptions 1 through 5, we should be furnished the following:

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- 1) A sworn statement disclosing all parties in possession of the land, including parties in possession under unrecorded leases and the terms and provisions thereof; options; and unrecorded contracts to purchase the land.
 - 2) A current survey of the land, properly certified to the Company, made in accordance with (i) the accuracy requirements of a survey pursuant to the 'Minimum Standard Detail Requirements for Land Title Surveys' Jointly Established and Adopted by the American Land Title Association and American Congress on Survey and Mapping; and (ii) the Laws of the State of Illinois.
 - 3) An ALTA Extended Coverage Policy Statement. If new construction has taken place within the last six months, the following should be produced: Satisfactory evidence of the payment in full of the cost of furnishing services, labor and materials in connection with any improvements made on the land within six months of the date of this commitment. This evidence should consist of sworn contractors' and subcontractors' affidavits, together with all necessary waivers of lien.
9. The record is unclear as to the nature of Plocher Family Farms. We should be furnished evidence as to the legal status of this entity. If it is a corporation, we should be furnished a current "Certificate of good standing" and directors' resolutions which authorize the contemplated conveyance or mortgage. If it is a partnership, we should be furnished a copy of the partnership agreement and any amendment thereto. If it is a limited liability company, we should be furnished evidence that the articles of organization have been filed with the State of Indiana and a copy of the operating agreement. If it is an unincorporated association, its ability to hold title is questionable and, in this regard, we should be furnished the governing regulations of said association and a resolution that authorizes the contemplated conveyance or mortgage. This commitment is subject to such further exceptions, if any, as may then be deemed necessary after our review of these materials.
 10. Note: If any contemplated deed of conveyance of the land is exempt from the operation of the provisions of paragraph 1(a) of 765 ILCS 205/1, the plat act, such deed should be accompanied by a proper affidavit establishing to the satisfaction of the recorder of deeds of Madison County, Illinois, that the conveyance is so exempt. If said conveyance is not so exempt, compliance should be had with the provisions of said paragraph 1(a).
 11. Submit proof satisfactory to the Company of completion of improvements, including tenant improvements, and satisfactory evidence that all contracts for labor, materials and services have been paid in full.
 12. Prior to closing, the Company must confirm whether the county recording office in which the Land is located has changed its access policies due to the COVID-19 outbreak. If recording has been restricted, specific underwriting approval is required; and, additional requirements or exceptions may be made.
 13. Deed from Plocher Family Farms to WFI Holdings-B LLC.
 14. The recording of an Easement Agreement by and between WFI Holdings-B LLC as grantor, and Heartlands Conervancy as grantee.

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SCHEDULE B, PART II

Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

Part One:

1. Rights or claims of parties in possession not shown by the Public Records.
2. Easements or claims of easements, not shown by Public Records.
3. Any encroachments, encumbrance, violation, variation or adverse circumstance affecting Title that would be disclosed by an accurate and complete survey of the Land pursuant to the "Minimum Standards of Practice," 68 Ill. Admin Code, Sec. 1270.56(b)(6)(P) for residential property or the ALTA/NSPS land title survey standards for commercial/industrial property.
4. Any lien or right to a lien for services, labor, material or equipment, unless such lien is shown by the Public Records at Date of Policy and not otherwise excepted from coverage herein.
5. Taxes, or special assessments, if any, not shown as existing liens by the Public Records.
6. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met.

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 First American Schedule BII (Cont.)	ALTA Commitment for Title Insurance ISSUED BY First American Title Insurance Company File No: NCS-1017039-MAD
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SCHEDULE B, PART II (Continued)

Exceptions (Continued)

Part Two:

1. General real estate taxes for the year(s) 2019, 2020 and subsequent years.
The first installment of the 2019 taxes in the amount of \$691.96 is due July 9, 2020.
The second installment of the 2019 taxes in the amount of \$691.96 is due September 9, 2020.
The third installment of the 2019 taxes in the amount of \$691.96 is due October 9, 2020.
The final installment of the 2019 taxes in the amount of \$691.96 is due December 9, 2020.
The 2020 taxes are not yet ascertainable or payable.
Permanent Index Number: 10-1-16-01-00-000-004
If applicable, an original tax bill must be presented if taxes are to be paid at time of closing.
2. This item has been intentionally deleted.
3. Fifty foot building setback line as shown on the plat of Klette's Subdivision recorded in Plat Cabinet 65, Page 182.
(Affects Parcel 2)
4. Twenty foot wide utility easement as shown on the plat of Klette's Subdivision recorded in Plat Cabinet 65, Page 182.
(Affects Parcel 2)
5. This item has been intentionally deleted.
6. Right of Way Easement dated September 7, 1996 and recorded October 11, 1996 in Book 4084 Page 1275 as Roll and Frame No. 2232-382 made by Kenneth L. Klette and Ina Ruth Klette, husband and wife to Bond/Madison Water Company, its successors and assigns for the right to construct, lay, use,

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operate, maintain and remove water transmission and distribution lines and all rights thereto and terms thereof.

(Affects Parcels 1 and 2)

7. Easement for Rectifier Station dated February 11, 1998 and recorded March 11, 1998 in Book 4212 Page 1277 as Roll and Frame No. 2360-324 made by Kenneth L. Klette and Ina Ruth Klette to Marathon Ashland Pipe line LLC, its successors and assigns, for the right to construct, operate, maintain, repair and remove a rectifier station for cathodic protection of pipelines and all rights thereto and terms thereof.

(Affects Parcels 1 and 2)

8. This item has been intentionally deleted.
9. Right of Way Grant dated February 13, 2002 and recorded March 25, 2002 in Book 4484 Page 4648 as Document No. 2002R18332 made by Kenneth L. Klette and Ina Ruth Klette, husband and wife to Equilon Pipeline Company LLC, its successors and assigns for the right to lay, construct, maintain, operate and remove an oil and gas pipeline and its by-products and all rights thereto and terms thereof.

(Affects Parcel 1)

10. Easement and Right of Way dated August 8, 2007 and recorded January 15, 2008 as Document No. 2008R02310 made by Kenneth L. Klette to Keystone Pipeline LP, its successors and assigns for the right to lay, construct, maintain and remove an oil and gas pipeline and appurtenances and all rights thereto and terms thereof. Amendment recorded March 12, 2009 as Document No. 2009R12354.

(Affects Parcel 1)

11. Right of Way Contract dated February 3, 1939 and recorded February 20, 1939 in Book 775 Page 404 made by Robert Funke, etal to Illana Company, its successors and assigns for the right to lay, maintain, operate and remove oil and gas pipelines and appurtenances and all rights thereto and terms thereof.

(Affects Parcel 1)

12. Premises in Question is subject to a strip of land 66 feet wide to be used as road purposes contained in Warranty Deed recorded March 28, 1900 in Book 273 Page 72 made by Edward J. Jeffress to Pin Oak Township and all rights thereto and terms thereof.
(For Further Particulars See Record)

(Affects Parcel 1)

13. Rights of way for drainage tiles, ditches, feeders and laterals, if any.
14. Rights of the Public, the State of Illinois and the Municipality in and to that part of the land, if any, taken or used for road purposes.

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15. The acreage stated in the legal description of the land is for description purposes only. The quantity of the land is not insured.
16. Existing unrecorded leases, if any, and rights of all parties claiming thereunder.
17. Minerals or mineral rights or any other subsurface substances (including, without limitations, oil, gas and coal) and all rights incidents thereto, now or previously leased, granted, excepted or reserved.
18. Rights of the interested parties to the free and unobstructed flow of the waters of the stream or creek which may flow on or through the land.

End of Schedule B

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*First American Title Insurance Company
National Commercial Services*

25 West Main Street, Suite 400

Madison, WI 53703

Phone: (608)204-7409 Fax: (866)314-2312

Chain of Title

FILE NO.: NCS-1017039-MAD

DATE: 06/29/2020

TO:

Columbia Acquisitions, LLC
248 Southwoods Ctr
Columbia, IL 62236-2462

PROPERTY ADDRESS :

Vacant Land/APN 10-1-16-01-00-000-004
IL

EFFECTIVE DATE: June 12, 2020

GRANTEE IN THE LAST DEED OF RECORD: Plocher Family Farms

LEGAL DESCRIPTION:

PARCEL 1: 70.92 ACRES, BEING THE WEST PART OF THE NORTHEAST QUARTER OF SECTION 1; ALSO, 49.84 ACRES, BEING THE EAST PART OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 1; ALSO, 20 ACRES OFF OF THE EAST END OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 1; (EXCEPTING FROM THE LAST TWO DESCRIBED TRACTS OF LAND, A STRIP OF LAND 6 FEET WIDE CONVEYED BY ALEXANDER W. JEFFRESS, UNMARRIED, TO THE COMMISSIONERS OF HIGHWAYS OF THE TOWN OF PIN OAK, MADISON COUNTY, ILLINOIS, BY WARRANTY DEED DATED MARCH 23, 1903 AND RECORDED IN BOOK 297 PAGE 53; DESCRIBED AS FOLLOWS: A STRIP OF LAND OF THE UNIFORM WIDTH OF 6 FEET OFF OF A TRACT OF LAND DESCRIBED AS 20 ACRES OFF OF THE EAST END OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 1 IN TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN. SAID STRIP TO BE OFF OF THE WEST SIDE OF SAID 20 ACRE TRACT AND IS ALSO TO EXTEND ALSO FROM THE SOUTH LINE OF SAID TRACT, A DISTANCE OF 5 RODS, AND NO FURTHER) IN MADISON COUNTY, ILLINOIS. ALSO, 33 ACRES OFF OF THE WEST END OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 1, (EXCEPT 13 ACRES OFF THE WEST END THEREOF); ALSO, 13 ACRES OF TIMBERED LAND IN THE NORTHWEST CORNER OF SECTION 1 IN TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A STONE AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN AND RUNNING THENCE SOUTH ALONG THE WEST LINE OF SAID SECTION 1 A DISTANCE OF 903 FEET TO A STONE AT THE SOUTHWEST CORNER OF SAID 13 ACRE TRACT; SAID LAST MENTIONED STONE ALSO MARKS THE NORTHWEST CORNER OF A CERTAIN 15 ACRE TRACT CONVEYED BY ALEXANDER W. JEFFRESS TO EDWARD J. JEFFRESS BY WARRANTY DEED DATED FEBRUARY 3, 1874 AND RECORDED IN BOOK 147 PAGE 419; THENCE FROM SAID LAST MENTIONED STONE RUNNING EASTERLY ALONG THE NORTH LINE OF ABOVE MENTIONED 15 ACRE TRACT, A DISTANCE OF 615 FEET TO A ROD; THENCE NORTH A DISTANCE OF 915 FEET TO A ROD IN THE NORTH LINE OF SAID SECTION 1; THENCE WEST ALONG THE NORTH LINE OF SAID SECTION 1 A DISTANCE OF 613 FEET TO THE STONE AT THE PLACE OF BEGINNING; ALSO, 15 ACRES OFF THE WEST END OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN

CONVEYED BY ALEXANDER W. JEFFRESS TO EDWARD J. JEFFRESS BY WARRANTY DEED DATED FEBRUARY 3, 1874 AND RECORDED IN BOOK 147 AT PAGE 419; ALL OF THE ABOVE DESCRIBED REAL ESTATE BEING SITUATED IN SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, IN MADISON COUNTY, ILLINOIS. (ALSO EXCEPTING FROM PARCEL 1 THE FOLLOWING DESCRIBED TRACT CONVEYED TO MADISON COUNTY BY WARRANTY DEED RECORDED AUGUST 27, 1982 IN BOOK 3227 PAGE 1430 DESCRIBED AS FOLLOWS: A PART OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, THE LAND HEREIN CONVEYED BEING DESCRIBED AS FOLLOWS: ALL THAT PART OF THE ABOVE DESCRIBED LAND LYING WITHIN THE LIMITS OF THE RIGHT OF WAY FOR A HIGHWAY KNOWN AS SECTION 79-00140-00-BR. COUNTY HIGHWAY 44 (LOCALLY KNOWN AS FRUIT ROAD) AS SAID HIGHWAY IS LOCATED AND SURVEYED BY THE SUPERINTENDENT OF HIGHWAYS OF MADISON COUNTY, ILLINOIS, AS SAID SURVEY IS SHOWN BY PLAT RECORDED IN ROAD RECORD BOOK 11 PAGE 114 OF THE RECORDS OF THE RECORDER OF DEEDS OF MADISON COUNTY, ILLINOIS, CONTAINING 2.50 ACRES, MORE OR LESS, EXCLUSIVE OF THE RIGHT OF WAY OF THE EXISTING HIGHWAY AND ALSO EXCEPTING FROM PARCEL 1 THAT PART PLATTED AS KLETTE'S SUBDIVISION RECORDED IN PLAT CABINET 65 PAGE 182 AND ALSO EXCEPTING FROM PARCEL 1 THAT PART CONVEYED TO KEVIN KLETTE AND KELLY KLETTE RECORDED IN DOCUMENT NO. 2013R36634 AND RERECORDED IN DOCUMENT NO. 2013R38016 DESCRIBED AS FOLLOWS: PART OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, MADISON COUNTY, ILLINOIS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON ROD AT THE NORTHEAST CORNER OF LOT 1 OF KLETTE'S SUBDIVISION AS SHOWN BY PLAT RECORDED IN PLAT CABINET 65 ON PAGE 182 OF THE MADISON COUNTY RECORDS; THENCE NORTH 0 DEGREES 24 MINUTES 43 SECONDS EAST ALONG THE SOUTH RIGHT OF WAY LINE OF FRUIT ROAD 5.00 FEET; THENCE SOUTH 89 DEGREES 35 MINUTES 17 SECONDS EAST ALONG SAID SOUTH RIGHT OF WAY LINE 25.23 FEET; THENCE SOUTH 2 DEGREES 48 MINUTES 18 SECONDS WEST 255.22 FEET; THENCE NORTH 89 DEGREES 35 MINUTES 17 SECONDS WEST 340.25 FEET; THENCE NORTH 0 DEGREES 24 MINUTES 43 SECONDS EAST 50.00 FEET TO THE SOUTH LINE OF SAID LOT 1; THENCE SOUTH 89 DEGREES 35 MINUTES 17 SECONDS EAST ALONG SAID SOUTH LINE 317.32 FEET TO AN IRON ROD AT THE SOUTHEAST CORNER OF SAID LOT 1; THENCE NORTH 2 DEGREES 48 MINUTES 18 SECONDS EAST ALONG THE EAST LINE OF SAID LOT 200.17 FEET TO THE POINT OF BEGINNING, CONTAINING 0.51 ACRE, AND ALSO EXCEPTING FROM PARCEL 1 COAL AND OTHER MINERALS UNDERLYING SAID PREMISES WITH THE RIGHT TO MINE AND REMOVE SAME), IN MADISON COUNTY, ILLINOIS.

EXCEPTING THEREFROM:

A TRACT OF LAND BEING PART OF THE NORTH HALF OF SECTION 1, TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, MADISON COUNTY, ILLINOIS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT AN IRON ROD AT THE NORTHEAST CORNER OF SAID SECTION; THENCE ON AN ASSUMED BEARING OF NORTH 89 DEGREES 14 MINUTES 34 SECONDS WEST, ON THE NORTH LINE OF SAID SECTION, 2,282.00 FEET; THENCE SOUTH 00 DEGREES 45 MINUTES 26 SECONDS WEST, LEAVING SAID NORTH LINE 33.00 FEET TO THE SOUTH RIGHT OF WAY LINE OF FRUIT ROAD, VARIABLE WIDTH AND THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED; FROM SAID POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 43 MINUTES 45 SECONDS WEST, 650.00 FEET; THENCE SOUTH 89 DEGREES 16 MINUTES 15 SECONDS EAST, 230.00 FEET; THENCE SOUTH 00 DEGREES 43 MINUTES 45 SECONDS WEST, 495.00 FEET; THENCE NORTH 89 DEGREES 16 MINUTES 15 SECONDS WEST, 1,022.04 FEET; THENCE NORTH 00 DEGREES 43 MINUTES 45 SECONDS EAST, 853.35 FEET TO THE SOUTH LINE OF AN EXCEPTION TO A DEED RECORDED IN DOCUMENT 2007R55887; THENCE SOUTH 89 DEGREES 14 MINUTES 54 SECONDS EAST ON SAID SOUTH LINE, 340.25 FEET TO THE SOUTHEASTERLY CORNER OF SAID EXCEPTION; THENCE NORTH 03 DEGREES 06 MINUTES 58 SECONDS EAST ON THE EAST LINE OF SAID EXCEPTION, 255.27 FEET TO THE SOUTH RIGHT OF WAY LINE OF SAID FRUIT ROAD; THENCE THE FOLLOWING 3 COURSES AND DISTANCES ON SAID RIGHT OF WAY LINE; 1.) SOUTH 89 DEGREES 18 MINUTES 11 SECONDS EAST, 276.14 FEET; 2.) NORTH 00 DEGREES 45 MINUTES 26 SECONDS EAST, 36.66 FEET; 3.) SOUTH 89 DEGREES 14 MINUTES 34 SECONDS EAST, 165.00 FEET TO THE POINT OF

BEGINNING, SAID TRACT OF LAND CONTAINING 909,611 SQUARE FEET OR 20.88 ACRES, MORE OR LESS IN MADISON COUNTY, ILLINOIS.

PARCEL 2: PART OF THE LOT 1 OF KLETTE'S SUBDIVISION LOCATED IN THE NORTHWEST QUARTER OF SECTION 1 TOWNSHIP 4 NORTH, RANGE 7 WEST OF THE THIRD PRINCIPAL MERIDIAN, MADISON COUNTY, ILLINOIS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON ROD AT THE NORTHWEST CORNER OF LOT 1 OF KLETTE'S SUBDIVISION AS SHOWN BY PLAT RECORDED IN PLAT CABINET 65 ON PAGE 182 OF THE MADISON COUNTY RECORDS; THENCE SOUTH 89 DEGREES 35 MINUTES 17 SECONDS EAST ALONG THE SOUTH RIGHT OF WAY LINE OF FRUIT ROAD 108.27 FEET; THENCE SOUTH 0 DEGREES 24 MINUTES 43 SECONDS WEST 205.00 FEET TO THE SOUTH LINE OF SAID LOT; THENCE NORTH 89 DEGREES 35 MINUTES 17 SECONDS WEST ALONG THE SOUTH LINE OF SAID LOT, 108.27 FEET TO AN IRON ROAD AT THE SOUTHWEST CORNER THEREOF; THENCE NORTH 0 DEGREES 24 MINUTES 43 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 205.00 FEET TO THE POINT OF BEGINNING, CONTAINING.

The Chain of title from January 1, 1930 is as follows:

Deed recorded August 12, 1931 in Book 658 Page 466 from O.H. Gehrs and D.H. Mudge, Executors of the Estate of Alexander W. Jeffress, Grantor to Fred Funke and Robert Funke, Grantee.

Deed recorded June 9, 1936 in Book 732 page 201 from Amy Black, Executrix of the Estate of Edward J. Jeffress, Mary J. Mudge and S. Hingley Mudge, her husband, Edna J. Ward, Edward W. Jeffress and Marion C. Jeffress, his wife, Mildred J. Bunn, and Amy J. Black and John W. Black, Grantor to Robert Funke and Fred Funke, Grantee.

Deed recorded February 1, 1940 in Book 796 page 157 from Leone Funke Yates and Raymond Yates, her husband, Grantor to Robert Funke, Grantee.

Deed recorded July 27, 1970 as document number Book 2701 page 299 from Edwardsville National Bank and Trust Company, as Trustee under the Will of Esther Funke, Deceased, Grantor to Kenneth L. Klette and Ina Ruth Klette as Joint tenants, Grantee.

Deed recorded September 3, 2008 as document number 2008R41450 from Kenneth LaVern Klette, Grantor to Kevin and Kelly Klette, Grantee.

(Affects Parcel 2)

Deed recorded August 22, 2013 as document number 2013R36632 from Kevin Klette and Kelly Klette, Grantor to Kenneth Klette, Grantee.

(Affects Parcel 2)

Deed recorded July 18, 2017 as document number 2017R23761 from Kay L. Greer, Independent Executrix of the Estate of Kenneth L. Klete, Grantor to Plocher Family Farms, Grantee.

Limitation of Liability for Informational Report

IMPORTANT - READ CAREFULLY: THIS REPORT IS NOT AN INSURED PRODUCT OR SERVICE OR A REPRESENTATION OF THE CONDITION OF TITLE TO REAL PROPERTY. IT IS NOT AN ABSTRACT, LEGAL OPINION, OPINION OF TITLE, TITLE INSURANCE COMMITMENT OR PRELIMINARY REPORT, OR ANY FORM OF TITLE INSURANCE OR GUARANTY. THIS REPORT IS ISSUED EXCLUSIVELY FOR THE BENEFIT OF THE APPLICANT THEREFOR, AND MAY NOT BE USED OR RELIED UPON BY ANY OTHER PERSON.

THIS REPORT MAY NOT BE REPRODUCED IN ANY MANNER WITHOUT FIRST AMERICAN'S PRIOR WRITTEN CONSENT. FIRST AMERICAN DOES NOT REPRESENT OR WARRANT THAT THE INFORMATION HEREIN IS COMPLETE OR FREE FROM ERROR, AND THE INFORMATION HEREIN IS PROVIDED WITHOUT ANY WARRANTIES OF ANY KIND, AS-IS, AND WITH ALL FAULTS. AS A MATERIAL PART OF THE CONSIDERATION GIVEN IN EXCHANGE FOR THE ISSUANCE OF THIS REPORT, RECIPIENT AGREES THAT FIRST AMERICAN'S SOLE LIABILITY FOR ANY LOSS OR DAMAGE CAUSED BY AN ERROR OR OMISSION DUE TO INACCURATE INFORMATION OR NEGLIGENCE IN PREPARING THIS REPORT SHALL BE LIMITED TO THE FEE CHARGED FOR THE REPORT. RECIPIENT ACCEPTS THIS REPORT WITH THIS LIMITATION AND AGREES THAT FIRST AMERICAN WOULD NOT HAVE ISSUED THIS REPORT BUT FOR THE LIMITATION OF LIABILITY DESCRIBED ABOVE. FIRST AMERICAN MAKES NO REPRESENTATION OR WARRANTY AS TO THE LEGALITY OR PROPRIETY OF RECIPIENT'S USE OF THE INFORMATION HEREIN.

This search reflects the "Grantee in Last Deed of Record" of the legal description provided to First American Title Insurance company as disclosed in Public Records established under state statutes and at the date shown. If requested by the applicant, it will also encompass general real estate taxes, mortgages, assignment, judgments and liens of record as shown in the Recorder's Office of the county where the subject property is located and which may constitute a lien on the described premises. It does not contain a search of any judicial proceedings in any court.

For your protection, please obtain a Title Commitment and subsequent Policy of Insurance.

First American Title Insurance Company

BY: Maegan Lorentzen

Summary of Title Work

Below is a summary of the title and encumbrances on the 161.92 acre tract of land currently owned by Plocher Family Farms, LLC ("Plocher Farm") as of June 12, 2020, which is the effective date of the title commitment prepared by First American Title Insurance Company.

OWNERSHIP

The 161.92 acre Plocher Farm is owned in fee simple by Plocher Family Farms, LLC , pursuant to an Independent Executrix's Deed from Kay Greer, executrix of the Estate of Kenneth L. Klette ("2017 Klette Deed") , which was recorded in Madison County, Illinois on July 18, 2017 with instrument number 2017R23761.

WFI Holdings-B LLC, as assignee of Columbia Acquisitions LLC, plans to purchase 73.17 acres of land on the western side of Plocher Farm ("Bank Site"), and intends to develop an approximately 70-acre mitigation bank ("SBWSMB") on that land.

MINERAL RIGHTS

First American Title Insurance Company performed an 80-year chain of title search on the Plocher Farm. The mineral rights appear to have remained attached to land up until the 2017 Klette Deed.

On July 7, 2020, the Sponsor spoke with the St. Louis District Army Corps of Engineers about mineral rights being severed on this project.

We attempted to contact Attorney Shannon Flanigan who drafted the 2017 Klette Deed to find out if the Klette Estate intentionally kept the mineral rights, and to ask about the possibility of re-attaching them to the land. Multiple attempts to reach Attorney Shannon Flanigan over the course of several weeks were unsuccessful.

EXISTING EASEMENTS AND ENCUMBRANCES

The title commitment lists the following easements and encumbrances currently affecting the Bank Site. The numbering below corresponds to the Exception Numbers on the June 12, 2020 title commitment prepared by First American Title Insurance Company.

3. Fifty-foot building setback line as shown on the plat of Klette's Subdivision recorded in Plat Cabinet 65, Page 182.

This is located on the north 50 feet of Klette's Subdivision, and encumbers Parcel 2 as well as tax ID 10-2-16-01-00-000-016. It affects the Bank Site but is a non-issue to the SBWSMB as there will be no buildings.

4. Twenty-foot wide utility easement as shown on the plat of Klette's Subdivision recorded in Plat Cabinet 65, Page 182.

We believe this is the same area as the Exception 6 Right of Way Easement for water transmission and distribution lines. It is located on the north 20 feet of Klette's Subdivision, and encumbers Parcel 2 as well as tax ID 10-2-16-01-00-000-016. The area covered by this easement affects a portion of the Bank Site but is excluded from the SBWSMB.

6. Right of Way Easement dated September 7, 1996 and recorded October 11, 1996 in Book 4084 Page 1275 as Roll and Frame No. 2232-382 made by Kenneth L. Klette and Ina Ruth Klette, husband and wife to Bond/Madison Water Company, its successors and assigns for the right to construct, lay, use, operate, maintain and remove water transmission and distribution lines and all rights thereto and terms thereof.

This easement affects the north 20 feet of Plocher Farm, southerly and adjacent to the road. The area covered by this easement affects the Bank Site but is excluded from the SBWSMB.

7. Easement for Rectifier Station dated February 11, 1998 and recorded March 11, 1998 in Book 4212 Page 1277 as Roll and Frame No. 2360-324 made by Kenneth L. Klette and Ina Ruth Klette to Marathon Ashland Pipe Line LLC, its successors and assigns, for the right to construct, operate, maintain, repair and remove a rectifier station for cathodic protection of pipelines and all rights thereto and terms thereof.

This easement grants Marathon Ashland Pipe Line the rights:

- a) to lay, construct, operate, inspect, maintain, repair, renew, change the size of and remove a rectifier station for cathodic protection of pipeline at any location it chooses anywhere in the Northwest Quarter of Section 1,
- b) of ingress and egress in, on, over and across the Northwest Quarter for any reason related to the above, and
- c) the right to trim and remove trees, brush, and vegetation within twenty-five feet of the rectifier station.

The entirety of the Bank Site, plus other land, is encumbered by this easement. However, if or when a rectifier station is built, our assumption is that it would be located on or near one of the pipelines (Exceptions 9, 10, 11) which are excluded from the SBWSMB, making this encumbrance a non-issue.

9. Right of Way Grant dated February 13, 2002 and recorded March 25, 2002 in Book 4484 Page 4648 as Document No. 2002R18332 made by Kenneth L. Klette and Ina Ruth Klette, husband and wife to Equilon Pipeline Company LLC, its successors and assigns for the right to lay, construct, maintain, operate and remove an oil and gas pipeline and its by-products and all rights thereto and terms thereof.

This easement affects the southern 50 feet of the Bank Site and is excluded from the SBWSMB. Grantee's access to the easement area will not affect the Bank Site, because the Grantee has historically accessed the western portion of the easement area by crossing the property to the south,

and because direct access to the eastern portion of the easement area is available via the adjacent property east of the Bank Site. The excluded areas allow for proper access.

10. Easement and Right of Way dated August 8, 2007 and recorded January 15, 2008 as Document No. 2008R02310 made by Kenneth L. Klette to Transcanada Keystone Pipeline LP, its successors and assigns for the right to lay, construct, maintain and remove an oil and gas pipeline and appurtenances and all rights thereto and terms thereof. Amendment recorded March 12, 2009 as Document No. 2009R12354.

This easement area is located north of the Equilon Pipeline (Exception 9) along part of the southern boundary of the Bank Site. The Amendment increases the size of the easement area from the Original Agreement.

This easement area is excluded from the SBWSMB. Grantee's access to the easement area will not affect the Bank Site, because the Grantee has historically accessed the western portion of the easement area by crossing the property to the south, and because direct access to the eastern portion of the easement area is available via the adjacent property east of the Bank Site. The excluded areas allow for proper access.

11. Right of Way Contract dated February 3, 1939 and recorded February 20, 1939 in Book 775 Page 404 made by Robert Funke, et al. to Illiana Company, its successors and assigns for the right to lay, maintain, operate and remove oil and gas pipelines and appurtenances and all rights thereto and terms thereof.

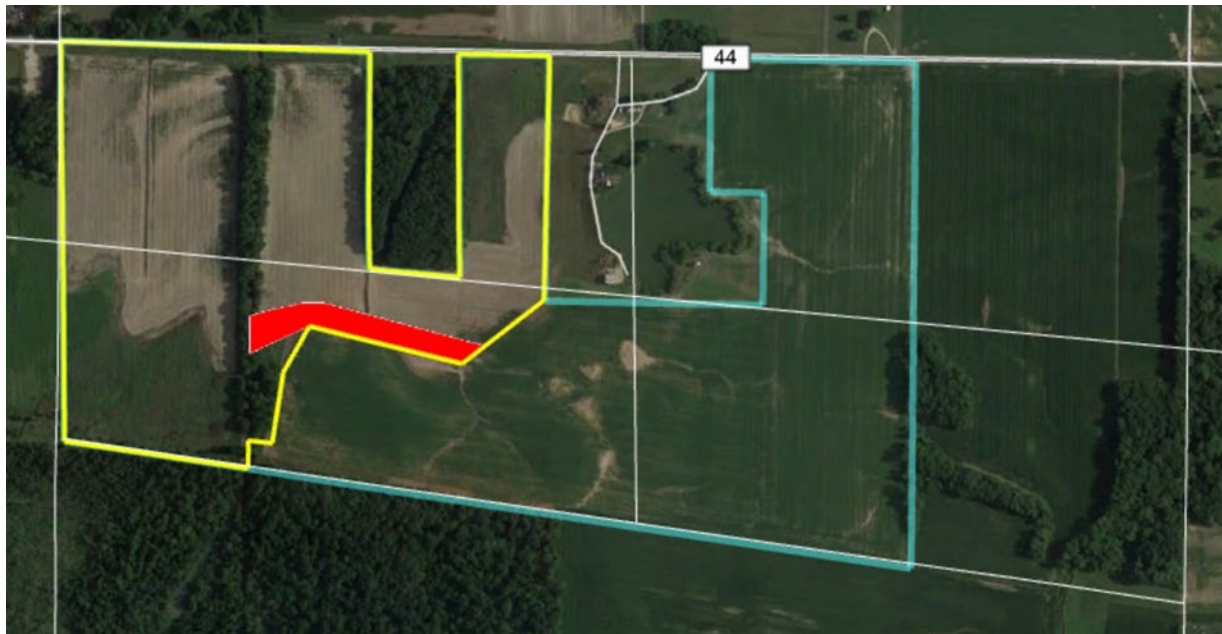
The pipeline under this easement runs from the southwest corner of the woods, on a diagonal toward Silver Creek. . The area where the pipeline is located, plus ____ feet on either side, is excluded from the SBWSMB.

12. Premises in Question is subject to a strip of land 66 feet wide to be used as road purposes contained in Warranty Deed recorded March 28, 1900 in Book 273 Page 72 made by Edward J. Jeffress to Pin Oak Township and all rights thereto and terms thereof. (For Further Particulars See Record)

This is a 66-foot wide right of way for the road to the north of Plocher Farm, and is excluded from the SBWSMB.

NEW EASEMENT PENDING

Concurrent with WFI Holdings-B LLC closing on the Bank Site, a permanent Drainage Easement benefitting the remainder of the Plocher Farm will be executed and recorded. The purpose of the Drainage Easement is to allow the remainder of the Plocher Farm, which is farmland, to drain onto the Bank Site through the existing surface ditch (as shown in red on the map below), or by any other route over the Purchase Area at the discretion of the owner of the Purchase Area. WFI Holdings-B LLC, or any future owner of the Bank Site shall be responsible for maintenance of the drainage system under this easement; preventing the owner of the remainder of Plocher Farm from affecting the SBWSMB.



Appendix 3

Conservation Easement

CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is given this ____ day of _____, 202__, (“Effective Date”) by **WFI Holdings-B LLC**, having an address of **248 Southwoods Center, Columbia, IL 62236** ("Grantor") to **HeartLands Conservancy**, an Illinois non-profit corporation, having an address of **29 E Main Street, Belleville, IL 62220** ("Grantee") and with a right of enforcement to the United States of America (“the United States”) acting by and through the United States Department of Agriculture (“USDA”). As used herein, the term "Grantor" shall include any and all heirs, successors, or assigns of the Grantor, and all subsequent owners of the Property (as hereinafter defined), and the term "Grantee" shall include any successor or assignee of Grantee.

WITNESSETH:

WHEREAS, Grantor is the sole owner in fee simple title of certain lands situated in Madison County, ILLINOIS, more particularly described in **Exhibit A** attached hereto and incorporated herein ("Property"), and

WHEREAS, Department Permit No. **MVS-2020-xxx** of the U.S. Army Corps of Engineers ("Corps") (hereinafter referred to as the "Permit") authorizes certain activities which affect waters of the United States; and

WHEREAS, the Protected Property, as defined herein, is adjacent to or in the vicinity of the Scott Air Force Base (the “Installation”), and therefore, the United States of America, acting by and through the USAF Secretary or his or her delegate entered into an agreement DATE pursuant to 10 U.S.C. § 2684a (“2684a Agreement”) with Heartlands Conservancy, a qualified eligible entity, to receive USAF contribution(s) to acquire interests in property such as the Protected Property in the vicinity of the Installation in order to limit encroachment on military training, testing, and operations and otherwise meet the objectives of the USAF and the Grantee through such acquisition from a willing landowner. Thus, it is also the purpose of this Easement to limit any development or use of the Protected Property that would otherwise be incompatible with the mission of the Installation, or might interfere, whether directly or indirectly, with current or future military training, testing, or operations on or near the Installation (collectively, “Mission Compatibility Purposes”).

WHEREAS, the permits require that Grantor preserve, enhance, restore, or mitigate wetlands or uplands located on the Property and under the jurisdiction of the Corps; and

WHEREAS, Grantor, in consideration of the issuance of the permits to construct and operate the permitted activity, and as an inducement to Grantee and the Corps to issue the Permits, is willing to grant a perpetual Conservation Easement over the Property; and

NOW THEREFORE, in consideration of the above and mutual covenants, terms conditions, and restrictions contained herein, together with other good and valuable consideration,

the adequacy and receipt of which is hereby acknowledged, Grantor hereby voluntarily grants and conveys a perpetual Conservation Easement for and in favor of Grantee upon the property, which shall run with the land and be binding upon the Grantor, and shall remain in full force and effect forever.

The scope, nature, and character of this Conservation Easement shall be as follows:

1. **Purpose:** The purpose of this Conservation Easement is to retain and maintain land or water areas on the Property in their natural, vegetative, hydrologic, scenic, open, agricultural, or wooded condition and to retain such areas as suitable habitat for fish, plants, or wildlife. Those wetland or upland areas that are to be restored, enhanced, or created pursuant to the Permit shall be retained and maintained in the restored, enhanced, or created condition required by the Permit.

2. **Rights of Grantee:** The following rights are conveyed to Grantee and the Corps by this easement:

a. The right to take action to preserve and protect the environmental value of the Property; and

b. The right to prevent any activity on or use of the Property that is inconsistent with the purpose of this Conservation Easement, and to require the restoration of areas or features of the Property that may be damaged by any inconsistent activity or use;

c. The right to enter upon and inspect the Property in a reasonable manner and at reasonable times to determine if Grantor is complying with the covenants and prohibitions contained in this Conservation Easement; and

d. The right to proceed at law or in equity to enforce the provisions of this Conservation Easement, and to prevent the occurrence of any of the prohibited activities hereinafter set forth.

3. **Prohibited Uses:** Except for restoration, creation, enhancement, maintenance, and monitoring activities, or surface water management improvements, which are permitted or required by the Permit, the following activities are prohibited on the Property:

a. Construction or placing of buildings, roads, signs, billboards or other advertising, utilities, or other structures on or above the ground, or the construction or placing of structures below the ground that may impact the surface of the Property;

b. Dumping or placing of soil or other substance or material as landfill, or dumping or placing of trash, waste, or unsightly or offensive materials;

c. Removal or destruction of trees, shrubs, or other vegetation, except as may be permitted by the Permit, and except for the removal of nuisance, exotic, or non-native vegetation in accordance with a maintenance plan approved by Grantee;

d. Planting of nuisance, exotic, or non-native plants as listed by the State of ILLINOIS;

e. Exploration for, or extraction of, oil or gas in such a manner as to affect the surface, or excavation, dredging, or removal of coal, loam, peat, gravel, soil, rock, or other material substance, except as may be permitted or required by the Permit;

f. Use of motorized and non-motorized vehicles, the keeping or riding of horses, grazing, livestock confinement, or other surface use that may affect the natural condition of the Property, except for vehicle use for purposes of maintenance and upkeep, or as otherwise may be permitted or required by the Permit; vehicle use as necessary to remove wild game harvested from the Property is not prohibited;

g. Tilling, plowing, planting of crops, digging, mining, or other activities that are or may be detrimental to drainage, flood control, water conservation, water quality, erosion control, soil conservation, or fish and wildlife habitat preservation, including but not limited to ditching, diking, and fencing, except as permitted or required by the Permit;

h. The extraction of water from the Property or adjacent properties owned by Grantor, or the impoundment of water on the Property or on adjacent properties owned by Grantor, so as to affect the hydrology of the Property;

i. Acts or uses detrimental to the aforementioned retention and maintenance of land or water areas;

j. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance.

k. The subdivision of the Property.

4. **Reserved Rights:** Grantor reserves all rights as owner of the Property, including the right to engage in uses of the Property that are not prohibited herein and that are not inconsistent with any Corps rule, criteria, permit, or the intent and purposes of this Conservation Easement.

5. **Taxes:** Grantor shall pay any and all applicable real property taxes and assessments levied by competent taxing authority on the Property.

6. **Maintenance:** Grantee shall, at Grantee's sole expense, operate, maintain and keep up the Property consistent with the purpose of this Conservation Easement. Grantee shall remove from the Property any nuisance, exotic, or non-native plants as listed by the State of ILLINOIS and shall maintain the hydrology of the Property as it currently exists or as otherwise required by the Permit.

7. **Hazardous Waste:** Grantor covenants that as of the Effective Date it has not received written notice of any hazardous substances or toxic waste that exists or has been generated, treated, stored, used, disposed of, or deposited in or on the Property, nor has Grantor received written notice of any underground storage tanks on the Property. Grantor shall be responsible for

any and all necessary costs of remediation of any hazardous materials on the Property of which Grantor has received written notice as of the Effective Date.

8. **Public Access:** No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement, and Grantor further covenants not to hold any portion of the Property open to general use by the public except with the written permission of the Corps and Grantee.

9. **Liability:** Grantor shall continue to retain all liability for any injury or damage to the person or property of third parties that may occur on the Property arising from ownership of the Property. Neither Grantor, nor any person claiming by or through Grantor, shall hold Grantee or the Corps liable for any damage or injury that may occur on the Property.

10. **Recording Requirements:** Grantor shall record this Conservation Easement in the official records of Madison County, ILLINOIS, and shall re-record it at any time Grantee or the Corps may require to preserve their rights. Grantor shall pay all recording costs, fees and taxes necessary at any time to record this Conservation Easement in the public records. Grantor shall thereafter insert the terms and restrictions of this Conservation Easement ("Restrictions") in any subsequent deed or other legal instrument by which Grantor divests himself/herself/itself of any interest in the Property, and shall provide a photocopy of the recorded Conservation Easement to the new owner(s).

11. **Enforcement:** The terms and conditions of this Conservation Easement may be enforced in an action at law or equity by the Grantee or the Corps against the Grantor or any other party violating or attempting to violate these Restrictions. Enforcement of this Conservation Easement shall be at the reasonable discretion of the Grantee or the Corps, and any forbearance on behalf of Grantee or the Corps to exercise its or their rights hereunder in the event of any breach by Grantor shall not be deemed or construed to be a waiver of rights. Any costs incurred in enforcing, judicially or otherwise, the terms, provisions, and restrictions of this Conservation Easement, including without limitation, the costs of suit, and attorney's fees, shall be borne by and recoverable against the non-prevailing party in such proceedings, except that such costs shall not be recoverable against the Corps. In addition, if the Grantee or the Corps shall prevail in an enforcement action, such party shall also be entitled to recover that party's cost of restoring the land to the natural vegetative and hydrologic condition existing at the time of execution of these Restrictions or to the vegetative and hydrologic condition required by the Permits.

12. **Assignment of Rights:** Grantee shall hold this Conservation Easement exclusively for conservation purposes. Grantee will not assign its rights and obligations under this Conservation Easement, except to another legal entity qualified to hold such interests under applicable state and federal laws and committed to holding this Conservation Easement exclusively for the purposes stated herein. Grantee shall notify the Corps in writing of any intention to reassign this Conservation Easement to a new grantee at least sixty (60) days in advance thereof, and the Corps must accept the assignment in writing. The new grantee shall then deliver a written acceptance to the Corps. The assignment instrument must then be recorded and indexed in the same manner as any other instrument affecting title to real property and a copy of the assignment instrument shall be furnished to the Corps. Failure to comply with the assignment procedure herein stated shall result in invalidity of the assignment. In the event of dissolution of the Grantee or any

successor, or failure for 60 days or more to execute the obligations of this Conservation Easement, the Grantee shall transfer this Conservation Easement to a qualified and willing grantee. Upon failure of the Grantee or any successor to so transfer the Conservation Easement, the Corps shall have the right to sue to force such an assignment to a grantee to be identified by the Court.

13. Rights of the United States: Grantee shall notify the United States in writing and obtain its written approval prior to transferring this Conservation Easement to another person or entity. If Grantee attempts to transfer or otherwise divest itself of this Conservation Easement without such approval, such transfer shall be legally ineffective, and the Secretary of the Air Force, at his or her option and through his or her delegate, shall have the right to demand transfer of this Conservation Easement to the United States and the Grantee and Grantor shall agree and execute such transfer. Any approved deed of transfer shall include the third party rights of the United States as set forth in this section and the requirements that all terms, restrictions, conditions, and purposes set forth in this Conservation Easement are to be continued in perpetuity by reference to this Conservation Easement.

A. Any amendment of this Conservation Easement, only as authorized in this Conservation Easement shall require the approval of the United States acting by and through the USDA, which shall be evidenced by its written acceptance of the deed of amendment.

B. Should Grantee fail to carry out its obligation to monitor and enforce this Conservation Easement to assure compliance with its terms, restrictions, and conditions that keep the property compatible with the mission of the Installation, the United States, acting by and through the authorized delegate of the Secretary of the Air Force, shall have the same rights as Grantee with respect to this Conservation Easement, including the right to inspect the property and enforce such terms, restrictions and conditions.

C. Should Grantee allow the property to be used for a purpose inconsistent with this Conservation Easement, its terms, restrictions, or conditions, the Secretary of the Air Force, at his or her option and through his or her delegate, shall have the right to demand transfer of this Conservation Easement to the United States and the Grantor and Grantee shall agree and execute such transfer.

D. Notwithstanding these specified occasions upon which the Secretary of the Air Force, at his or her option and through his or her delegate, has the right to demand transfer of this Conservation Easement, the Secretary of the Air Force shall have right to demand such transfer of this Conservation Easement at any time for any other purpose it deems necessary to fulfill the purposes of the Conservation Easement, especially the mission compatibility purposes, and the obligations of the United States, and the Grantor and Grantee shall agree and execute such transfer.

E. In the event that this Conservation Easement is transferred to the United States pursuant to this section, the purposes, terms, restrictions, and conditions of this Conservation Easement shall continue to run with the land and be binding on Grantor, the United States, and any subsequent transferees.

14. **Successors:** The covenants, terms, conditions, and restrictions of this Conservation Easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors, and assigns, and shall continue as a servitude running in perpetuity with the Property.

15. **Notices:** All notices, consents, approvals, or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest.

16. **Severability:** If any provision of this Conservation Easement or the application thereof to any person or circumstances is found to be invalid, the remainder of the provisions of this Conservation Easement shall not be affected thereby, as long as the purpose of the Conservation Easement is preserved.

17. **Alteration or Revocation:** This Conservation Easement may be amended, altered, released, canceled, or revoked only by written agreement between the parties hereto or their heirs, assigns, or successors in interest, which shall be filed in the public records of Madison County, ILLINOIS. No action shall be taken, however, without advance written approval thereof by the Corps. Corps approval shall be by letter attached as an exhibit to the document amending, altering, canceling, or revoking the Conservation Easement, and said letter shall be informal and shall not require notarization. It is understood and agreed that Corps approval requires a minimum of sixty (60) days written notice, and that the Corps may require substitute or additional mitigation, a separate conservation easement or alternate deed restrictions, or other requirements as a condition of approval. Any amendment, alteration, release, cancellation, or revocation together with written Corps approval thereof shall then be filed in the public records of Madison County, ILLINOIS, within 30 days thereafter.

18. **Controlling Law:** The interpretation and performance of this Conservation Easement shall be governed by the laws of the State of ILLINOIS.

TO HAVE AND TO HOLD unto Grantee forever. The covenants, terms, conditions, restrictions, and purpose imposed with this Conservation Easement shall be binding upon Grantor, and shall continue as a servitude running in perpetuity with the property.

GRANTOR FURTHER COVENANTS that Grantor is lawfully seised of said Property in fee simple; that the Property is free and clear of all encumbrances that are inconsistent with the terms of this Conservation Easement and that no mortgages or other liens exist; that Grantor has good right and lawful authority to convey this Conservation Easement, and that it hereby fully warrants and defends the title to the Conservation Easement hereby conveyed against the lawful claims of all persons whomsoever. Notwithstanding this last paragraph of the Conservation Easement, Grantor shall have the right to mortgage the Property so long as any such mortgage is subordinated to the Conservation Easement.

[Signature Pages Follow]

IN WITNESS WHEREOF, the Grantor has executed this Conservation Easement this _____ day of _____, 20____.

Signed in the presence of:

GRANTOR:

Print Witness Name: _____

WFI Holdings-B LLC

By: Chris Elliott

Print: _____

Title: _____

Print Witness Name: _____

STATE OF ILLINOIS
COUNTY OF _____

The foregoing Conservation Easement was acknowledged before me this _____ day of _____, 20____, by _____ as _____ of _____ who is personally known to me or has produced _____ as identification.

My Commission Expires:

NOTARY PUBLIC

IN WITNESS WHEREOF, the Grantee has executed this Conservation Easement this _____ day of _____, 20____.

Signed in the presence of:

GRANTEE:

Print Witness Name: _____

HeartLands Conservancy

By: _____

Print: _____

Title: _____

Print Witness Name: _____

STATE OF ILLINOIS
COUNTY OF _____

The foregoing Conservation Easement was acknowledged before me this _____ day of _____, 20____, by _____ as _____ of _____ who is personally known to me or has produced _____ as identification.

My Commission Expires:

NOTARY PUBLIC

EXHIBIT A

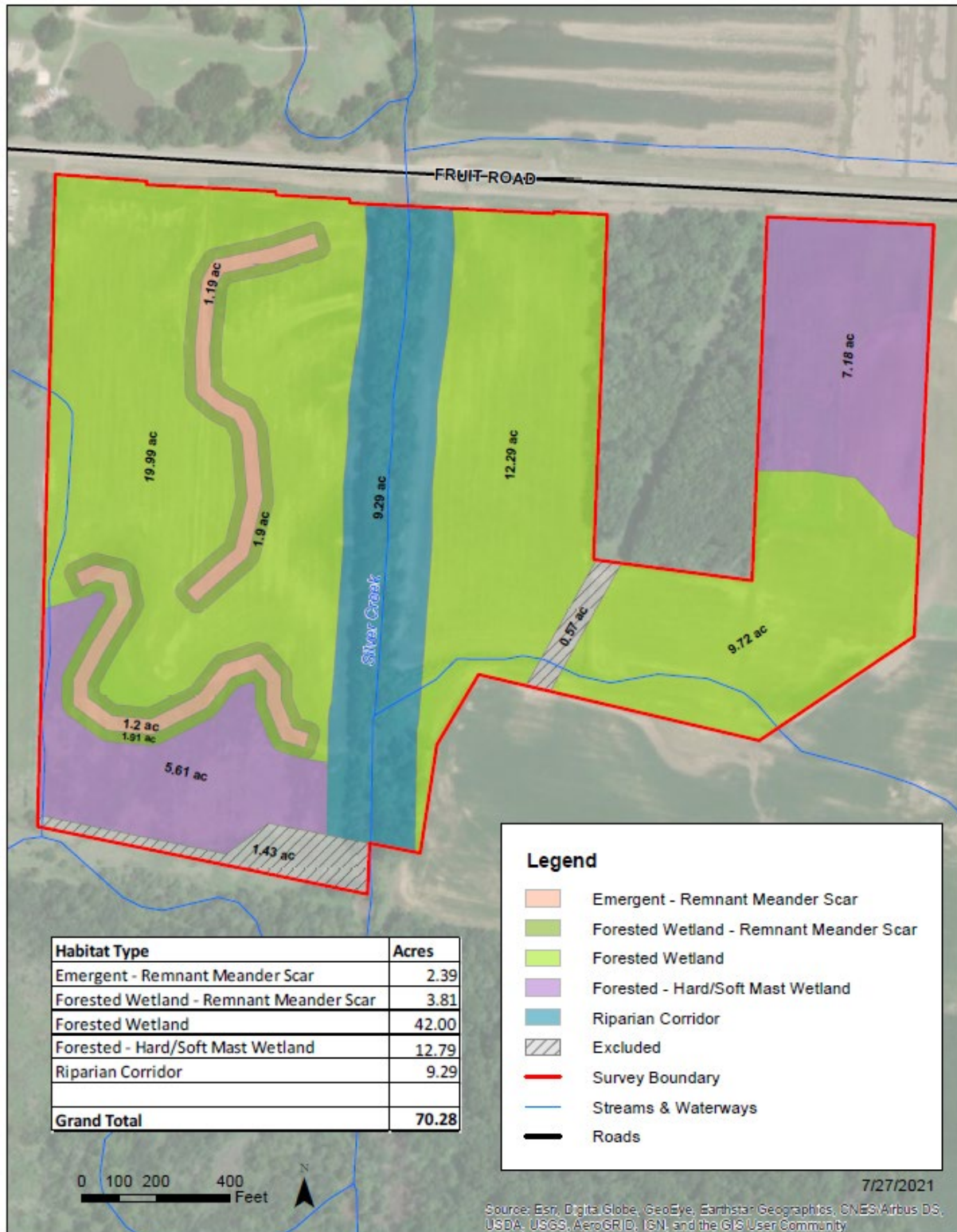
Legal Description

[insert legal description]

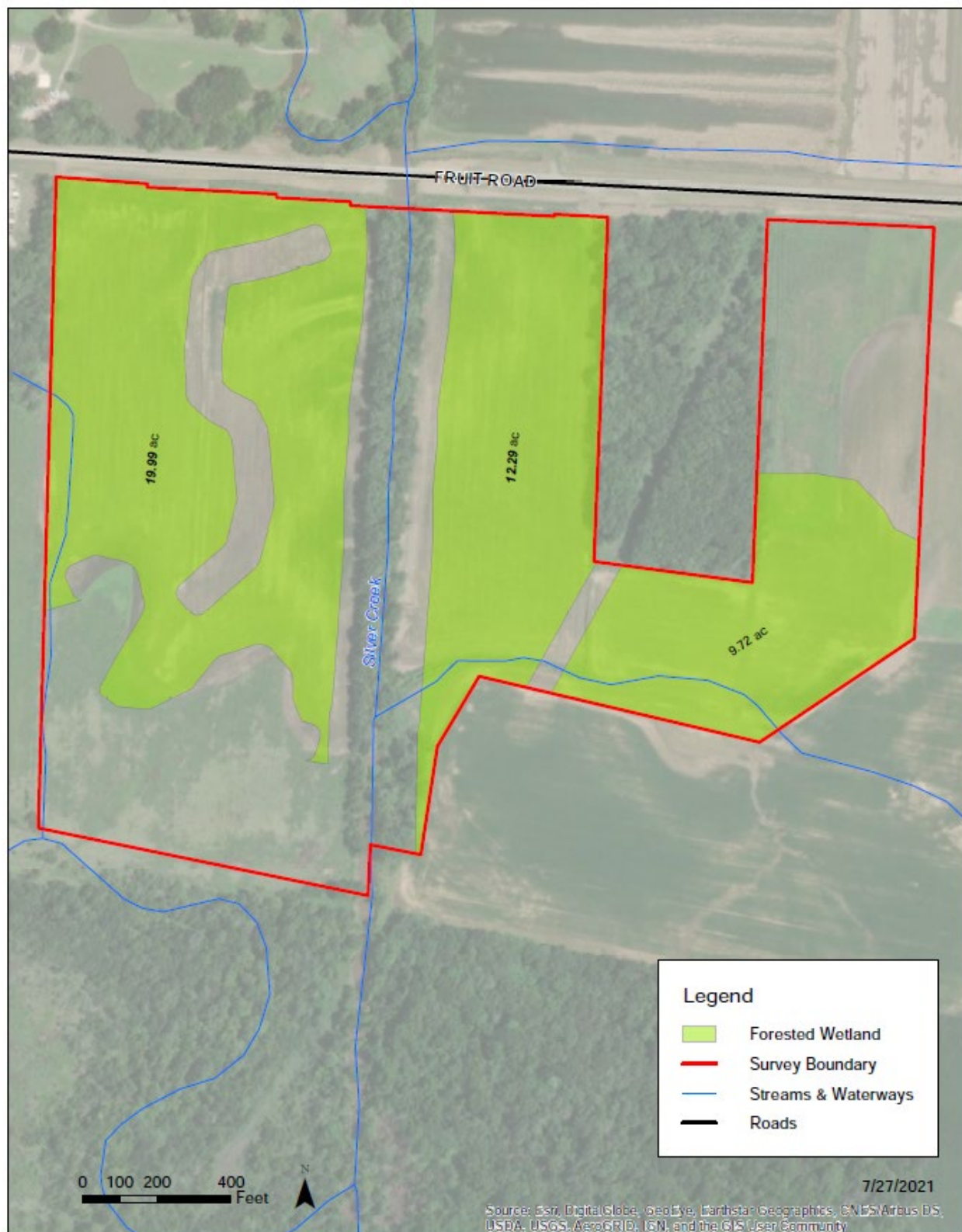
Appendix 4

Mitigation Work Plan Drawings

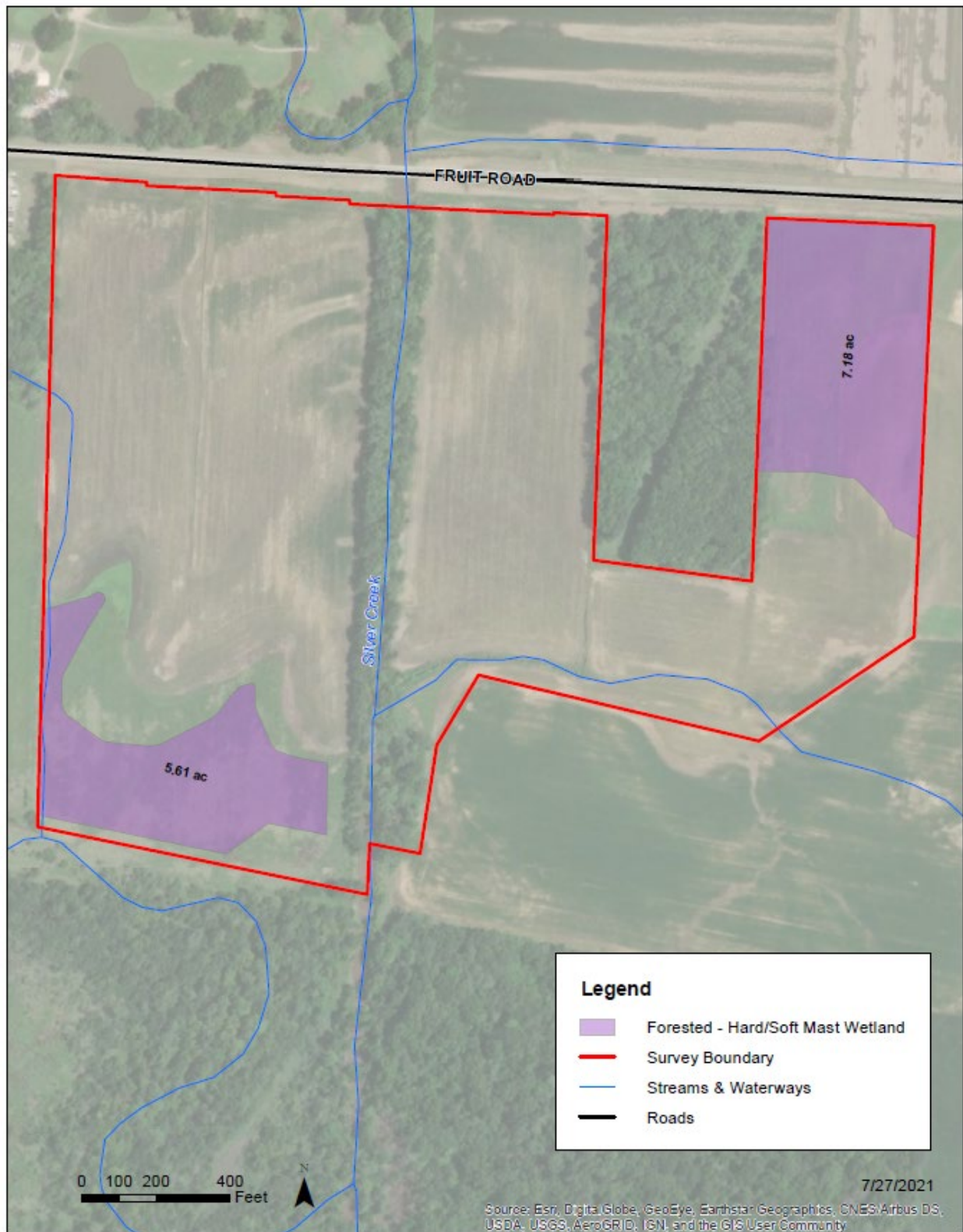
Silver Banks Habitat Plan



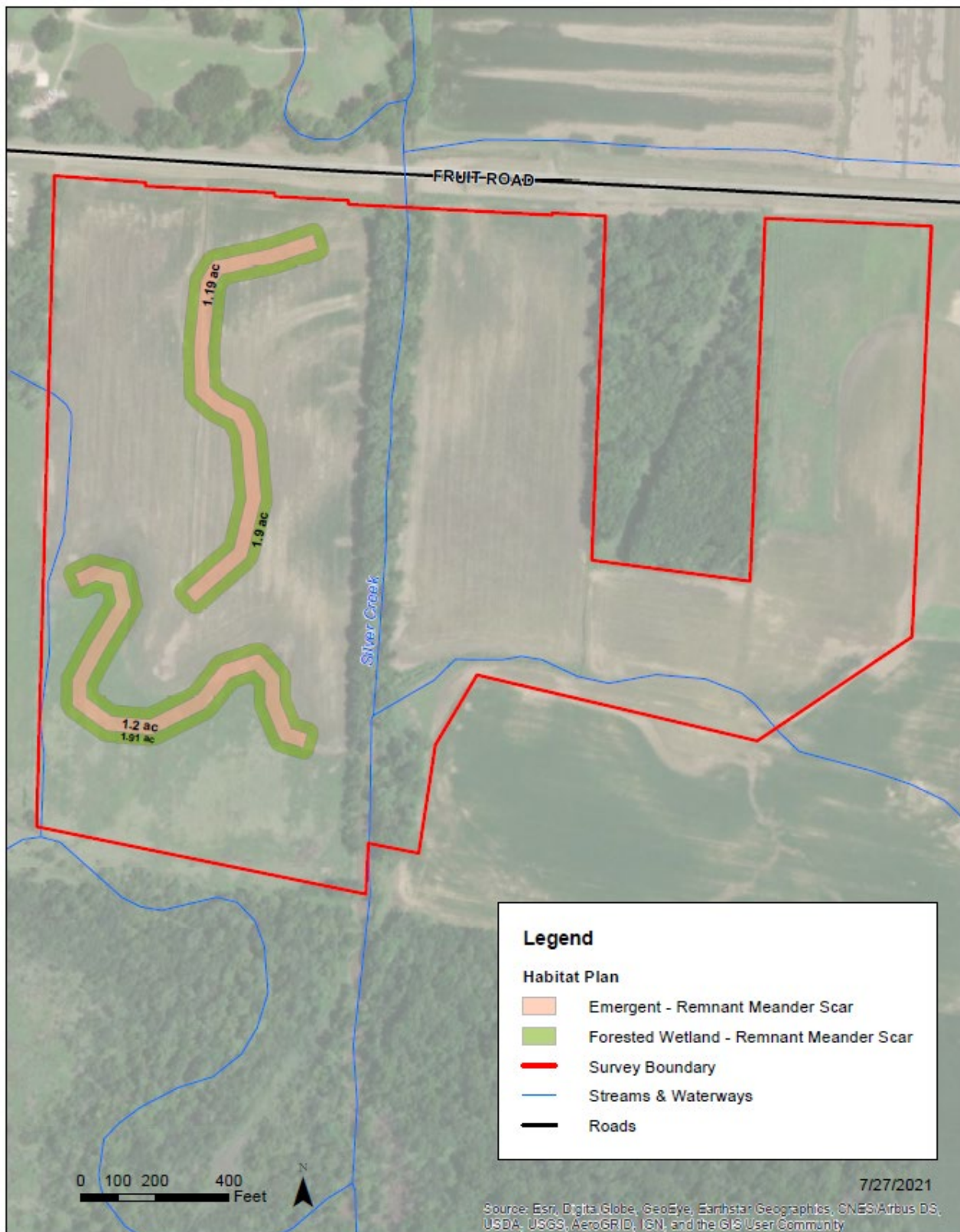
Silver Banks Habitat Plan - Forested Wetland



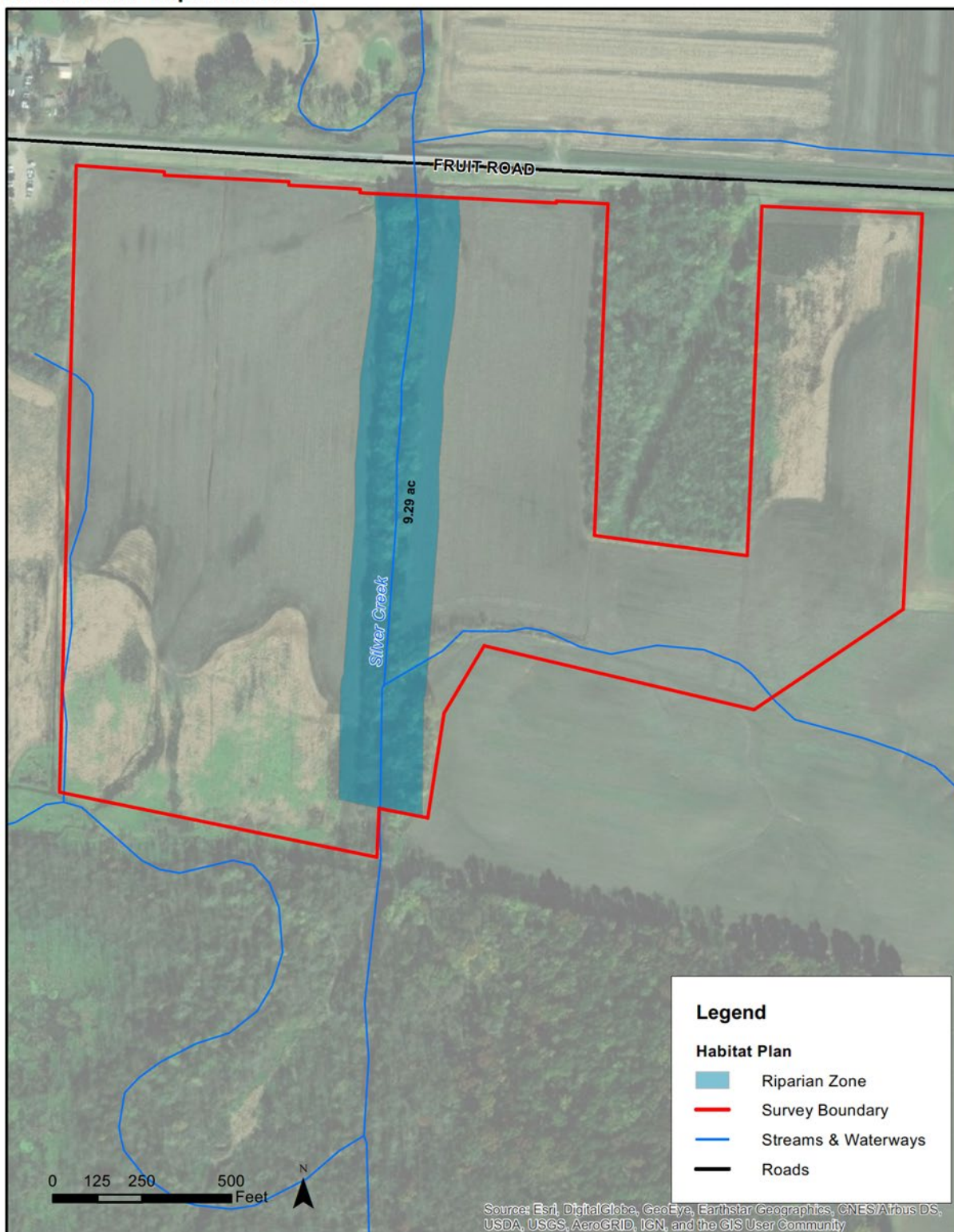
Silver Banks Habitat Plan Forested - Hard/Soft Mast Wetland



Silver Banks Habitat Plan - Remnant Meander Scars



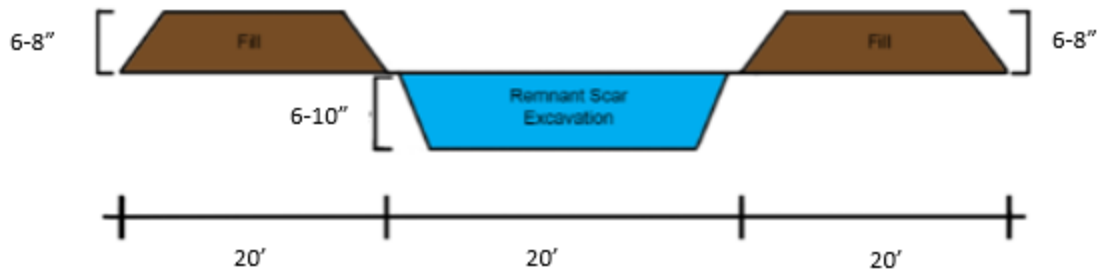
Habitat Plan - Riparian Zone



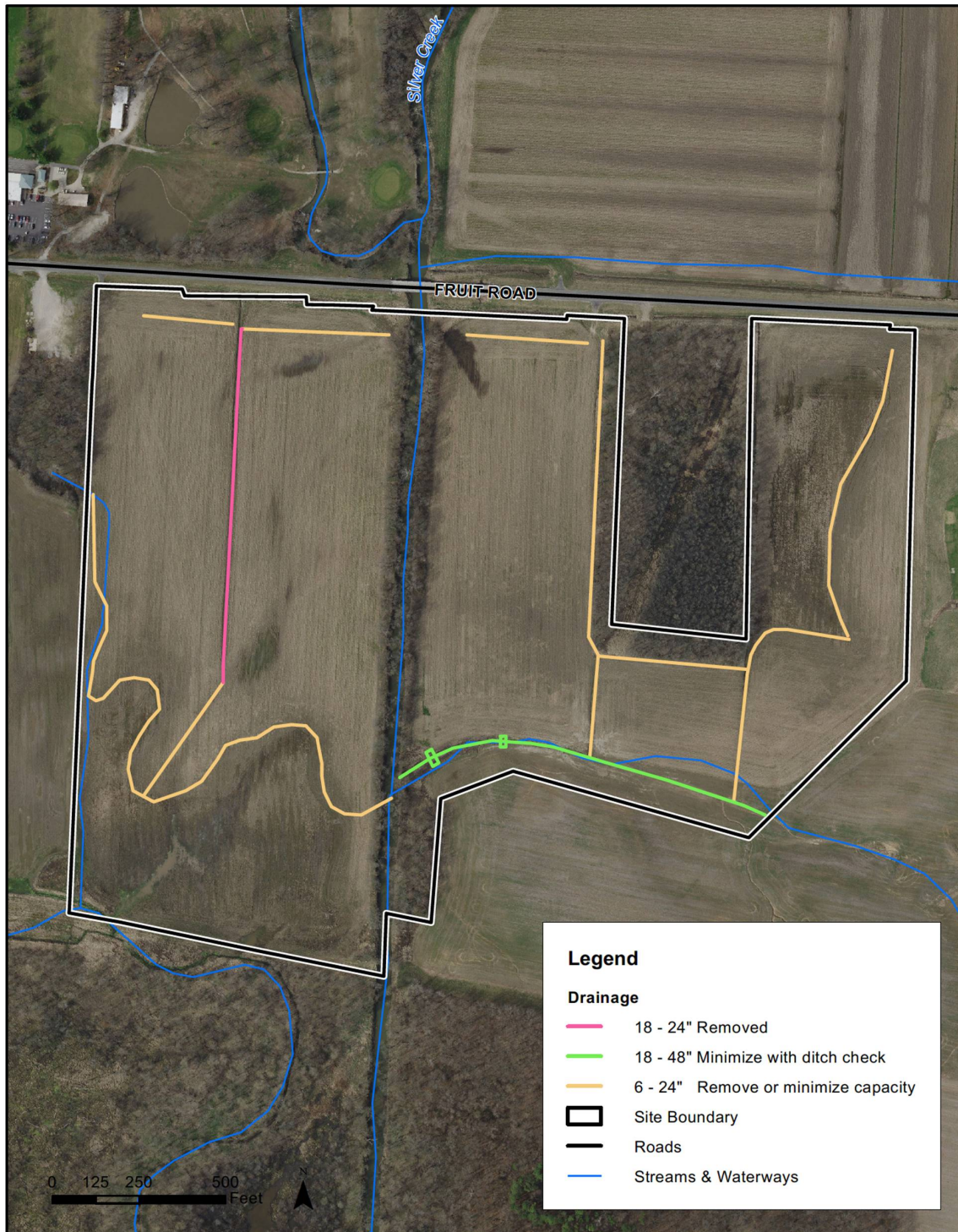
Construction Berms/Mounds



Cross Section
Remnant Scar Channel
Silver Bank WMB



Ditch Locations and Actions



Appendix 5

Long-Term Management and Maintenance Plan Agreement

LONG-TERM MANAGEMENT AND MAINTENANCE PLAN

AGREEMENT

SILVER BANKS WETLAND AND STREAM MITIGATION BANK

This Plan will guide the long-term management of the Silver Banks Wetland and Stream Mitigation Bank, sponsored by WFI Holdings-B LLC. in Madison County, Illinois. The property ownership is held by WFI Holdings-B LLC.

The Plan takes effect when the performance standards have been met and the Project Close-out Report is approved by the USACE – St. Louis District Regulatory Branch. Initial estimate for when the Long-Term Management Plan is scheduled to begin is 2028. WFI Holdings-B LLC established an endowment (reference Financial Assurances Appendix 6) to fund long-term management at the Mitigation Site by the Long-Term Steward (Heartlands Conservancy - Steward). Following transfer of management responsibilities upon Mitigation Bank closure, WFI Holdings-B LLC to the Steward, authority and responsibility for implementing the long-term management plan will reside with the Steward.

LONG-TERM MANAGEMENT GOALS AND OBJECTIVES

The Mitigation Bank possesses wetland habitat and wildlife values important to the Steward, the people of the State of Illinois, and the people of the United States. The Mitigation Bank provides high quality restored, enhanced and preserved wetlands and contains jurisdictional waters of the United States and the State of Illinois. Individually and collectively, these habitat and wildlife values comprise the “Conservation Values” of the Mitigation Bank.

The goal of long-term management is to ensure that the Conservation Values of the Mitigation Site are managed, monitored and maintained over the long term by transferring management responsibilities to a qualified long-term Steward upon Mitigation Bank closure. Long-term management is intended to be adaptive, as defined in the federal mitigation rule (U.S. Army Corps of Engineers 2008) cited below:

Adaptive management means the development of a management strategy that anticipates likely challenges associated with compensatory mitigation projects and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects. It requires consideration of the risk, uncertainty, and dynamic nature of compensatory mitigation projects and guides modification of those projects to optimize performance. It includes the selection of appropriate measures that will ensure that the aquatic resource functions are provided and involves analysis of monitoring results to identify potential problems of a compensatory mitigation project and the identification and implementation of measures to rectify those problems.

The wetlands at the Mitigation Bank will not be altered without obtaining all appropriate permits and clearances from regulatory agencies.

Long-term management is intended to promote the long-term functionality of forested wetlands.

Long-term management objectives for the Mitigation Bank are as follows:

- Maintain diverse forested wetland communities dominated by native species;
- Establishment of a Climax Bottomland Hardwood Forest;
- Maintain buffer habitat that supports overall site functionality for wetland habitats;
- Maintain improved habitat conditions for wildlife.

Limits of Responsibility

The Steward will not be responsible for Mitigation Bank failure attributed to natural catastrophes such as flood, drought, disease, regional pest infestation, and others that are beyond their reasonable control. Active management is not expected for ecological change that comes about as a result of processes such as climate change, fluctuating river levels, and sedimentation due to overbank flood deposits that may affect the wetlands. Over time, natural successional processes will occur that may reduce wetland functioning or reduce wetland area.

LONG-TERM MANAGEMENT AND MAINTENANCE

The Plan describes long-term management needs, roles and responsibilities of the Steward. The Steward will retain qualified staff and/or contractors with adequate ecological and biological qualifications to manage the Mitigation Bank. Prior to taking over management of the Mitigation Bank, the Steward will have ample time to work with WFI Holdings-B LLC while the Mitigation Bank remains under WFI Holdings-B LLC's management responsibility in order for the Steward to become comfortable with the tasks associated with long term Mitigation Bank management. Permits necessary to implement management actions on the Mitigation Bank will be held by the Steward in the form of the Conservation Easement. The Steward will be compensated by WFI Holdings-B LLC through an Endowment for management, maintenance and monitoring period associated with the conservation easement. The management and maintenance endowment will provide financial support of long-term operations and maintenance associated with a forested wetland, riparian corridor and upland oak habitat. However, the Steward, at their discretion, may provide a higher level of monitoring and operation and maintenance than is described in this plan.

The Conservation Easement (CE) holder (HeartLands Conservancy) and the Long-Term Steward (HeartLands Conservancy) will be responsible for the management of the site for various activities. Specifically, these include encroachment enforcement such as signage, dumping, trespassing activities according to the CE and other prohibited actions. The general condition of the site will be addressed by HeartLands Conservancy as the Steward of the ecological condition of the site for operations and maintenance of the site.

The restoration site's long-term management should reflect activities that are associated with long-term timberland management. The bank sponsor employed a Consulting Forester, Mr. Matt Thompson, Bartelso, IL to develop a long-term management plan for the site, specifically Item 6 - Planned Management Activity Schedule for Forestry Practices, attached.

MONITORING

General Monitoring Protocol

Long-term monitoring will employ adaptive management of the Mitigation Bank. Since the wetlands are intended to be self-sustaining, performance standards are purposefully less rigorous than those identified and used during Mitigation Bank establishment and operational period. Unless otherwise noted, monitoring will occur annually during the growing season in order to trigger necessary management activities that will protect wetland functions and to maintain a consistent annual record of wetland conditions. More frequent monitoring visits, such as a spring, mid-summer, and fall visit, are recommended in order to manage the site. Reports will be submitted to the USACE – St. Louis District Regulatory Branch for a period of five (5) years following the close-out report. There will be no requirement to submit monitoring reports to the regulatory agencies after the five years of submissions. The Steward will have access to the monitoring reports prepared by WFI Holdings-B LLC during the (pre close-out) 7-year performance monitoring period.

Hydrology Monitoring

The primary source of hydrology for the Bank Site is via surface water runoff from adjacent property, and from Silver Creek. Monitoring of wetland hydrology in the general region of the Mitigation Bank wetlands will ensure that wetland hydrology continues to be present on the site, a requirement for the persistence of the wetlands. To determine whether a stable hydrologic condition exist between the site and the Silver Creek, the Steward will collect data utilizing the USACE Wetland Determination Data Forms. Surficial observations and soil samples will be taken annually and entered into the Data Forms. The site will be photo-documented annually in late spring or early summer, capturing indicators of hydrologic function, hydrophytic vegetation, saturated soils, standing water, macroinvertebrates, stressed upland vegetation, and sediment deposits.

Vegetation Monitoring

The cover of native herbaceous wetland plants is expected to be self-sustaining by Mitigation Bank Closure and the end of the performance standard monitoring and will not be monitored over the long-term. However, the cover of invasive non-native plants, and estimated stem counts of native woody plants along the edges of the wetlands will be monitored over the long-term.

Non-native Invasive Species

The establishment and spread of invasive non-native species is one of the greatest long-term threats to the functioning of the Mitigation Bank. The Steward will monitor the Mitigation Site as necessary to meet the intent of the Illinois Department of Natural Resources for its Noxious Weed Policy as identified in the Conservation Easement. Any non-regulated weed control activities, such as non-chemical weed removal, will commence without regulatory input. During Mitigation Bank establishment, invasive weed control will be conducted. New infestations of noxious weed species should be identified during the annual inspection and a management strategy employed to eliminate the invasive species.

LONG-TERM MANAGEMENT AND MAINTENANCE PLAN

AGREEMENT

SILVER BANKS WETLAND AND STREAM MITIGATION BANK

HEARTLANDS CONSERVANCY

By: _____

PROJECT MANAGER, REGULATORY

BRANCH, U.S. ARMY CORPS OF

ENGINEERS

By: _____

WFI HOLDINGS-B LLC

MITIGATION BANK SPONSOR

By: _____

Heartlands Conservancy LTMP Calculation

- Boundary Inspection
- Signage Inspection
- Invasive Species Management
- Debris Removal
- Administration

Land Management and Maintenance Costs										
NOTE: Enter values in blue-shaded cells. Click on individual Tasks and Descriptions for additional guidance.										
Management and Maintenance Tasks	Description	Regular Staff (hours)	Short-term Staff (hours)	Quantity	Unit	Unit Cost	Extended Cost	Recurrence Interval (years)	Annual Cost	Subtotal
Infrastructure Maintenance and Replacement										\$ 440.93
Travel expenses recurring annually	Number of trips annually			0.5	# trips					
	Overnight stays for annual site visit(s)			0	# nights	\$ 18.56	\$ 18.56	1	\$ 18.56	
	Allowance for meals (# of days) for annual site visit(s)			0	# days					
Travel expenses (non-annual trips)	Number of trips			1	# trips					
	Overnight stays for site visit(s)			0	# nights	\$ 37.12	\$ 37.12	3	\$ 12.37	
	Allowance for meals (# of days) for site visit(s)			0	# days					
Site visit	Inspect boundaries, signs, other infrastructure. Include prep time, travel time and time on-site.	1	3		hours		\$ 146.00	1	\$ 146.00	
Remove trash and rectify trespass, vandalism	Trash removal and addressing trespass, vandalism	0	2		hours		\$ 64.00	1	\$ 64.00	
Replace fence	Materials or Contract Amount				linear ft	\$ -	\$ -	1	\$ -	
	Labor or Staff Oversight				hours		\$ -		\$ -	
Replace signs	Material (add description)			1	ea	\$ 200.00	\$ 200.00	1	\$ 200.00	
	Labor (may be included in annual site visit)				hours		\$ -		\$ -	
Other (select from drop-down)	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -	
	Labor or Staff Oversight				hours		\$ -		\$ -	
Equipment daily use rate	Vehicle (add description)				day	\$ -	\$ -	1	\$ -	
	Other (select from drop-down list)				day	\$ -	\$ -	1	\$ -	
Equipment replacement	Vehicle (add description)				ea	\$ -	\$ -	1	\$ -	
	Other (select from drop-down list)				ea	\$ -	\$ -	1	\$ -	
Ecological Management										\$ 1,130.15
Travel expenses	Number of trips annually			1.5	# trips					
	Overnight stays for annual site visit(s)			0	# nights	\$ 55.68	\$ 55.68	1	\$ 55.68	
	Allowance for meals (# of days) for annual site visit(s)			0	# days					
Travel expenses (non-annual trips)	Number of trips			1	# trips					
	Overnight stays for site visit(s)			0	# nights	\$ 37.12	\$ 37.12	3	\$ 12.37	
	Allowance for meals (# of days) for site visit(s)			0	# days					
Update management plan	Review and update management plan	1	4		hours		\$ 178.00	5	\$ 35.60	
Ecological monitoring	Monitoring T&E species, inventories, reporting	1	4		hours		\$ 178.00	1	\$ 178.00	
	Supplies			20	ea	\$ 0.50	\$ 10.00		\$ 10.00	
Invasive species control (plants)	Materials or Contract Amount			1	ea	\$ 200.00	\$ 200.00	3	\$ 66.67	
	Labor or Staff Oversight	4	16		hours		\$ 712.00		\$ 237.33	
Nuisance wildlife control	Materials or Contract Amount			1	ea	\$ 250.00	\$ 250.00	4	\$ 62.50	
	Labor or Staff Oversight	0	2		hours		\$ 64.00		\$ 16.00	
Prescribed fire	Cost of burn (burn plan, implementation of burn, follow-up monitoring)			0	ea	\$ -	\$ -	1	\$ -	
	Staff oversight of contract	0	0		hours		\$ -		\$ -	
	Annual training and recertification costs			0	ea	\$ -	\$ -	1	\$ -	
Vegetation management	Materials or Contract Amount			5	ea	\$ 20.00	\$ 100.00	1	\$ 100.00	
	Labor or Staff Oversight	2	8		hours		\$ 356.00		\$ 356.00	
Supplies	Small equipment & supplies				ea	\$ -	\$ -	1	\$ -	
Other (add description)	Materials or Contract Amount				ea	\$ -	\$ -	1	\$ -	
	Labor or Staff Oversight				hours		\$ -		\$ -	
Occupancy										\$ 200.00
Property taxes	Taxes, drainage assessments, other fees			1	ea	\$ -	\$ -	1	\$ -	
Insurance				1	ea	\$ 200.00	\$ 200.00	1	\$ 200.00	
Other fees	eg. utilities, water rights			1	ea	\$ -	\$ -	1	\$ -	
ANNUAL COST SUBTOTAL:										\$ 1,771.09

Forest Management Plan

For:

**Silver Banks Wetland and Stream Mitigation Bank
WFI Holdings-B LLC
c/o Michael Thompson
P.O Box 6
Bartelso, Illinois 62218
(618) 204-0199**

Prepared by:

**Thompson Resource Management, LLC
P.O Box 5
Bartelso, Illinois 62218
(618) 335-3066**

August 31, 2020

**Stand 1: Forested Acres: 67.89
Stand 2: Emergent Acres: 2.39
Plan Expiration Date: August 31, 2030**

Forest Management Plan for: Silver Banks Wetland and Stream Mitigation Bank, WFI Holdings-B LLC., c/o Michael Thompson

1. Goals and Resource Concerns:

- A. Long-term care and maintenance of established RPM (Root Production Method) trees is needed to ensure the success and survival of the tree planting. The goal is to use existing forest practices to maintain the trees for continued health and growth into biological maturity.
- B. Completing the practices will allow more stable vegetative cover, protection from soil erosion, and produce hard mast forests that provide for wildlife habitat, timber production, recreation, and aesthetics.

2. Location and Description of Property:

- A. Northwest ¼ of Section 1, T4N-R7W, Madison County, Illinois, Pin Oak Township. Total acreage is 73.17 acres and the forested acreage planted in RPM trees is 67.89 acres. There are 2.39 additional emergent acres.
- B. Access: From Route 4, take Fruit Road west for approximately 2 miles. The mitigation area is across the street from Oak Brook Golf Course on the south side of Fruit Road.
- C. Surrounding land use is agricultural row crop production (field) and forest.
- D. The property has been owned / under control since 2020 by WFI Holdings-B LLC. The property has been in row crop production until now.
- E. Boundaries are surveyed and known.
- F. There is a gas pipeline easement that runs through the property.

3. Detailed Stand Descriptions and Analysis

A. Existing Forestland

- 1. Stand 1: All acres were in row crop production prior to being converted to a wetland site.
- 2. Bottomlands. No Aspect. 0-5% slopes
- 3. Soils:
 - a. 3070A- Beaucoup Silty Clay Loam, 0-2% slopes, frequently flooded
 - b. 3333A- Wakeland Silt Loam, 0-2% slopes, frequently flooded
- 4. Forest cover type: Oak-Hickory Bottomland Hardwood.
- 5. Stand Age Class: Even-aged
- 6. Size Class, Canopy – Sapling timber
- 7. Invasive and/or exotic species:
 - a. Reed Canary Grass: Grows rapidly in the emergent area
- 8. Advance regeneration and understory conditions. Some silver maple, elm, hackberry, box elder, sycamore, cottonwood, and green ash regeneration.
- 9. Forest Inventory Data:
 - a. Trees/acre: 109
 - b. Basal Area/acre: Approx. 20-30 square feet per acre
 - c. Volume/acre: <10 board feet (Doyle Scale)
 - d. Average Diameter: 1 inches (DBH)
 - e. Stocking Level: Fully stocked (Gringich)
 - f. Percent Stocking: <100%
- 10. Species Level Summary:

*Tree Varieties	Trees per Acre	Acres Planted	Total Number of Trees for Bank Site
Pin Oak (<i>Quercus palustris</i>)	15	55	825
Sycamore (<i>Platanus occidentalis</i>)	5	55	275
Willow Oak (<i>Quercus phellos</i>)	5	55	275
Northern Pecan (<i>Carya Illinoensis</i>)	10	55	550
Swamp White Oak (<i>Quercus bicolor</i>)	5	55	275
Green Hawthorne (<i>Crataegus viridis.</i>)	5	55	275
Shellbark Hickory (<i>Carya laciniosa</i>)	5	55	275
Button Bush (<i>Cephalanthus occidentalis</i>)	10	55	550
Persimmon (<i>Diospyros virginiana</i>)	4	55	220
Overcup Oak (<i>Quercus lyrata</i>)	10	55	550
Water hickory (<i>Carya aquatic</i>)	4	55	220
Sugarberry (<i>Celtis laevigata</i>)	4	55	220
Nuttall Oak (<i>Quercus nuttallii</i>)	10	55	550
Swamp Privet (<i>Forestiera acuminata</i>)	4	55	220
Bald Cypress (<i>Taxodium distichum</i>)	5	55	275
River birch (<i>Betula nigra, spp</i>)	4	55	220
Kentucky coffee (<i>Gymnocladus dioicus</i>)	4	55	220
Totals	109	55	5,995

*Tree Varieties	Trees per Acre	Acres Planted	Total Number of Trees for Bank Site
Pin Oak (<i>Quercus palustris</i>)	10	12.79	128
Overcup Oak (<i>Quercus lyrata</i>)	10	12.79	128
Willow Oak (<i>Quercus phellos</i>)	10	12.79	128
Northern Pecan (<i>Carya Illinoensis</i>)	10	12.79	128
Swamp White Oak (<i>Quercus bicolor</i>)	10	12.79	128
Silver Maple (<i>Acer saccharinum</i>)	40	12.79	512
Sycamore (<i>Platanus occidentalis</i>)	40	12.79	512
Bald Cypress (<i>Taxodium distichum</i>)	40	12.79	511
River Birch (<i>Betula nigra</i>)	40	12.79	511
Eastern Cottonwood (<i>Populus deltoids</i>)	40	12.79	512
Willow (<i>Salix nigra</i>)	40	12.79	512
Totals	290	12.79	3,710

11. Timber Quality and Timber Production Assessment: The stand has overall good timber quality and production is acceptable.
12. Timber Harvest or Forest Practices Assessment: This property is being managed to restore natural wetland functions. A timber sale is not part of this management plan.
13. Active Conservation Practices or Projects: No active projects or erosion problems on the property.

B. Afforestation or Reforestation: No afforestation or reforestation needed

4. Detailed Stand Recommendations:

A. Stand Specific Objectives:

1. Increase Oak and Hickory growth and production.

2. Description of Silvicultural Treatments:

- a. Tree Pruning: Tree pruning of the healthy crop trees, such as oak, hickory, and pecan is needed to maintain apical dominance (growing straight) and keeping the trees from bushing out. Guidelines for pruning should include not cutting for than 1/3 of the

limbs at one time and not cutting any branches larger than 1/3 of the main stem. Larger limbs should be “headed off” at a branch or connection. Cuts should be made to the callous tissue on the stem. Wound dressing is not necessary. Pruning will help the health and quality of the trees, as well as increase upward growth. Pruning should be completed between 7.5 and 10 years.

- b. Invasive Species Control: **Always read and follow herbicide directions.**
 - i. **Reed Canary Grass:** To control, mow late in mid-September, followed by the application of 5% glyphosate in October (after big bluestem is dormant) can help to control reed canary grass. Because reed canary grass productivity is reduced by shade, planting native shrubs or wetland trees in areas of chemically-treated grass may be effective.
 - c. Timber Stand Improvement (TSI) is needed to improve the forest. TSI includes removing poor quality trees such as elm, crooked hickories, and hackberry, and thinning overcrowded trees while encouraging the production and growth of swamp white oak, pin oak, bur oak, Shumard’s oak, and other desirable straight trees, such as pecan and shellbark hickory. Emphasis should be on removing poorer quality trees around crop trees, such as oak and hickory to help the trees in natural reseeding by providing for sun light to the forest floor. Remove unwanted trees at least past the dripline or that are interfering with the crown branches. Undesirable trees should be removed at least 15 feet from the trunk of the oaks and desirable trees. Grapevines also need to be removed when too numerous and choking trees. Some of the larger, older cull trees can be left for wildlife or utilized for firewood. TSI can start at 20 years and become completed every fifteen years until age 50 for the stand.
 - i. Timber Stand Improvement Objectives:
 - Release approximately 60 trees in forested wetland area of various bottomland hardwood species, preferably RPM planted oak species, hickories, and pecans.
 - Remove undesirable species to promote apical dominance in RPM planted crop trees.
 - Retain “B-Level Stocking” (approximately 50-100 square feet of basal area per acre) over the course of the next 50 years.
 - d. Invasive species can quickly over take and out-compete native vegetation in a forest. Special attention needs to be made so as to control the invasive species become predominate. Species that can become nuisances include bush honeysuckle, autumn olive, multiflora rose, winter creeper, and Japanese honeysuckle.
 - e. Prescribed fire may be considered as an option to maintain diversity.
3. Appropriate quantified treatment targets based upon stand objectives, silviculture, and desired future conditions:
 - a. Stocking or Density:
 - i. Retain approximately 80 square feet of Basal Area per acre.

- ii. Desired Species Composition: Oak-Hickory-Bottomland forest
- b. Desired Stocking Percent: 65%, or above B-Level Stocking
- c. Under Planting Specifications: No under planting is needed at this time, unless stocking falls below 109 trees per acre.

5. Conservation Opportunities, Constraints, and Concerns:

A. Recreation and Aesthetics: Planting and maintaining the trees will increase recreation and aesthetic opportunities, such as hiking and hunting.

B. Air, Soil, and Water Quality Conservation:

- 1. No prominent issues exist.
- 2. No site-specific Illinois Forestry Best Management Practices are necessary to conserve soil and water quality.

C. Wetland Protection: This property is a functioning wetland mitigation bank. Care should be taken when driving ATV's and other equipment through these areas, so as not to cause ruts or surface erosion. Rodeo (roundup labeled for waterways), should be used around the wetter areas in the stands.

D. Fish, Wildlife, and Biodiversity:

- 1. Increasing the wildlife habitat and diversity will be accomplished by TSI and will help the wildlife by creating brushy areas and promoting mast trees such as oak and hickory.
- 2. Wildlife habitat improvement must be consistent with the IDNR State Wildlife Action Plan. This includes enhancing oak dominance by conducting timber stand improvement to remove shade tolerant species that compete with oaks, and invasive species control to eliminate competition for oaks. For more information contact IDNR wildlife biologist Tim Kelley at (309) 543-3262.

E. Forest Health and Protection:

- 1. Detection and/or Management of Existing and Imminent Insects and Diseases: No insects or diseases are known in the Stand. Emerald ash borer could be a problem if there was an infestation.
- 2. No other physical or environmental aspects are known.

F. Threatened and Endangered Species:

- 1. No threatened or endangered species, nor nature preserves, land or water reserves or Illinois Natural Inventory Areas (INAI) occur on the property according to the IDNR ECOCAT (Ecological Compliance Assessment Tool) website.
- 2. For more information on Illinois Natural Area Inventory Sites, contact Debbie Newman, Illinois Nature Preserves Biologist (618) 684-3840. For more information on Endangered and Threatened species, contact Mark Phipps, District Heritage Biologist at mark.phipps@illinois.gov.

G. Identify and Protect Special Sites:

1. No cultural, archeological, or historical sites are located on the property.
2. If any artifacts or sites are discovered, please notify the Illinois State Historic Office (ISHA) at (217)-785-5031.

6. Planned Management Activity Schedule for Forestry Practices

A. **Stand 1**- Forested Wetland

Stand	Description	Year	Acres	Cost/Ac. (\$)	Comments
1	Pruning/TSI	10.0	67.89	N/A	Capture at Close-Out
1	TSI	20.0	67.89	100.00	TSI with Plan Update
1	TSI	35.0	67.89	N/A	TSI thinning generates revenue
1	TSI	50.0	67.89	N/A	TSI thinning generates revenue

7. Long Term Objectives for Mitigation Bank

- Maintain diverse forested wetland communities dominated by hard-mast native species;
- Establishment of a healthy Bottomland Hardwood Forest;
- Maintain riparian corridor that provides linkages along Silver Creek;
- Maintain buffer habitat that supports overall site functionality for wetland habitats;
- Maintain improved habitat conditions for wildlife.

8. Glossary of Forestry Terms:

- **Basal Area (BA)**- The cross-sectional area in square feet of tree trunk, when measured 4.5 feet above ground. This measurement is used to estimate stocking of trees per acre.
- **Board Foot (BF)**- A unit of wood measuring one inch thick by 12 inches by 12 inches (144 cubic inches)
- **Canopy**- The entire layer of tree crowns within a stand of trees. Canopies can be subdivided into over story (the dominant upper tree crowns) and under story (the lower, sub level tree crowns).
- **Competition**- The struggle among trees and other vegetation for sunlight, energy, water, nutrients, growing space, and other site resources.
- **Cord**- A stack of round or split wood containing 128 cubic feet of wood, bark, and air space. A standard cord measures 4 feet high x 4 feet wide x 8 feet long.
- **Crop Tree**- A tree of desirable higher value species whose crown is within or just below the overstory. A crop tree should be well formed and free from defects, insects, or disease.
- **Crown**- All the branches, limbs, needles, or leaves of an individual tree. All of the crowns in a stand of trees comprise the canopy.
- **Cull**- A tree or log that has a defect that makes it unusable for its original intended purpose. Defects can include crooked trunks, rotten wood, and hollowed/forked trunks.
- **Diameter at Breast Height (DBH)**- The standard measure used in forestry for measuring tree diameter, 4.5 feet above the ground.
- **Merchantable**- Term used to describe some aspect of how valuable a tree is. A non-merchantable tree has no commercial value.

- **Mixed Stand**- A stand of trees where less than 80% of trees in the overstory canopy are of one species.
- **Overstory**- The highest layer of tree canopy within a stand of trees.
- **Reforestation**- A specific method of regenerating a forest by the planting of individual trees or seeds.
- **Reproduction**- Young trees which can grow to become the primary component of the next stand of trees.
- **Residual Stand**- The crop trees or cull tree left standing after a cutting.
- **Site Index**- A relative measure of a site's productivity potential based upon tree height at a specific based age, usually 25-50 years. A site index of 45 is considered poor and a site index of 105 is considered very good for a tree species.
- **Stand**- A manageable group of trees that occupies a specific area and often is of uniform age, species, and condition.
- **Stocking**- A relative number of trees or volume per acre. Stands can be under stocked, fully stocked, or over stocked.
- **Timber Stand Improvement (TSI)**- Actions taken to improve the health, quality, and vigor of a stand of trees. Examples may include improvement cutting, prescribed burning, crop tree release, control of competition, or other forestry practices as warranted by the site conditions and owner's goals.
- **Understory**- The sub layer of a tree canopy that exists beneath the overstory.

Illinois Nature Preserves Invasive Species List*	
Invasive Species Common Name	Latin Name
Autumn olive	<i>Elaeagnus umbellata</i>
Black locust	<i>Robinia pseudoacacia</i>
Exotic Buckthorns: Common, Glossy, Dahurian, Japanese, and Chinese Buckthorn	<i>Rhamnus cathartica</i> , <i>R. frangula</i> , <i>R. davurica</i> , <i>R. japonica</i> , and <i>R. utilis</i>
Bush Honeysuckles: Tartarian, Morrow's, Belle, and Amur Honeysuckle	<i>Lonicera tatarica</i> , <i>L. morrowii</i> , <i>L. x bella</i> Zabel, and <i>L. maackii</i>
Canada thistle	<i>Cirsium arvense</i>
Crown vetch	<i>Coronilla varia</i>
Fescue	<i>Festuca pratensis</i>
Garlic mustard	<i>Alliaria petiolata</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Johnson grass	<i>Sorghum halepense</i>
Leafy spurge	<i>Euphorbia esula</i>
Moneywort	<i>Lysimachia nummularia</i>
Multiflora rose	<i>Rosa multiflora</i>
Osage orange	<i>Maclura pomifera</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Quaking aspen	<i>Populus tremuloides</i>
Reed canary grass	<i>Phalaris arundinacea</i>
Round-leaved bittersweet	<i>Celastrus orbiculatus</i>
Siberian elm	<i>Ulmus pumila</i>
Smooth sumac	<i>Rhus glabra</i>
Sweet clover (white and yellow)	<i>Melilotus alba</i> and <i>Melilotus officinalis</i>
Cut-leaved and common teasel	<i>Dipsacus laciniatus</i> and <i>Dipsacus sylvestris</i>
White poplar	<i>Populus alba</i>
Wild parsnip	<i>Pastinaca sativa</i>
Wintercreeper (climbing euonymus)	<i>Euonymus fortunei</i>
Kentucky bluegrass	<i>Poa pratensis</i>
Smooth brome	<i>Bromus inermis</i>
Honey locust	<i>Gleditsia triacanthos</i>
White mulberry	<i>Morus alba</i>
Kudzu	<i>Pueraria lobata</i>
Sericea lespedeza	<i>Lespedeza cuneata</i>
Gray dogwood	<i>Cornus racemosa</i>
Tree-of-heaven	<i>Ailanthus altissima</i>
Chinese yam	<i>Dioscorea oppositifolia</i>
Spotted knapweed	<i>Centaurea maculosa</i>
Phragmites	<i>Phragmites australis</i>
Japanese Stilt Grass	<i>Microstegium vimineum</i>
Japanese Hops	<i>Humulus japonicus</i>
Musk Thistle	<i>Carduus nutans</i>
Dame's Rocket	<i>Hesperis matronalis</i>
* https://www2.illinois.gov/dnr/INPC/Pages/INPCManagementGuidelines.aspx	

Appendix 6

Third Party Agreement, Draft Casualty Insurance Policy, and Construction Estimate

THIRD-PARTY RESPONSIBILITY AGREEMENT

THIRD-PARTY RESPONSIBILITY AGREEMENT

WHEREAS, HeartLands Conservancy is not-for-profit corporation organized under the laws of the State of Illinois and,

WHEREAS, HeartLands Conservancy has obtained approval of their Board of Directors for their participation and execution of this Agreement, and

WHEREAS, WFI Holdings-B LLC, hereinafter referred to as the “Sponsor” has drafted and executed a Mitigation Bank Instrument/Plan for the purpose of establishing a Wetland and Stream Mitigation Bank on real estate located in Madison County, Illinois, and

WHEREAS, the said Silver Banks Wetland and Stream Mitigation Bank, hereinafter referred to as the Mitigation Bank, requires the sponsor to undertake certain activities and sets certain performance standards relative to the real estate upon which the mitigation site project is located and further authorized the U. S. Army Corps of Engineers (USACE) to monitor the activity and performance of the sponsor concerning those requirements, and

WHEREAS, the USACE and the Mitigation Bank Instrument required financial assurances from the sponsor for the performance of their obligations there under.

THEREFORE IT IS STIPULATED AND AGREED TO BY AND BETWEEN
THE PARTIES AS FOLLOWS:

1. The Sponsor shall obtain a casualty insurance policy from Conservation United payable to HeartLands Conservancy in the form and content agreeable to the Sponsor, HeartLands Conservancy and the USACE.

2. The insurance policy shall be conditioned on the Sponsor performing its obligations under the Mitigation Site Plan.

3. If payment of all or any portion of the proceeds of the insurance policy is received by HeartLands Conservancy, then HeartLands Conservancy shall apply said funds toward the completion of the obligations of the Mitigation Site Plan.

HeartLands Conservancy

By: _____

PROJECT MANAGER,
REGULATORY BRANCH, U.S.
ARMY CORPS OF
ENGINEERS

By: _____

WFI HOLDINGS-B LLC,
MITIGATION BANK SPONSOR
MANAGER

By: _____

DRAFT CASUALTY INSURANCE POLICY

COMPENSATORY MITIGATION INSURANCE

THIS FORM PROVIDES CLAIMS MADE AND REPORTED COVERAGE. PLEASE READ THE ENTIRE FORM CAREFULLY.

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties, and what is and is not covered.

Throughout this policy the words "you" and "your" refer to the **Named Insured** shown in the Declarations, and any other person or organization qualifying as an **Insured** under this policy. The words "we", "us", and "our" refer to the Company providing this insurance. "You" and "your" do not refer to the **Authorizing Agency**. Other than headings, words and phrases that appear in bold have special meaning. Refer to **SECTION II - DEFINITIONS**.

This policy provides **Claims Made and Reported Coverage** and has **Claim** reporting requirements. Coverage provided herein only applies to a **Claim** first made against the **Named Insured** during the **Policy Period**, and reported to us in writing during the **Effective Coverage Period** in which the **Claim** is made. This policy does not include a duty to defend or to pay defense costs. Notice of a **Default** or **Deficiency Notice** is not a **Claim** and does not trigger coverage under the policy.

The application, filed and approved **Mitigation Plan**, **Mitigation Instrument**, supplemental materials, and information submitted therewith, are the basis of this policy and are incorporated into and constitute a part of this policy. Any materials and information received in application for the policy will be maintained on file with the Company and shall be deemed to be attached to the policy as if physically attached. As a condition precedent to coverage, it is agreed by all **Insureds** that the statements made in the application and supplemental materials are representations made on behalf of all **Insureds**, that they are material, and that this policy is issued by the Company in reliance upon the truth of such representations.

In consideration of the payment of the premium and the undertaking of the **Insured(s)** to pay the **Indemnification Obligation** in the **Indemnification Endorsement** attached to this policy, and subject to the **Limits of Insurance** set out in **SECTION IV – LIMITS OF INSURANCE** and the Declarations, and the exclusions, conditions, and other terms of this policy, the Company agrees with the **Insured(s)** as follows:

SECTION I – INSURING AGREEMENT

To pay on behalf of the **Named Insured** the amount of **Financial Assurances** for which the **Named Insured** becomes legally obligated to pay as a result of a **Claim** first made against it during the **Policy Period**, by reason of a **Default** under a **Mitigation Instrument**, to which this insurance applies, provided that, as a condition precedent to coverage, the **Claim** is reported, in writing, to the Company by the **Named Insured** or by the **Authorizing Agency** on the **Named Insured's** behalf during the **Effective Coverage Period** in which the **Claim** is first made against the **Named Insured**.

We will have the right to adjust, pay or settle any **Claim** seeking **Financial Assurances** as described in **SECTION V – REPORTING, ADJUSTMENT & SETTLEMENT**; and

We may at our discretion investigate any **Default** and settle any **Claim** that may result. But:

1. The amount we will pay for **Financial Assurances** under this policy is limited as described in **SECTION IV – LIMITS OF INSURANCE**; and
2. Our obligation to adjust, pay or settle any **Claim** under an **Effective Coverage Period** ends when we have paid the limit of insurance applicable to that **Effective Coverage Period**, in the payment or settlement of **Financial Assurances**.

SECTION II - DEFINITIONS

1. **Adaptive Management Plan** means the development of a management strategy that results in a written plan as defined in 33 CFR 332.4(c)(12) or Applicable State Regulation scheduled in the Declarations to the policy, that anticipates likely challenges associated with **Compensatory Mitigation Projects** and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects.
2. **Authorizing Agency** means the Department of the Army, the U.S. Army Corps of Engineers, the District Engineer, or other person, entity or agency designated by the Department of the Army, that retains the sole and final authority under 33 CFR 332 or any state agency that retains sole and final authority under Applicable State Regulations

scheduled in the Declarations to the policy, to negotiate, determine, approve and enforce the terms of the **Mitigation Instrument**, and any other documents established thereunder.

3. **Claim** means a written demand received by the **Named Insured** from the **Authorizing Agency**, or from the **Authorizing Agency** on the **Named Insured's** behalf seeking payment of **Financial Assurances** as a result of a **Default** under the **Mitigation Instrument**.
4. **Compensatory Mitigation** as defined in 33 CFR 332.2 or Applicable State Regulation scheduled in the Declarations to the policy, means the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.
5. **Compensatory Mitigation Project** means the site or sites scheduled in the Declarations to the policy at which the **Named Insured** is implementing a **Mitigation Plan** approved by the **Authorizing Agency** under 33 CFR 332 or Applicable State Regulation scheduled in the Declarations to the policy.
6. **Default** means a written and final determination made by the **Authorizing Agency** that the **Named Insured** has failed to successfully complete construction activities and/or has failed to achieve the **Performance Standards**, as applicable, in accordance with the **Mitigation Plan**, at a **Compensatory Mitigation Project** site scheduled in the Declarations to the policy, but only if such determination is made following:
 - (1) a period of time as determined by the **Authorizing Agency** in accordance with applicable **Compensatory Mitigation** regulations after the **Authorizing Agency** has issued a **Deficiency Notice** for that **Mitigation Plan** or **Compensatory Mitigation Project** site, and
 - (2) the **Named Insured's** best efforts to mitigate any deficiencies identified by the **Authorizing Agency** in any prior **Deficiency Notice** for that **Mitigation Plan** or **Compensatory Mitigation Project** site for the purpose of preventing the **Default**.

Default shall not include any determination by the **Authorizing Agency** that the **Named Insured** has failed to comply with, or breached, any other term or condition of the **Mitigation Instrument** or other document thereunder, other than the construction activities and/or **Performance Standards**, as applicable, in a **Mitigation Plan** for a **Compensatory Mitigation Project** site scheduled in the Declarations to the policy, or any resultant suspension or termination of the **Mitigation Instrument** as a result of such non-compliance or breach.

7. **Deficiency Notice** means a written notice issued by the **Authorizing Agency** to the **Named Insured**:
 - (1) advising that it is not progressing towards, or on track to, successfully complete construction and/or meeting the **Performance Standards** in accordance with the **Mitigation Plan** for a **Compensatory Mitigation Project** site; and
 - (2) requesting that the **Named Insured** implement measures to correct the deficiencies, including but not limited to implementation of an **Adaptive Management Plan**, or modifications to the existing **Mitigation Plan**, and/or
 - (3) modifying, decreasing or suspending credit sales of the **Mitigation Site** until the **Named Insured** successfully completes measures to correct deficiencies in the implementation of a **Mitigation Plan** for a **Compensatory Mitigation Project** site.
8. **Effective Coverage Period** means the term set forth in the Declarations to the policy.
9. **Financial Assurances** means the amount of reasonable and necessary costs to remedy a **Default** determination and **Claim** made by the **Authorizing Agency**, which amount shall be determined by the lesser of the following:
 - (1) **Mitigation Expenses** required to successfully complete the **Compensatory Mitigation** at the **Compensatory Mitigation Project** site from which the **Default** has been determined; or
 - (2) **Mitigation Expenses** required to provide replacement **Compensatory Mitigation** at another site; or
 - (3) the actual costs to purchase replacement mitigation credits from another mitigation site and any legal fees associated with the purchase.

All subject to the **Limit of Liability** shown on the Declarations to the policy, associated with the **Effective Coverage Period** in effect at the time of the issuance of a **Deficiency Notice** which, despite the **Named Insured's** best efforts, ultimately results in a **Default** determination and **Claim** made by the **Authorizing Agency**.

Mitigation Expenses under (1) and (2) above means the direct costs of engineers, contractors and subcontractors, to design, plan, engineer, construct, and implement the **Compensatory Mitigation** work at the site, exclusive of profit or markup of any kind by, or in favor of, the **Named Insured**. Direct costs may include reasonable administrative and management costs incurred by such engineers, contractors, and subcontractors, but only to the extent such costs are directly and exclusively allocable to the actual **Compensatory Mitigation** work being performed at the site,

Mitigation Expenses under (2) above includes the cost to acquire a replacement property and includes legal fees associated with the acquisition.

Mitigation Expenses under (1) and (2) above shall not include: (i) any costs for insurance or bonds, including those costs attendant to securing and reporting in connection with such insurance and bonds; (ii) legal fees of any kind, except those noted in (2) and (3) above; (iii) costs related to reporting and other obligations under this policy, and (iv) any costs, charges or expenses (including salaries, benefits, or fringes) of the **Named Insured**, unless such costs are directly attributable to the implementation of the tasks and activities for the **Compensatory Mitigation** and the Company has approved and consented to the work and costs prior to them being incurred.

10. Insured means:

- (1) The **Named Insured** but only with respect to liability incurred from the **Default of a Mitigation Instrument** to which this insurance applies;
- (2) The **Named Insured's** current or former members and partners, and their spouses, but only with respect to liability incurred from the **Named Insured's Default of a Mitigation Instrument**, to which this insurance applies;
- (3) The **Named Insured's** current or former directors, executive officers, and stockholders, and their spouses, but only with respect to liability incurred from the **Named Insured's Default of a Mitigation Instrument**, to which this insurance applies.

11. Mitigation Site means the site, or suite of sites, where aquatic resources are being restored, reestablished, established, created, enhanced, and/or preserved as part of the **Compensatory Mitigation Project** governed by the **Mitigation Instrument**, as scheduled in the **Declarations** to the policy.

12. Mitigation Instrument means the legal document scheduled in the **Declarations** to the policy, provided that such document is prepared, approved, filed, and documented in compliance with applicable law.

13. Mitigation Plan means the plan prepared by the **Named Insured** per 33 CFR 332.4 c(2) through c(14), or Applicable State Regulation scheduled in the **Declarations** to the policy, and approved by the **Authorizing Agency**, for **Compensatory Mitigation** to be performed at each **Compensatory Mitigation Project** site as scheduled in the **Declarations** to the policy.

14. Named Insured means the entity listed in the **Declarations** to the policy that has executed the approved **Mitigation Instrument**.

15. Policy Period means the period set forth in the **Declarations** to the policy, or any shorter period arising as a result of cancellation or termination of the policy.

16. Performance Standards as defined in 33 CFR 332.2 or Applicable State Regulation scheduled in the **Declarations** to the policy, means observable or measurable physical (including hydrological), chemical and/or biological attributes that are used to determine if a **Compensatory Mitigation Project** meets its objectives. **Performance Standards** also mean the completion of initial construction and planting in accordance with the **Mitigation Plan**.

SECTION III – EXCLUSIONS

This insurance does not apply to **Claims, Defaults, or Financial Assurances** based upon, arising out of, or relating to:

1. Force Majeure, or any natural catastrophe or disaster, as defined in the **Mitigation Instrument**;
2. Liability assumed by the **Named Insured** under any contract or agreement, including but not limited to liability for payment of attorney's fees, termination fees, consequential or liquidated damages, or liabilities of another pursuant to any indemnification agreement, except for liability to pay **Financial Assurances** as a result of a **Default** under a **Mitigation Instrument**.
3. Any legal fees, costs, or expenses (including expert or consultant fees) incurred in the defense of any liability or obligation of the **Named Insured** for any reason.
4. Fluctuation in, short fall of, or devaluation of, the monetary value of, or marketability of, mitigation credits (or other equivalent credits), or of any real property, including a site at which **Compensatory Mitigation** is being performed, or is planned to be performed, under the **Mitigation Instrument**.

SECTION IV – LIMITS OF INSURANCE

1. The "Policy Aggregate" Limit of Insurance shown in the Declarations and the rules below fix the most we will pay on behalf of the Named Insured for the Compensatory Mitigation Site shown in the Declarations and described by the Mitigation Plan regardless of the number of Defaults, Claims, Financial Assurances, Mitigation Plans, or Compensatory Mitigation Project sites.
2. The "Total All Claims" Limit set forth in the Declarations for each Effective Coverage Period is the most we will pay on behalf of the Named Insured for Financial Assurances as a result of all Claims first made against the Named Insured during the Policy Period, where a Deficiency Notice that results in the Default and Claim, is first issued by the Authorizing Agency during the scheduled Effective Coverage Period, and is first reported in writing to us, during that same scheduled Effective Coverage Period.
3. Subject to item 2 above, the "Per Claim" Limit set forth in the Declarations is the most we will pay on behalf of the Named Insured for Financial Assurances as a result of any one Claim first made against the Named Insured during the Policy Period, where a Deficiency Notice that results in the Default and Claim, is first issued by the Authorizing Agency during the scheduled Effective Coverage Period, and is first reported in writing to us, during that same scheduled Effective Coverage Period.
4. Subject to items 2 and 3 above, the maximum Limits of Insurance we will pay for any Claim made during the Policy Period shall be the limits corresponding to the scheduled Effective Coverage Period stated in the Declarations, in which the Deficiency Notice that results in the Default and Claim is first made against the Named Insured and reported to us in writing during that same scheduled Effective Coverage Period.

At the end of each Effective Coverage Period, the Limit of Insurance shall expire and will no longer be available for payment of any new or additional Claim resulting from a Deficiency Notice not already issued by the Authorizing Agency against the Named Insured and reported to us in writing before expiration of the Effective Coverage Period. If the Named Insured resolves the Deficiency Notice issued during the Effective Coverage Period to the satisfaction of the Authorizing Agency in writing, and the Effective Coverage Period has expired, the limit of insurance for that Effective Coverage Period shall no longer be available for future Claims.

At the end of each Effective Coverage Period, the limit of available insurance shall also be replaced by the "Per Claim" Limit and "Total All Claims" Limit scheduled in the subsequent Effective Coverage Period.

5. One or more Claims made against the Named Insured, and reported in writing to the Company, that arise out of the same, interrelated, repeated, or associated Defaults in a single Mitigation Plan, or at a single Compensatory Mitigation Project site, shall be considered a single Claim, and the Company's total liability for Financial Assurance from that Claim shall be subject to the Limits of Insurance corresponding to the "Per Claim" Limit for the Effective Coverage Period set forth in the Declarations (or any reduced or modified Limit established by endorsement to this policy) and effective at the time the initial Deficiency Notice that results in the Claim was first issued by the Authorizing Agency against the Named Insured and first reported in writing to the Company during that same Effective Coverage Period.

SECTION V – REPORTING, ADJUSTMENT & SETTLEMENT

1. NOTICE OF A DEFICIENCY

The Named Insured shall provide written notice to the Company as soon as possible of any Deficiency Notice received by the Named Insured from the Authorizing Agency. The Named Insured shall forward to the Company a copy of the Deficiency Notice and any other communication or information related thereto, including the following:

- (1) Details of the Compensatory Mitigation Project site and Mitigation Plan for which the Deficiency Notice was received;
- (2) The Named Insured's plan to remedy the deficiencies noted by the Authorizing Agency, including any planned modifications to the Mitigation Plan and/or its Adaptive Management Plan in order to prevent a Default under the Mitigation Instrument;
- (3) Any other information necessary for the Company to understand the circumstances surrounding the Deficiency Notice and/or the Named Insured's plan to meet the applicable Performance Standards and prevent a Default under the Mitigation Instrument.

The Named Insured shall have the duty to use its best efforts to mitigate a Deficiency Notice in order to prevent a Default under the Mitigation Instrument. The Company shall have the right to investigate any Deficiency Notice. The Named Insured shall cooperate with the Company's investigation, and make available upon the Company's request, documents for review and personnel for interview, all without charge to the Company. A Deficiency Notice is not a Claim and shall not trigger coverage under the policy.

2. NOTICE OF A DEFAULT or CLAIM

The **Named Insured** shall provide immediate written notice to the Company of any Claim made against the **Named Insured**, or of any determination by the **Authorizing Agency** that the **Named Insured** is in Default of the **Mitigation Instrument**. The **Named Insured** shall immediately forward to the Company every demand, notice, or other communication related to the Claim or the determination of Default as well as the following information:

- (1) Details of the **Compensatory Mitigation Project** site and **Mitigation Plan** determined to be in Default and for which the Claim is being made;
- (2) An explanation of the events and circumstances leading to the Default, including the specific basis and reasons upon which the Default has been determined;
- (3) A description of the mitigation efforts undertaken to prevent or cure the Default (and the deficiencies leading thereto), including a detailed description of the amount of funds expended and the type of activity conducted;
- (4) An estimate of the costs necessary to cure the Default;
- (5) Any other information necessary for the Company to understand the circumstances surrounding the Default or Claim.

The Company shall have the right to investigate any Default or Claim noticed under the policy. The **Named Insured** shall cooperate with the Company's investigation and, upon the Company's request, shall assist in the investigation and settlement of the Claim, and make available to the Company, documents for review and personnel for interview, all without charge to the Company. Notice of a Default is not a Claim and shall not trigger coverage under the policy.

In the event that the **Authorizing Agency** first provides notice of a Claim to the Company, the Company may investigate and pay or adjust such claim as provided herein in its sole discretion without any duty to make inquiry of the **Insured** with respect to the Claim, and such payment or adjustment shall reduce the Limits of Liability remaining under the policy. The **Insured** shall not be released from any of its obligations to the Company under this policy by virtue of any such payment or adjustment, including its duties to indemnify the Company pursuant to the **Indemnification Endorsement** attached to this policy.

3. CLAIM ADJUSTMENT AND SETTLEMENT

The **Insured(s)** agree that the Company shall have the right to adjust, pay or settle any Claim, to which this insurance applies, at its sole discretion, without the **Insured(s)** consent, subject to the available and remaining Limits of Insurance for the applicable **Effective Coverage Period**, and that such adjustment, payment, or settlement may include, but not be limited to, the following actions:

- (1) Payment of reasonable and necessary **Financial Assurances** to a designee or standby trust, as approved by the **Authorizing Agency**, for distribution by such designee or trustee to complete the **Compensatory Mitigation** in accordance with the **Insured's** legal responsibility under the **Mitigation Instrument**, pursuant to the **Authorizing Agency's** authority under the **Mitigation Instrument** and/or 33 CFR 332 or Applicable State Regulation scheduled in the **Declarations** to the policy; or
- (2) Payment of reasonable and necessary **Financial Assurances** to a replacement contractor, as approved by the **Authorizing Agency** or its designee, and subject to the Company's written consent and approval, to either perform replacement **Compensatory Mitigation** at another site or to complete the **Compensatory Mitigation** at the **Compensatory Mitigation Project** site from which the Default has been determined, whichever is less.

The Company may make such inquiries and investigations of the Claim as it deems expedient, including inquiries to the **Named Insured** or the **Authorizing Agency** regarding the Claim, and payment of **Financial Assurances**. The **Insured(s)** agree that no Claim or **Financial Assurances** will be paid without the prior written consent and approval of the **Authorizing Agency**, and that the Company shall incur no liability to the **Insured(s)** resulting from such inquiries and/or resulting from the non-payment of any Claim or **Financial Assurances** for which the **Authorizing Agency** has not consented and/or approved. The **Insured(s)** shall not admit liability or settle any Claim without the Company's consent. The **Insured(s)** shall not be released from any of their duties or obligations to the Company under this policy by virtue of any payment or adjustment of a Claim by the Company, including the **Insured(s)** duties to indemnify the Company, according to the **Indemnification Endorsement** attached to this policy.

SECTION VI – CONDITIONS

1. LEGAL ACTION AGAINST THE COMPANY

No action shall lie against the Company unless, as a condition precedent thereto, there shall have been full compliance with all of terms of this policy, nor until the amount of the **Named Insured's** obligation to pay shall have been finally determined either by judgment against the **Named Insured** after actual trial or by written agreement of the **Named Insured**, the **Authorizing Agency** and the Company. No person or organization shall have any right under

this policy to join the Company as a party to any action against any **Insured** to determine the **Insured's** liability, nor shall the Company be impleaded by any **Insured** or its legal representative.

2. TRANSFER OF POLICY

Your rights and duties under this policy may not be assigned or transferred without our written consent.

3. BANKRUPTCY

Bankruptcy or insolvency of the **Named Insured** will not relieve the Company of its obligations under this policy, nor shall it relieve the **Insured(s)** of their indemnification obligations to the Company.

4. RENEWAL, CANCELLATION AND TERMINATION

- (1) The Company may renew this policy at its sole discretion, pursuant to the Company's rates, rules, underwriting guidelines and underwriting decisions in effect as of the expiration date of the Policy Period. Renewal of this policy will not be in effect unless the Company issues a written quote and binder outlining the terms of coverage and the **Named Insured** accepts such terms in writing.
- (2) The Company may cancel the policy by mailing to the **Named Insured** at the last known address, and the **Authorizing Agency**, written notice of not less than One Hundred and Twenty days (120) before such cancellation shall be effective. The notice shall include the reason for cancellation which may include:
 - a. The policy is no longer needed;
 - b. Non-payment of premium;
 - c. Fraud, material misrepresentation or intentional concealment of information which increases the risk originally insured; or
 - d. The **Insured's** failure to comply with the terms and conditions of this policy including the failure to pay any premium when due.
- (3) Upon release by the **Authorizing Agency** pursuant to applicable law, the **Insured** may cancel the policy by mailing or delivering written notice to us stating when the cancellation shall be effective.
- (4) Termination by other than cancellation:

The policy may terminate without the approval of the **Authorizing Agency** at the earlier of:

 - a. The expiration date of the policy as shown in the Declarations to the policy;
 - b. A written acknowledgement, certification or other legally equivalent determination by the **Authorizing Agency** that the **Mitigation Site** has closed after having met the **Performance Standards** set forth in the **Mitigation Instrument**.
- (5) The minimum earned premiums due for this policy shall be calculated in accordance with the following:
 - a. The minimum earned premium due for this policy is the percentage shown on the Declarations to the policy.
 - b. In the event of cancellation of this policy by the Company for reasons other than nonpayment of premium, the earned premium for this policy shall be computed on a pro-rata basis.
 - c. Premiums applicable to any subsequent endorsements will be in addition to the minimum premium shown in the Declarations to the policy.

Cancellation or termination of the policy shall be subject to release of the Company by the **Authorizing Agency**. Upon the effective date of such release, all obligations on the part of the Company hereunder shall automatically cease and neither the **Authorizing Agency** nor the **Insured** shall have further recourse against the Company with respect to unpaid **Financial Assurances**, including existing or future liabilities or obligations arising from Claim(s) previously reported or pending under the policy.

5. CHANGES

Notice to any agent or knowledge possessed by any agent or by any other person shall not effect a waiver or change in any part of this policy or estop the Company from asserting any right under the terms of this policy; nor shall the terms of this policy be waived or changed, except by endorsement issued by the Company to form a part of this policy with the prior approval of the **Authorizing Agency**.

6. COOPERATION

The **Named Insured** shall cooperate with the Company, and offer all reasonable assistance in the Company's investigations. The Company may require that the **Named Insured** submit to examination under oath, and attend hearings, depositions and trials. In the course of investigation, the Company may require written statements or the **Named Insured's** attendance at meetings with the Company. The **Insured** must assist the Company in effecting settlement, securing and providing evidence and obtaining the attendance of witnesses.

7. COVERAGE TERRITORY

The coverage provided under this policy shall only apply to **Mitigation Sites** located within the United States of America.

8. AUDIT AND INSPECTION

- (1) We may examine and audit your books and records as they relate to this policy at any time during the policy period and up to three (3) years after the end of the policy period;
- (2) We may be permitted but not obligated to, interview persons employed by you; or
- (3) We shall be permitted but not obligated to inspect, sample and monitor the **Named Insured's Mitigation Site** during the **Policy Period** or any time thereafter. Neither our right to make inspections, sample and monitor nor the actual undertaking thereof nor any report thereon shall constitute an undertaking, on behalf of the **Named Insured** or others, to determine or warrant that the **Mitigation Site** or operations are safe, healthful, or conform to acceptable engineering practice or are in compliance with any law, rule or regulation. The **Named Insured** agrees to provide appropriate personnel to assist our representatives during any inspection.

9. OTHER INSURANCE

- (1) This insurance is primary, except when (2) below applies.
- (2) This insurance is excess:
 - a. When stated in the Declarations to apply in excess of, or contingent upon the absence of, other appropriate instruments; or
 - b. Over any other bonds, reserves, escrows, trust funds, credits, or valid and collectible insurance available to the **Named Insured** to cover **Claims for Financial Assurances** under the **Mitigation Instrument**; or
 - c. Over any other appropriate instruments applicable to cover **Claims for Financial Assurances** under the **Mitigation Instrument**.

When this insurance is excess over other valid and collectible appropriate instruments, the Company shall be obligated to pay only its share of the applicable amount and shall not contribute with such instruments.

The **Insured** shall promptly, upon the request of the Company, provide the Company with copies of all such instruments or documentation.

10. MATERIAL CHANGE IN RISK

In consideration of the Company's acceptance of this insurance, the **Named Insured** hereby agrees the **Named Insured** must notify the Company, in writing, of any changes in the **Mitigation Instrument**, including changes in the credits release schedule, or any other information that materially changes the risk from that originally assumed by the Company at policy inception.

11. SOLE AGENT

The **Named Insured** shown in the Declarations shall act on behalf of, and serve as the sole agent for, all **Insureds** with respect to the return or payment of any premiums, the issuance by the Company of the policy, the receipt or acceptance of any endorsements issued to form a part of the policy, or the receiving of any notices from the Company required by this policy.

12. SUBROGATION

In the event of any payment under this policy by the Company, the Company shall be subrogated to all of the rights of recovery that the **Insured(s)** may have against any person or organization and the **Insured(s)** shall execute and deliver instruments and papers and do whatever else is necessary to secure such rights. The **Insured(s)** shall do nothing to prejudice such rights.

Silver Banks Wetland and
Stream Mitigation Bank

Post Construction
Estimate

	Description	Units	Unit Costs	Total Cost
1.00	Construction			
1.10	Construction (Dirt work and trees)	50	\$2,750.00	\$137,000.00
2.00	Annual Monitoring (8 years)			
2.10	Monitoring (years)	8	\$5,000.00	\$40,000.00
3.00	Post Construction O&M			
3.10	Operation and Maintenance (yrs)	8	\$1,000.00	\$8,000.00
4.00	Final Delineation Report			
4.10	Report	1 Lump Sum		\$7,000.00
				TOTAL
				\$192,000.00

Appendix 7

Wetland Delineation



SCI ENGINEERING, INC.

650 Pierce Boulevard
O'Fallon, Illinois 62269
618-624-6969
www.sciengineering.com

Wetland and Waterbody Delineation Report

**SILVER BANKS WETLAND AND STREAM MITIGATION BANK
EDWARDSVILLE, ILLINOIS**

November 18, 2020

Prepared for:

WFI HOLDINGS-B LLC

SCI No. 2020-0311.30 (Task 300)
Revised 5/20/2021



SCI ENGINEERING, INC.

EARTH • SCIENCE • SOLUTIONS

GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

May 20, 2021

Mr. Linden Graber
WFI Holdings-B LLC
248 Southwoods Center
Columbia, Illinois 62236

RE: Wetland and Waterbody Delineation Report (Revised)
Silver Banks Wetland and Stream Mitigation Bank
Edwardsville, Illinois
SCI No. 2020-0311.30 Task 300

Dear Mr. Graber:

SCI Engineering, Inc. (SCI) is pleased to submit the attached *Wetland and Waterbody Delineation Report (Revised)*, dated November 2020. SCI received comments from The U.S. Army Corps of Engineers (USACE) recent review of the Silver Banks Wetland and Stream Mitigation Bank Site Plan, to be constructed under the proposed Umbrella Mitigation Banking Instrument (UMBI) that WFI Holdings-B LLC is currently developing with the USACE - St. Louis District and the Mitigation Bank Review Team (MBRT). A supplemental site visit was therefore performed on October 30, 2020 in order to collect additional data to address those comments. The data was utilized during the calculation and determination of the proposed wetland credits that the bank would provide. Overall, our Natural Resource services included a review of available resource maps and a reconnaissance survey with photographic documentation to document existing wetlands and waterbodies and to provide a Wetland and Waterbody Delineation Report summarizing our findings.

- SCI conducted a wetland and waterbody delineation of the approximately 73.17-acre project area on June 26, 2020. An additional site visit was conducted on August 31, 2020. The site was found to contain one emergent wetland, three areas identified as prior-converted cropland (PCC) and confirmed the presence of Silver Creek within the proposed project study area.
- The emergent wetland identified on site is anticipated to be considered a jurisdictional wetland and a water of the United States (WOTUS) as identified under the definitions described in Section 328.3 of the *Code of Federal Regulations and the Navigable Waters Protection Rule (NWPR)*. It is our professional opinion that the wetland would be categorized as WOTUS under the NWPR: (a)(4) wetlands abutting WOTUS Silver Creek. In addition, the three PCC areas may be categorized as exempt under NWPR: (b)(6)-Prior Converted Cropland. However, the USACE has the authority to determine whether or not the identified wetland areas are under their jurisdiction.
- A supplemental site visit, to collect additional information across the proposed bank site, was performed on October 30, 2020. Eleven additional sample points, photos, and data were acquired. Additional wetland determination forms are included in Appendix B. Each sample point was also digitally collected with a GPS unit and mapped on the attached *Figure 4 – Wetland and Waterbody Delineation & Aerial Photograph*.

650 Pierce Boulevard, O'Fallon, Illinois 62269 ■ 618-624-6969
www.sciengineering.com

Mr. Linden Graber
WFI Holdings-B LLC

2

May 21, 2021
SCI No. 2020-0311.30

Based on our review and field reconnaissance, it appears that jurisdictional WOTUS, as defined under the NWPR, are present on the site. If it appears that jurisdictional wetlands or waterbodies will be impacted during site development, the USACE will likely require a Section 404 Permit and a Section 401 Water Quality Certification from the Illinois Environmental Protection Agency (IEPA) will also be required. Overall, it appears that the project site will likely support wetland construction and development as both a stream and wetland mitigation bank.

We appreciate the opportunity to provide you with our Natural Resource services. If you have any questions or comments, please do not hesitate to contact us.

Respectfully,

SCI ENGINEERING, INC.



Laura A. Vrabel, PWS
Project Scientist



Scott E. Billings
Senior Project Scientist

LAV/SEB/rah

\\SCISTC\FFS01\Projects\2020\2020-0311 Lower Kankakee Wetland Mitigation Banks\NR\Task300\Wetland Report\Revised_Plocher_wetland and waterbody delin report_11-17-20.docx

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APPENDICES

Appendix A - Photographic Summary
Appendix B - Wetland Determination Data Forms
Appendix C - Rapid Bioassessment Protocols (RBP) Data Forms

Wetland and Waterbody Delineation Report
SILVER BANKS WETLAND AND STREAM MITIGATION BANK
EDWARDSVILLE, ILLINOIS

1.0 INTRODUCTION

SCI Engineering, Inc. (SCI) was retained by WFI Holdings-B LLC (WFI) to conduct a wetland and waterbody delineation on an approximately 73.17-acre site located approximately 2.5 miles east of Interstate 55, south of Fruit Road near Edwardsville, Illinois. SCI understands that the subject site is being considered as the first Wetland and Stream Mitigation Bank Site to be constructed under the proposed Umbrella Mitigation Banking Instrument (UMBI) that WFI is currently developing with the U.S. Army Corps of Engineers (USACE) - St. Louis District. Our scope of services included performing site reconnaissance to characterize the soils, vegetation, and hydrology for the delineation of wetlands and waterbodies.

The primary purpose of our visit was to determine the acreage of wetlands and length of tributaries that currently exist within the project limits during due diligence for the development of the site as a proposed wetland and/or stream mitigation bank. Our services were provided in general accordance with our proposal, dated June 19, 2020 and accepted on June 22, 2020.

Our site reconnaissance identified one emergent wetland, three areas identified as prior-converted cropland (PCC), and confirmed the presence of Silver Creek within the project study area. SCI anticipates that one of the wetlands (Wetland A) and Silver Creek would likely be considered jurisdictional Waters of the United States (WOTUS). Perennial and intermittent tributaries, as well as abutting and adjacent wetlands, are typically considered WOTUS as identified under the definitions described in Section 328.3 of the *Code of Federal Regulations (33 CFR)* and under the Navigable Waters Protection Rule (NWPR). In addition, the three areas identified areas as PCC would likely be considered non-jurisdictional features under the NWPR. Any impact to a WOTUS, including filling, crossing, piping, relocating, or discharging into, will require a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from Illinois Environmental Protection Agency (IEPA).

2.0 SITE LOCATION

The subject site consists of an approximately 73.17-acre agricultural field and riparian corridor located south of Fruit Road near Edwardsville, Illinois (38.828050, -89.832645). The surrounding land use consists mainly of rural residences, agricultural fields, a golf course, and forested riparian area. The *Vicinity and Topographic Map* depicting the site location is enclosed as Figure 1.

3.0 DESKTOP REVIEW

3.1 United States Geological Survey

The United States Geological Survey (USGS) topographic map depicts a generally flat parcel. One blue line tributary, identified as Silver Creek, bisects the project study area from north to south and a remnant stream feature is mapped along the western boundary of the site. The project site appears to drain centrally toward Silver Creek. The USGS topographic map is enclosed as Figure 1.

3.2 National Wetlands Inventory

The *National Wetlands Inventory (NWI) Map* depicts several wetland and riverine features within and abutting the project study area. A palustrine emergent (PEM) wetland is mapped within the southwest portion of the study area, while a palustrine forested (PFO) wetland is mapped within the northeast portion of the site. A second PFO wetland is mapped within a forested area that separates the site. The *NWI Map* depicts the western portion of the wetland extending onto the project area. Additionally, several riverine features are mapped at various locations within the project limits. The *NWI Map* is enclosed as Figure 2.

3.3 Web Soil Survey

The *Natural Resources Conservation Service (NRCS) Web Soil Survey* (<http://websoilsurvey.nrcs.usda.gov>) was utilized to determine the mapped soil types and hydric rating of the soils located within the project site. Hydric soils are described as those soils that are sufficiently wet in the upper-part to develop anaerobic conditions during the growing season. Partially hydric and hydric soils mapped within the project study area include Beacoup silty clam loam and Wakeland silty clay loam. The mapped soils are shown on Figure 2.

Table 3.1. NRCS Mapped Soils

Map Unit Symbol	Map Unit Name	Hydric	Acreage with Study Area
491C2	Ruma silt loam, 5 to 10% slopes, eroded	0%	0.04
702F	Ruma-Hickory silt loams, 18 to 35% slopes	0%	0.04
3070A	*Beaucoup silty clay loam, 0 to 2% slopes, frequently flooded	100%	70.31
3333A	Wakeland silt loam, 0 to 2% slopes, frequently flooded	5%	5.98

3.4 Federal Emergency Management Agency Flood Insurance Rate Map

Review of the *Flood Insurance Rate Map* panel maps 170436005B (Effective date: April 15, 1982) depicts the entire site within the special flood hazard area of Silver Creek and is mapped Zone-A6 (100-year floodplain). The *Federal Emergency Management Agency (FEMA) Flood Map* is included as Figure 3.

3.5 Aerial Review

Available aerial photographs of the project study area have been reviewed back to 1945. The aerials indicate that the site has been in agricultural production since at least 1945. Between 1945 and 1981 it appears that forest stand removal occurred for additional agricultural production. The current extent of forested area that has persisted is not a part of the study area. The aerial photographs taken between 1991 and 2019 show that agricultural swales and ditches are typically farmed in dry years and generally left fallow in wet years. Additionally, stressed crops and saturation signatures are visible within the agricultural fields, and it appears that significant flooding occurred in 2010 and 2018. Our review also identified two areas that appeared to possess noticeable saturation and surface water through the decades. These two areas are located within the northeast and southwest portions of the study area. However, even these areas are farmed in dry years and left fallow in wet years. Based on our historical aerial review from the areas that are mapped as wetlands, these areas would likely be considered prior converted croplands and have not been left fallow for more than five years at a time.

4.0 SITE RECONNAISSANCE

On June 26 and August 31, 2020 an SCI Professional Wetland Scientist and Natural Resources Scientist conducted field explorations to delineate the extent of wetlands and waterbodies that may exist within the project study area. Suspect areas that were identified during the desktop review were explored for wetland and waterbody characteristics utilizing methods as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0).

The proposed mitigation bank site is located within an undeveloped tract of land that exists as an active agricultural field. The surrounding landscape includes rural residential, small forested tracts, forested riparian corridors, agricultural fields, and the Oak Brook Golf Course to the northwest. The natural flow of water across the project study area drains centrally toward Silver Creek, which drains across the central portion of the site from north to south. Dominant herbaceous vegetation within the project study area included corn, butterweed (*Packera glabella*), johnsongrass (*Sorghum halepense*), pigweed (*Amaranthus*

albus), waterhemp (*A. tuberculatus*), sedge species (*Carex spp.*), barnyard grass (*Eleocharis crus-galli*), and cheatgrass (*Bromus tectorum*).

A supplemental site visit, to collect additional data, was performed on October 30, 2020. Eleven additional sample points, data forms, and photos were collected in order to provide more representative data of the site overall. The agricultural field had been harvested and plowed in some areas. Vegetation that had not been growing within the fields in May was observed throughout the agricultural field in October. According to WeatherUnderground history for the region, approximately 1.47 inches of rain fell in the week of October 26, 2020.

5.0 CONDITION SUMMARY

Our site visits identified one farmed palustrine emergent (PEM) wetland, three areas identified as PCC, and confirmed the presence of Silver Creek. Aerial imagery indicates saturation and stressed crops in some years within the PCC areas. In drier years the PCC areas appear to be planted in row crops, particularly within the areas identified as Area B, C, and D. Conversely, in years with above-average rainfall, the areas are not included in agricultural activities and appear to be left fallow. A photographic summary of the representative site conditions and identified features is contained in Appendix A. Detailed information about wetland hydrology, soils, and hydrophytic vegetation are included on the *Wetland Determination Data Forms*, enclosed as Appendix B. In addition, the features identified are illustrated on the *Wetland Delineation & Aerial Photograph*, enclosed as Figure 4. Table 5.1 provides a summary of the wetlands and waterbody identified on site.

Table 5.1 Wetlands and Waterbody Summary

Feature ID	Type ¹	NWPR Category ²	Size	WOTUS ³ or Exempt
Wetland A	Farmed PEM	(a)(4) Abutting Silver Creek	0.58 acre	WOTUS
Area B	PCC	(b)(6) PCC	8.74 acres	Exempt
Area C	PCC	(b)(6) PCC	12.70 acres	Exempt
Area D	PCC	(b)(6) PCC	0.29 acre	Exempt
Total:			22.31 acres	
Silver Creek	Perennial	(a)(2) Tributary	1,860 linear feet	WOTUS

¹PEM - Palustrine Emergent Wetland

²NWPR - Navigable Waters Protection Rule and PCC (Prior Converted Cropland)

³WOTUS - Waters of the U.S.

The wetland and PCC areas identified on site indicate that this area would likely support a successful mitigation bank site. The mitigation site would potentially improve existing wetland habitats and move them out of agricultural production, thus benefitting the local ecosystem and water quality of Silver Creek. Wetland A abuts Silver Creek and is not always farmed. Wetland A would likely be considered jurisdictional under the NWPR, while planted in row crops in dry years, it is much less frequent. PCC Areas B, C, and D are not anticipated to be considered jurisdictional as they appear to be planted in row crops during dry years. Silver Creek is disconnected from its floodplain and Areas B, C, and D are not flooded in typical years. Areas B, C, and D would likely be categorized as exempt under the NWPR: (b)(6) Prior Converted Cropland. Silver Creek, a perennial tributary, would be considered a jurisdictional WOTUS. It should be noted that the USACE has the sole discretion to determine what wetland and waterbody features are under their jurisdiction.

6.0 RAPID BIOASSESSMENT

The U.S. Environmental Protection Agency (USEPA) *Rapid Bioassessment Protocols (RBP) for Use in Streams and Wadeable Rivers* was utilized in order to determine the current condition of Silver Creek within the project limits. Data was collected along Silver Creek at three locations and included on three RBP data forms, which are enclosed as Appendix C. Data collected includes physical characteristics, water quality, and a visual-based habitat assessment. Much of the data is similar along the entire reach as the characteristics along the tributary do not change. Total scores as determined by the *Habitat Assessment Field Data Sheet – Low Gradient Streams* ranged from 75 to 90. Silver Creek appears to have been channelized historically according to our review of historic aerial imagery from 1945. It appears that Silver Creek has been impacted by agricultural practices and is disconnected from the floodplain. The stream bed is approximately 12 to 15 feet below the top of bank. Downcutting is occurring due to the lack of riparian corridor and agricultural production surrounding the feature. The banks are vertical and tree roots are exposed along the study reach. Water was observed to be turbid during the site visit. The top of bank width ranges between 30 and 40 feet and the ordinary high-water mark (OHWM) ranges between 15 and 20 feet. The riparian corridor is approximately 25 to 30 feet in width along both banks. Silver Creek would potentially benefit from mitigation bank development and would likely uplift the quality of the stream and the surrounding ecosystem.

7.0 CONCLUSION

Our review of the proposed project study area identified one farmed-emergent wetland, three areas identified as PCC, and Silver Creek within the proposed mitigation bank study area. Silver Creek and

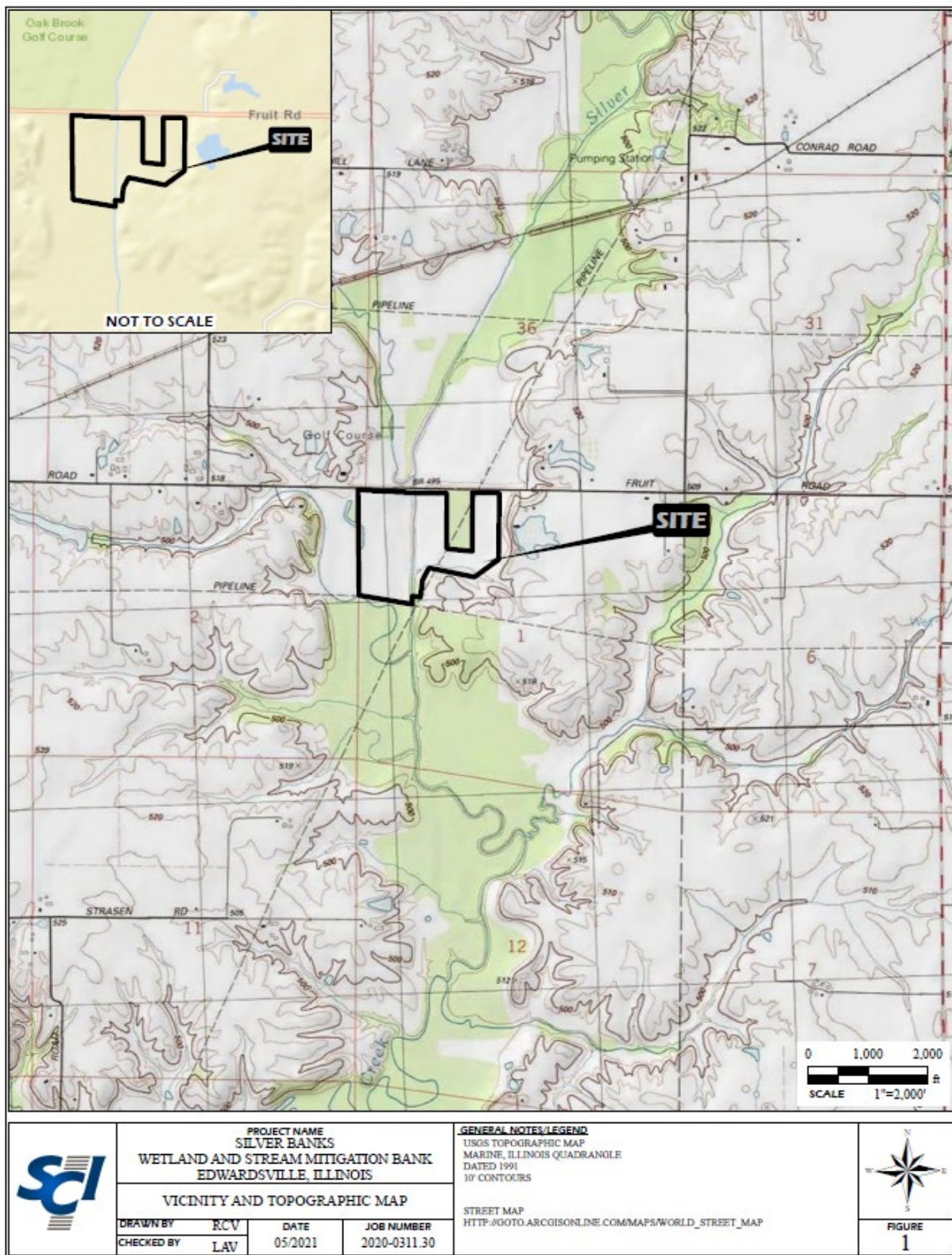
Wetland A would likely be considered jurisdictional WOTUS under the NWPR. In addition, Areas B, C and D may potentially be categorized as PCC and possibly exempt as jurisdictional waters under the NWPR. Overall, it appears that the project site will likely support wetland construction and development as both a stream and wetland mitigation bank.

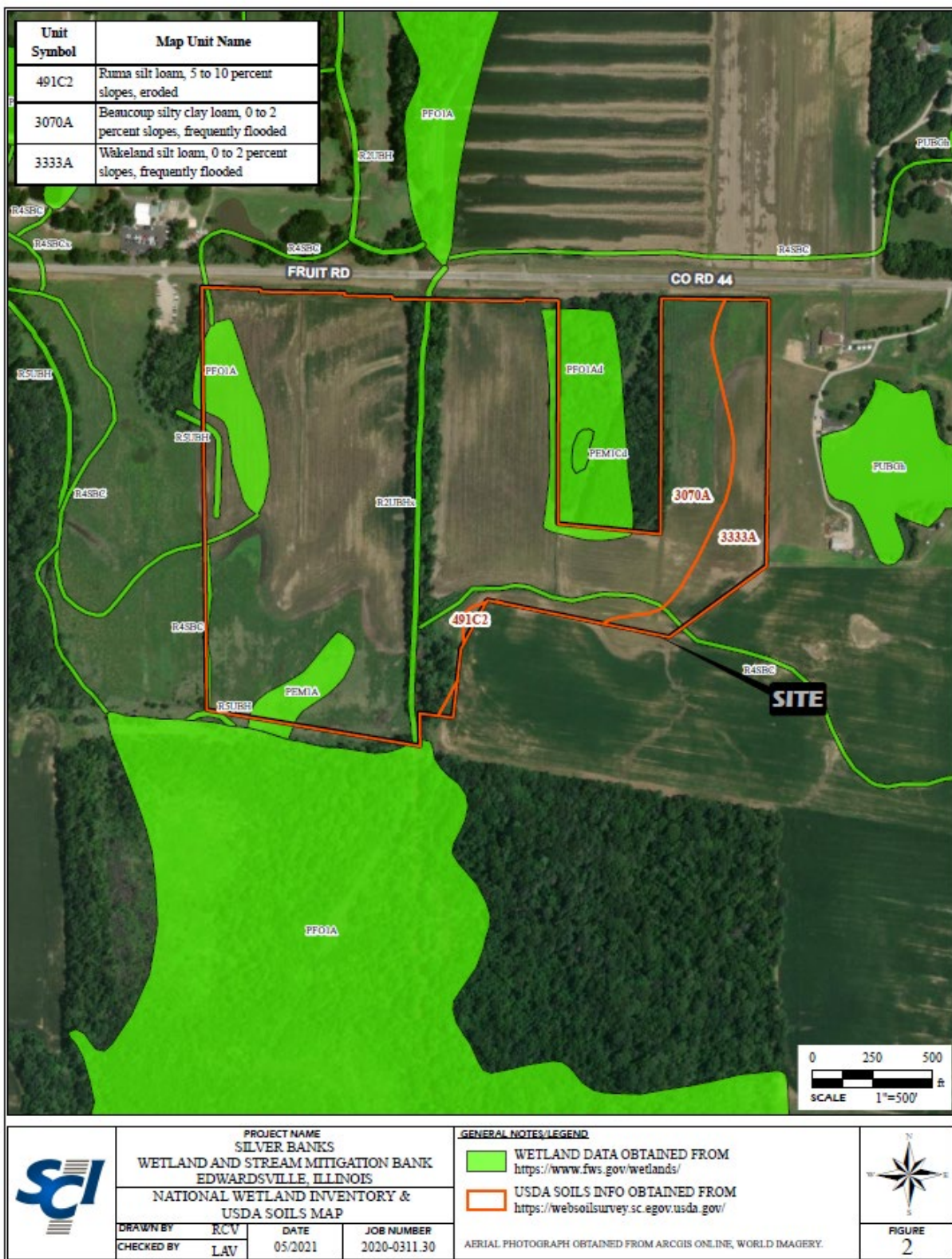
8.0 LIMITATIONS

This report has been prepared for the exclusive use of WFI Holdings-B LLC and the USACE. SCI is not responsible for independent conclusions or recommendations made by others. The size and location of all identified wetland and waterbody features have been delineated and quantified using a sub-meter accurate global positioning system. The USACE has the sole authority to determine if any of the features identified would be under their jurisdiction. Furthermore, written consent must be provided by SCI should anyone other than WFI Holdings-B LLC and the USACE wish to excerpt or rely on the contents of this report. The findings of this report are valid as of the present date of the delineation. SCI is not responsible for surveys, calculations, or plans that were prepared by others.

This delineation is based on professional experience in the approved methodology and from experience with the USACE; however, this delineation does not constitute a jurisdictional determination of waters of the United States. This delineation has been based on the professional experience of SCI staff and our interpretation of USACE regulations at 33 CFR 328.3 and joint USACE/Environmental Protection Agency guidance documents. While, SCI believes our delineation to be accurate, final authority to interpret the regulations and to issue or deny a permit lies solely with the USACE. SCI in no way guarantees the acquisition of a permit from the USACE and/or IEPA, if it is deemed necessary.

Changes in surface and subsurface conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, the broadening of knowledge, or other reasons. Accordingly, the findings of this report may be invalidated in whole or in part by changes outside our control.





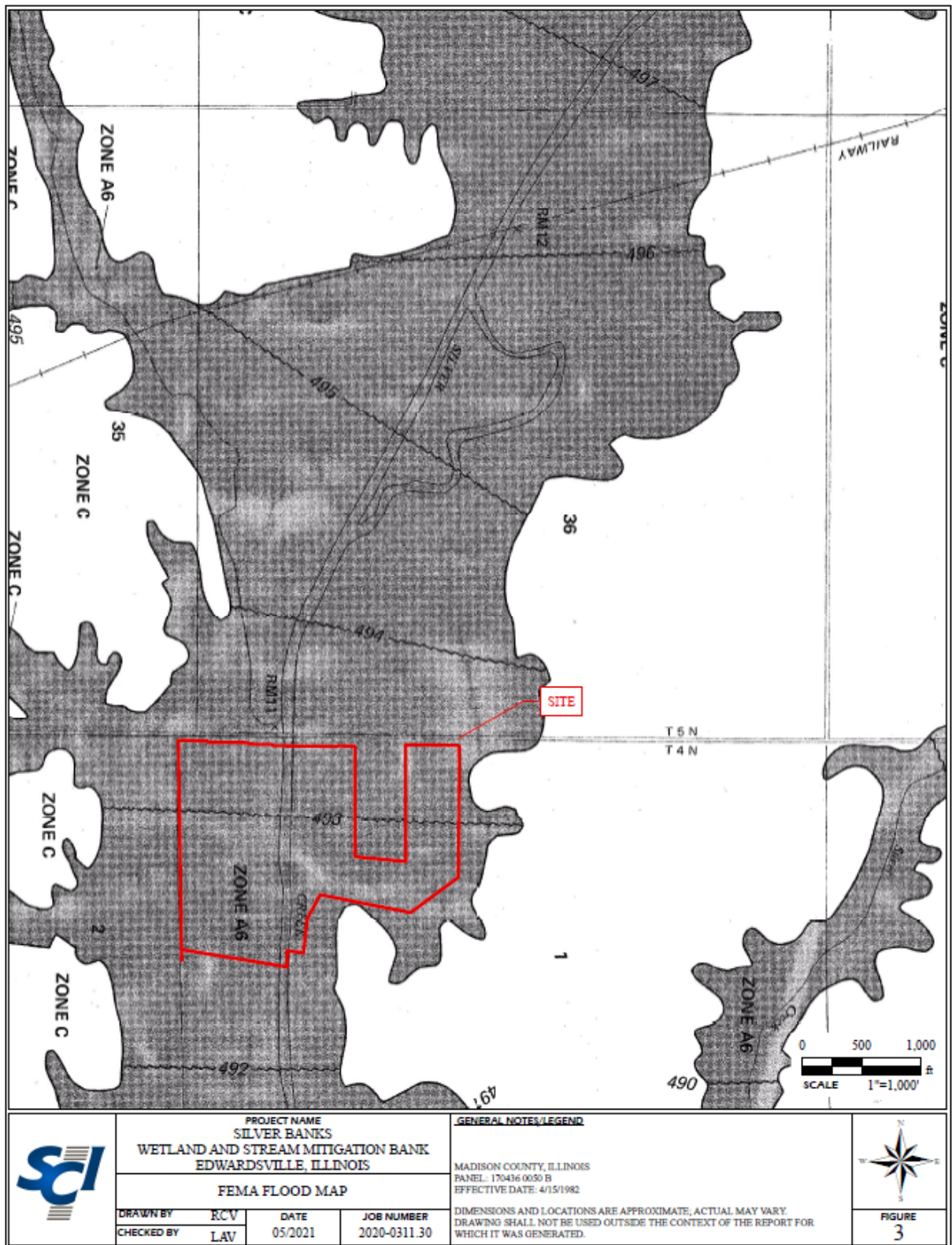




Photo 1. View of Silver Creek (downstream) from Fruit Road Bridge, facing southwest



Photo 2. View of area near RBP-1 site on Silver Creek (downstream), facing south

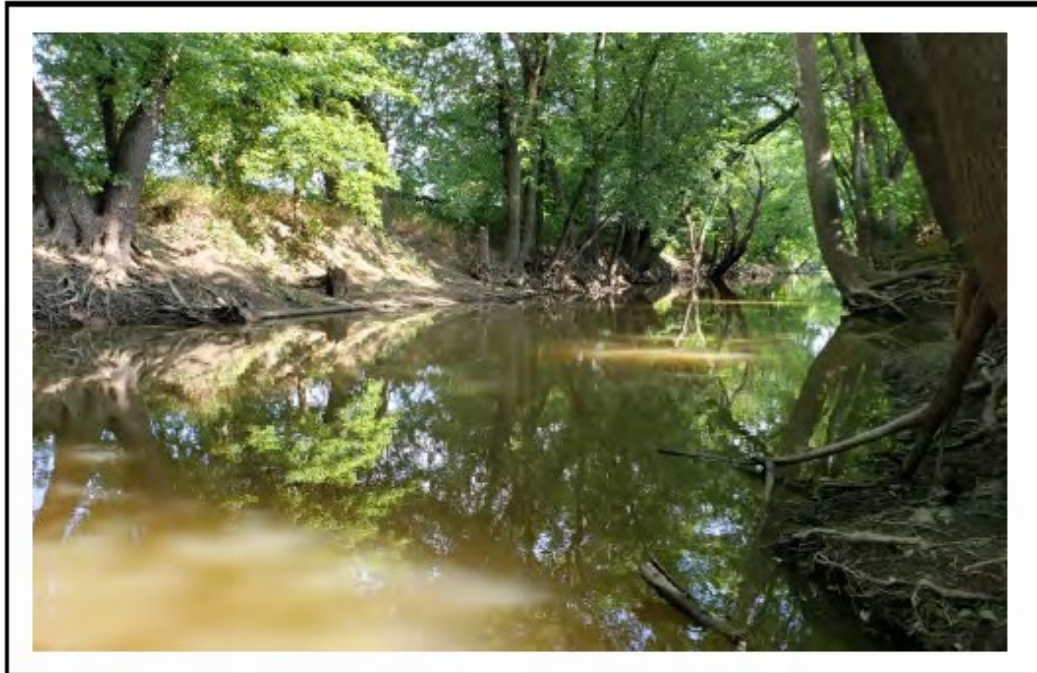


Photo 3. View of area near RBP-2 on Silver Creek (upstream), facing north



Photo 4. View of area near RBP-3 on Silver Creek (bank to bank), facing east



Photo 5. View of Wetland A abutting Silver Creek, facing northwest



Photo 6. View of Wetland B along farmed edge, facing southeast



Photo 7. View of Wetland B along farmed edge, facing north



Photo 8. View of Wetland C within the center on the area, facing south



Photo 9. View of Wetland C from farmed field, facing south



Photo 10. View of agricultural ditch and western site conditions, facing north



Photo 11. View of agricultural ditch from wooded edge, facing south



Photo 12. View of overgrown agricultural ditch near southern boundary, facing west



Photo 13. Overview of agricultural field edge south of off-site forested area, facing west

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Plocher Mitigation Bank Site (Proposed) City/County: Alhambra/Madison Sampling Date: 6/26/2020
 Applicant/Owner: WFI HOLDINGS LLC. State: IL Sampling Point: S1
 Investigator(s): SCI - L. Vnsabel, PWS-2273 Section, Township, Range: S1-T4N-R7W
 Landform (hillslope, terrace, etc.): flood plain Local relief (concave, convex, none): none
 Slope (%): 0% Lat: 38.826795 Long: -89.831619 Datum: WGS 84
 Soil Map Unit Name: Beaucoup silty clay loam, 0-2 percent slope, frequently flooded NWI classification: NIA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐		
Wetland Hydrology Present?	Yes ☒ No ☐		
Remarks: Wetland A is an emergent wetland abutting Silver Creek on its east bank. A portion of the wetland is farmed on its eastern edge in dry years.			

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size: 15' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ That Are OBL, FACW, or FAC: _____ A/B OBL species x1 = _____ FACW species 70% x2 = 1.4 FAC species 25% x3 = 0.75 FACU species x4 = _____ UPL species x5 = _____ Column Totals: 0.95 (A) 2.15 (B) Prevalence Index = B/A = 2.26
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
= Total Cover				
Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation ☒ 2-Dominance Test is >50% ☒ 3-Prevalence Index is ≤3.0 ¹ 4-Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Xanthium strumarium</i>	5%	No	FAC	
2. <i>Phalaris arundinacea</i>	30%	Yes	FACW	
3. <i>Panicum pensylvanicum</i>	15%	Yes	FACW	
4. <i>Carex grayi</i>	5%	No	FACW	
5. <i>Ambrosia trifida</i>	15%	Yes	FAC	
6. <i>Bidens frondosa</i>	10%	No	FACW	
7. <i>Rumex crispus</i>	5%	No	FAC	
8. <i>Carex vulpinoidea</i>	10%	No	FACW	
9. _____				
10. _____				
11. _____				
12. _____				
13. _____				
14. _____				
15. _____				
16. _____				
17. _____				
18. _____				
19. _____				
20. _____				
95% = Total Cover				
Woody Vine Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes ☒ No ☐
1. _____				
2. _____				
= Total Cover				
Remarks: (include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3"	10YR 4/2	80	10YR 4/6	20	C	M	Silty Clay Loam	
3-15"	10YR 4/1	80	10YR 4/6	20	C	M	Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ Coast Prairie Redox (A16)	☐ Iron-Manganese Masses (F12)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ Dark Surface (S7)	☐ Very Shallow Dark Surface (TF12)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Other (Explain in Remarks)	
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)		
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)		
☐ 2 cm Muck (A10)	☒ Depleted Matrix (F3)		
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)		
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)		
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)		
☐ 5 cm Mucky Peat or Peat (S3)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☒ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations:		Wetland Hydrology Present?	
Surface Water Present?	Yes ☐ No ☒	Depth (inches):	
Water Table Present?	Yes ☐ No ☒	Depth (inches):	
Saturation Present?	Yes ☐ No ☒	Depth (inches):	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Soil moist, not saturated

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Flocher Mitigation Bank Site (Proposed) City/County: Alhambra/Madison Sampling Date: 6/26/2020
 Applicant/Owner: WFI HOLDINGS LLC State: IL Sampling Point: S2
 Investigator(s): SC - L. Vrabel, PWS-2273 Section, Township, Range: S1-T4N-R7W
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave
 Slope (%): 0% Lat: 38.828117 Long: -89.828239 Datum: WGS 84
 Soil Map Unit Name: Beaucoup silty clay loam, 0-2 percent slope, frequently flooded NW classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: Wetland B is an emergent wetland surrounded by agricultural field and a wooded tract. Some of the wetland is farmed in dry years.			

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: That Are OBL, FACW, or FAC: <u>40%</u> x1 = <u>0.4</u> <u>55%</u> x2 = <u>1.1</u> FAC species <u> </u> x3 = <u> </u> FACU species <u> </u> x4 = <u> </u> UPL species <u> </u> x5 = <u> </u> Column Totals: <u>0.95</u> (A) <u>1.5</u> (B) Prevalence Index = B/A = <u>1.58</u>
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u>X</u> 1-Rapid Test for Hydrophytic Vegetation <u>X</u> 2-Dominance Test is >50% <u>X</u> 3-Prevalence Index is ≤3.0 ¹ <u> </u> 4-Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Phalaris arundinacea</u>	<u>30%</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Leersia oryzoides</u>	<u>25%</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Panicum pensylvanicum</u>	<u>10%</u>	<u>No</u>	<u>FACW</u>	
4. <u>Sagittaria latifolia</u>	<u>10%</u>	<u>No</u>	<u>OBL</u>	
5. <u>Eleocharis obtusa</u>	<u>5%</u>	<u>No</u>	<u>OBL</u>	
6. <u>Echinochloa crus-galli</u>	<u>15%</u>	<u>No</u>	<u>FACW</u>	
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
12. <u> </u>				
13. <u> </u>				
14. <u> </u>				
15. <u> </u>				
16. <u> </u>				
17. <u> </u>				
18. <u> </u>				
19. <u> </u>				
20. <u> </u>				
<u>95%</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

Sampling Point: S2

HYDROLOGYUS Army Corps of Engineers

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Plocher Mitigation Bank Site (Proposed) City/County: Alhambra/Madison Sampling Date: 6/26/2020
 Applicant/Owner: WFI HOLDINGS LLC State: IL Sampling Point: S4
 Investigator(s): SC - L. Vrabiel, PWS-2273 Section, Township, Range: S1-T4N-R7W
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none
 Slope (%): 0% Lat: 38.827882 Long: -89.828238 Datum: WGS 84
 Soil Map Unit Name: Beaucoup silty clay loam, 0-2 percent slope, frequently flooded NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area	
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	within a Wetland?	Yes <u> </u> No <u>X</u>
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		

Remarks:
 Data point S4 represents the upland conditions of the agricultural fields surrounding Wetlands A, B, C.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover			

Dominance Test worksheet:

Number of Dominant Species
 That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species
 That Are OBL, FACW, or FAC: 0% (A/B)

Sapling/Shrub Stratum (Plot size: <u>15'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover			

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
That Are OBL, FACW, or FAC:	A/B
OBL species	x1 = <u> </u>
FACW species	x2 = <u>0.1</u>
FAC species	x3 = <u> </u>
FACU species	x4 = <u>0.2</u>
UPL species	x5 = <u>4</u>
Column Totals:	<u>0.90</u> (A) <u>4.3</u> (B)
Prevalence Index = B/A = <u>4.78</u>	

Herb Stratum (Plot size: <u>5'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Zea mays</u>	<u>80%</u>	<u>Yes</u>	<u>UPL</u>
2. <u>Amaranthus albus</u>	<u>5%</u>	<u>No</u>	<u>FACU</u>
3. <u>Echinochloa crus-galli</u>	<u>5%</u>	<u>No</u>	<u>FACW</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>
12. <u> </u>	<u> </u>	<u> </u>	<u> </u>
13. <u> </u>	<u> </u>	<u> </u>	<u> </u>
14. <u> </u>	<u> </u>	<u> </u>	<u> </u>
15. <u> </u>	<u> </u>	<u> </u>	<u> </u>
16. <u> </u>	<u> </u>	<u> </u>	<u> </u>
17. <u> </u>	<u> </u>	<u> </u>	<u> </u>
18. <u> </u>	<u> </u>	<u> </u>	<u> </u>
19. <u> </u>	<u> </u>	<u> </u>	<u> </u>
20. <u> </u>	<u> </u>	<u> </u>	<u> </u>
90% = Total Cover			

Hydrophytic Vegetation Indicators:

1-Rapid Test for Hydrophytic Vegetation
 2-Dominance Test is >50%
 3-Prevalence Index is ≥3.0¹
 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Woody Vine Stratum (Plot size: <u>30'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover			

Hydrophytic Vegetation
 Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: S4

HYDROLOGY

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Plocher Mitigation Bank Site (Proposed) City/County: Alhambra/Madison Sampling Date: 8/31/2020
 Applicant/Owner: WFI HOLDINGS LLC State: IL Sampling Point: S3
 Investigator(s): SCI - S. Billings Section, Township, Range: S1-T4N-R7W
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave
 Slope (%): 0% Lat: 38.826564 Long: -89.828239 Datum: WGS 84
 Soil Map Unit Name: Beaucoup silty clay loam, 0-2 percent slope, frequently flooded NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area	
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	within a Wetland?	Yes <u>X</u> No <u> </u>
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>		
Remarks: Wetland C is a farmed emergent wetlands (prior converted cropland).				

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u> radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u> radius)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> That Are OBL, FACW, or FAC: <u> </u> A/B OBL species <u>5%</u> x1 = <u>0.05</u> FACW species <u>23%</u> x2 = <u>0.46</u> FAC species <u>3%</u> x3 = <u>0.09</u> FACU species <u>5%</u> x4 = <u>0.2</u> UPL species <u> </u> x5 = <u> </u> Column Totals: <u>0.36</u> (A) <u>0.8</u> (B) Prevalence Index = B/A = <u>2.22</u>
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
= Total Cover				
Herb Stratum (Plot size: <u>5'</u> radius)				Hydrophytic Vegetation Indicators: 1-Rapid Test for Hydrophytic Vegetation <u>X</u> 2-Dominance Test is >50% <u>X</u> 3-Prevalence Index is ≥3.0 ¹ 4-Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Phalaris arundinacea</u>	<u>15%</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Amaranthus albus</u>	<u>5%</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Panicum pensylvanicum</u>	<u>3%</u>	<u>No</u>	<u>FACW</u>	
4. <u>Rumex crispus</u>	<u>3%</u>	<u>No</u>	<u>FAC</u>	
5. <u>Eleocharis obtusa</u>	<u>5%</u>	<u>Yes</u>	<u>OBL</u>	
6. <u>Echinochloa crus-galli</u>	<u>5%</u>	<u>Yes</u>	<u>FACW</u>	
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
12. <u> </u>				
13. <u> </u>				
14. <u> </u>				
15. <u> </u>				
16. <u> </u>				
17. <u> </u>				
18. <u> </u>				
19. <u> </u>				
20. <u> </u>				
<u>36%</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u> radius)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>				
2. <u> </u>				
= Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: S3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6"	10YR 4/2	85	10YR 4/3	15	C	M	Silty Clay Loam	
6-15"	10YR 4/1	85	10YR 4/6	15	C	M	Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ Coast Prairie Redox (A16)	
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ Iron-Manganese Masses (F12)	
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Dark Surface (S7)	
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Very Shallow Dark Surface (TF12)	
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)	
☐ 2 cm Muck (A10)	☒ Depleted Matrix (F3)		
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)		
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)		
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)		
☐ 5 cm Mucky Peat or Peat (S3)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):		Hydric Soil Present?	
Type: _____		Yes	☒ No ☐
Depth (inches): _____			

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required: check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☒ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☒ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations:		Wetland Hydrology Present?	
Surface Water Present?	Yes ☐ No ☒	Yes	☒ No ☐
Water Table Present?	Yes ☐ No ☒		
Saturation Present?	Yes ☐ No ☒		
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Moist soils, not saturated.

Project/Site: Piocher Mitigation Bank site (Proposed) City/County: Alhambra/Madison Sampling Date: 8/31/2020
 Applicant/Owner: WFI HOLDINGS LLC. State: IL Sampling Point: S6
 Investigator(s): SCI - S. Billings Section, Township, Range: S1-T4N-R7W
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none
 Slope (form): 0% Lat: 38.828117 Long: -89.826239 Datum: WGS 84
 Soil Map Unit Name: Beaumont silty clay loam, 0-2 percent slope, frequently flooded NMT classification: NIA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			
Remarks: Upland data point S5 is associated with and lays adjacent to Wetland C within an active ag-field.					

Observation = Use scientific names of plants.

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
= Total Cover			

Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
= Total Cover			

Herb Stratum (Plot size: <u>5' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Zea mays</i>	30%	Yes	UPL
2. <i>Echinochloa crus-galli</i>	10%	Yes	FACW
3. <i>Paspalum pensylvanicum</i>	3%	No	FACW
4. <i>Amaranthus albus</i>	3%	No	FACU
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
46% = Total Cover			

Woody Vine Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
= Total Cover			

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: S5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-6"	10YR 3/2	100					Silty Clay Loam	
6-10"	10YR 4/3	100					Clay Loam	
10-15"	10YR 4/2	100					Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ Coast Prairie Redox (A16)	
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ Iron-Manganese Masses (F12)	
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Dark Surface (S7)	
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Very Shallow Dark Surface (TF12)	
☐ Stratified Layers (A5)	☐ Loamy Gleyed Matrix (F2)	☐ Other (Explain in Remarks)	
☐ 2 cm Muck (A10)	☐ Depleted Matrix (F3)		
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)		
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)		
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)		
☐ 5 cm Mucky Peat or Peat (S3)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):		Hydric Soil Present?		Yes	No	X
Type:						
Depth (inches):						

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations:		Wetland Hydrology Present?		Yes	No	X
Surface Water Present?	Yes ☐ No ☒	Depth (inches):				
Water Table Present?	Yes ☐ No ☒	Depth (inches):				
Saturation Present?	Yes ☐ No ☒	Depth (inches):				
(includes capillary fringe)						

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix C

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET
(FRONT)**

STREAM NAME <u>Silver Creek</u>	LOCATION <u>Madison County</u>	
STATION # <u>RBP 1</u> RIVERMILE _____	STREAM CLASS <u>Perennial</u>	
LAT <u>38.830275</u> LONG <u>-89.832231</u>	RIVER BASIN <u>Kaskaskia River</u>	
STORET # _____	AGENCY <u>SCI Engineering</u>	
INVESTIGATORS <u>SCI - Laura Vrabel, PWS</u>		
FORM COMPLETED BY <u>SCI - Laura Vrabel, PWS</u>	DATE <u>6-26-20</u> TIME <u>9:00-12:30</u> AM PM	REASON FOR SURVEY <u>Potential Mitigation Site</u>

WEATHER CONDITIONS	Now ☐ storm (heavy rain) ☐ rain (steady rain) ☐ showers (intermittent) ☐ %cloud cover ☒ clear/sunny	Past 24 hours ☐ storm (heavy rain) ☐ rain (steady rain) ☐ showers (intermittent) ☐ %cloud cover ☐ clear/sunny	Has there been a heavy rain in the last 7 days? ☒ Yes ☐ No Air Temperature <u>85</u> °C Other <u>June 23 -0.38" rain, June 21-0.8" rain</u>
	SITE LOCATION/MAP Draw a map of the site and indicate the areas sampled (or attach a photograph)		
STREAM CHARACTERIZATION	Stream Subsystem ☒ Perennial ☐ Intermittent ☐ Tidal Stream Type ☐ Coldwater ☒ Warmwater Catchment Area _____ km² Stream Origin ☐ Glacial ☐ Spring-fed ☐ Non-glacial montane ☒ Mixture of origins ☐ Swamp and bog ☐ Other _____		

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET
(BACK)**

WATERSHED FEATURES	Predominant Surrounding Landuse ☐ Forest ☐ Commercial ☐ Field/Pasture ☐ Industrial ☒ Agricultural ☐ Other _____ ☐ Residential		Local Watershed NPS Pollution ☐ No evidence ☐ Some potential sources ☒ Obvious sources
			Local Watershed Erosion ☐ None ☒ Moderate ☐ Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present ☒ Trees ☒ Shrubs ☐ Grasses ☐ Herbaceous dominant species present <u>Silver maple, green ash, hackberry, box elder, honeysuckle</u>		
INSTREAM FEATURES	Estimated Reach Length <u>152</u> m Estimated Stream Width <u>8</u> m Sampling Reach Area <u>1,216</u> m ² Area in km ² (m ² x1000) <u>1,216,000</u> km ² Estimated Stream Depth <u>0.5</u> m Surface Velocity (at thalweg) <u>0.5</u> m/sec		Canopy Cover ☐ Partly open ☐ Partly shaded ☒ Shaded High Water Mark <u>4.5</u> m Proportion of Reach Represented by Stream Morphology Types ☐ Riffle _____ % ☒ Run 100 % ☐ Pool _____ % Channelized ☒ Yes ☐ No Dam Present ☐ Yes ☒ No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area)		
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present ☐ Rooted emergent ☐ Rooted submergent ☐ Rooted floating ☐ Free floating ☐ Floating Algae ☐ Attached Algae dominant species present <u>N/A</u> Portion of the reach with aquatic vegetation <u>0</u> %		
WATER QUALITY	Temperature <u>77</u> °C Specific Conductance <u>5195</u> uS/cm Dissolved Oxygen _____ pH <u>6.6</u> Turbidity <u>97</u> ppm WQ Instrument Used <u>combo pH&EC Hanna pen</u>		Water Odors ☒ Normal/None ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Fishy ☐ Other _____ Water Surface Oils ☒ Slick ☐ Sheen ☐ Globbs ☐ Flecks ☒ None ☐ Other _____ Turbidity (if not measured) ☐ Clear ☐ Slightly turbid ☒ Turbid ☐ Opaque ☐ Stained ☐ Other _____
SEDIMENT/SUBSTRATE	Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ None ☐ Other _____ Deposits ☐ Sludge ☐ Sawdust ☐ Paper fiber ☒ Sand ☐ Relict shells ☐ Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? ☒ Yes ☒ No		

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	25
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	25	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	25			
Clay	< 0.004 mm (slick)	25			

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS (FRONT)

STREAM NAME Silver Creek	LOCATION Madison Co., IL	
STATION # RBP 1 RIVERMILE	STREAM CLASS Perennial	
LAT 38.830275 LONG -89.832231	RIVER BASIN Kaskaskia River	
STORET #	AGENCY SCI Engineering	
INVESTIGATORS Laura Vrabel, PWS		
FORM COMPLETED BY SCI	DATE 6/28/20 TIME 9:00 AM AM PM	REASON FOR SURVEY Potential Mitigation Bank Site

Parameters to be evaluated in sampling reach	Habitat Parameter	Condition Category			
		Optimal	Suboptimal	Marginal	Poor
	1. Epifaunal Substrate/ Available Cover	Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	30-50% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization (may rate at high end of scale).	10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 10% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	SCORE 6	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	2. Pool Substrate Characterization	Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.	All mud or clay or sand bottom; little or no root mat; no submerged vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
	SCORE 6	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	3. Pool Variability	Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.	Majority of pools large-deep; very few shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools small-shallow or pools absent.
	SCORE 4	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 20-50% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 50-80% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
	SCORE 5	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
	SCORE 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS (BACK)

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.	
SCORE 8	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Channel Sinuosity The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line. (Note - channel braiding is considered normal in coastal plains and other low-lying areas. This parameter is not easily rated in these areas.)	The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.	The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.	Channel straight; waterway has been channelized for a long distance.	
SCORE 3	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.	
SCORE 4 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 4 (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0
9. Vegetative Protection (score each bank) Note: determine left or right side by facing downstream.	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE 8 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 8 (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone) Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.	
SCORE 4 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 4 (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0

Total Score 75

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET
(FRONT)**

STREAM NAME <u>Silver Creek</u>	LOCATION <u>Madison County</u>	
STATION # <u>RBP 2</u> RIVERMILE _____	STREAM CLASS <u>Perennial</u>	
LAT <u>38.826019</u> LONG <u>-89.832178</u>	RIVER BASIN <u>Kaskaskia River</u>	
STORET # _____	AGENCY <u>SCI Engineering</u>	
INVESTIGATORS <u>SCI - Laura Vrabel, PWS</u>		
FORM COMPLETED BY <u>SCI - Laura Vrabel, PWS</u>	DATE <u>6-26-20</u> TIME <u>8:00-12:30</u> AM PM	REASON FOR SURVEY <u>Potential Mitigation Site</u>

WEATHER CONDITIONS	Now ☐ storm (heavy rain) ☐ rain (steady rain) ☐ showers (intermittent) ☐ %cloud cover ☒ clear/sunny	Past 24 hours ☐ storm (heavy rain) ☐ rain (steady rain) ☐ showers (intermittent) ☐ %cloud cover ☐ clear/sunny	Has there been a heavy rain in the last 7 days? ☒ Yes ☐ No Air Temperature <u>85</u> °C Other <u>June 23 -0.38" rain, June 21-0.8" rain</u>
	SITE LOCATION/MAP Draw a map of the site and indicate the areas sampled (or attach a photograph)		
STREAM CHARACTERIZATION	Stream Subsystem ☒ Perennial ☐ Intermittent ☐ Tidal Stream Type ☐ Coldwater ☒ Warmwater Stream Origin ☐ Glacial ☐ Spring-fed ☐ Non-glacial montane ☒ Mixture of origins ☐ Swamp and bog ☐ Other _____ Catchment Area _____ km²		

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET
(BACK)**

WATERSHED FEATURES	Predominant Surrounding Landuse ☐ Forest ☐ Commercial ☐ Field/Pasture ☐ Industrial ☒ Agricultural ☐ Other _____ ☐ Residential	Local Watershed NPS Pollution ☐ No evidence ☐ Some potential sources ☒ Obvious sources Local Watershed Erosion ☐ None ☒ Moderate ☐ Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present ☒ Trees ☒ Shrubs ☐ Grasses ☐ Herbaceous dominant species present Silver maple, green ash, hackberry, box elder, honeysuckle	
INSTREAM FEATURES	Estimated Reach Length <u>152</u> m Estimated Stream Width <u>8</u> m Sampling Reach Area <u>1,216</u> m ² Area in km ² (m ² x 1000) <u>1,216,000</u> km ² Estimated Stream Depth <u>0.5</u> m Surface Velocity <u>0.5</u> m/sec Canopy Cover ☐ Partly open ☐ Partly shaded ☒ Shaded High Water Mark <u>ss</u> m Proportion of Reach Represented by Stream Morphology Types ☐ Riffle _____ % ☒ Run 100 % ☐ Pool _____ % Channelized ☒ Yes ☐ No Dam Present ☐ Yes ☒ No	
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ³ /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present ☐ Rooted emergent ☐ Rooted submergent ☐ Rooted floating ☐ Free floating ☐ Floating Algae ☐ Attached Algae dominant species present <u>N/A</u> Portion of the reach with aquatic vegetation <u>0</u> %	
WATER QUALITY	Temperature <u>79</u> °C Specific Conductance <u>5195</u> uS/cm Dissolved Oxygen _____ pH <u>6.8</u> Turbidity <u>99</u> ppm WQ Instrument Used <u>combo pH&EC Hanna pen</u> Water Odors ☒ Normal/None ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Fishy ☐ Other _____ Water Surface Oils ☐ Slick ☐ Sheen ☐ Globs ☐ Flecks ☒ None ☐ Other _____ Turbidity (if not measured) ☐ Clear ☐ Slightly turbid ☒ Turbid ☐ Opaque ☐ Stained ☐ Other _____	
SEDIMENT/ SUBSTRATE	Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ None ☐ Other _____ Deposits ☐ Sludge ☐ Sawdust ☐ Paper fiber ☒ Sand ☐ Relict shells ☐ Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? ☐ Yes ☒ No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	25
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)	25	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	25			
Clay	< 0.004 mm (slick)	25			

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS (FRONT)

STREAM NAME Silver Creek		LOCATION Madison Co., IL	
STATION # RBP 2 RIVERMILE		STREAM CLASS Perennial	
LAT 36.828919 LONG -89.832178		RIVER BASIN Kaskaskia River	
STORET #		AGENCY SCI Engineering	
INVESTIGATORS Laura Vrabel, PWS			
FORM COMPLETED BY SCI		DATE 6/26/20 TIME 10:00 AM AM PM	REASON FOR SURVEY Potential Mitigation Bank Site

	Habitat Parameter	Condition Category			
		Optimal	Suboptimal	Marginal	Poor
Parameters to be evaluated in sampling reach	1. Epifaunal Substrate/ Available Cover	Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	30-50% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization (may rate at high end of scale).	10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 10% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	SCORE 7	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	2. Pool Substrate Characterization	Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.	All mud or clay or sand bottom; little or no root mat; no submerged vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
	SCORE 7	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	3. Pool Variability	Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.	Majority of pools large-deep; very few shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools small-shallow or pools absent.
	SCORE 4	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 20-50% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 50-80% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
	SCORE 5	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
	SCORE 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS (BACK)

Habitat Parameter	Condition Category																				
	Optimal					Suboptimal					Marginal					Poor					
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.					Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.					Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.					Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.					
SCORE 8	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
7. Channel Sinuosity	The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line. (Note - channel braiding is considered normal in coastal plains and other low-lying areas. This parameter is not easily rated in these areas.)					The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.					The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.					Channel straight; waterway has been channelized for a long distance.					
SCORE 3	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
8. Bank Stability (score each bank)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.					Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.					Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.					Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.					
SCORE 4 (LB)	Left Bank 10 9					8 7 6					5 4 3					2 1 0					
SCORE 4 (RB)	Right Bank 10 9					8 7 6					5 4 3					2 1 0					
9. Vegetative Protection (score each bank) Note: determine left or right side by facing downstream.	More than 50% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.					70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.					Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.					
SCORE 8 (LB)	Left Bank 10 9					8 7 6					5 4 3					2 1 0					
SCORE 8 (RB)	Right Bank 10 9					8 7 6					5 4 3					2 1 0					
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.					Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.					Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.					Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.					
SCORE 4 (LB)	Left Bank 10 9					8 7 6					5 4 3					2 1 0					
SCORE 4 (RB)	Right Bank 10 9					8 7 6					5 4 3					2 1 0					

Total Score 77

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET
(FRONT)**

STREAM NAME <u>Silver Creek</u>	LOCATION <u>Madison County</u>	
STATION # <u>RBP 3</u> RIVERMILE _____	STREAM CLASS <u>Perennial</u>	
LAT <u>38.626242</u> LONG <u>-89.6323245</u>	RIVER BASIN <u>Kaskaskia River</u>	
STORET # _____	AGENCY <u>SCI Engineering</u>	
INVESTIGATORS <u>SCI - Laura Vrabel, PWS</u>		
FORM COMPLETED BY <u>SCI - Laura Vrabel, PWS</u>	DATE <u>6-26-20</u> TIME <u>9:00-12:30</u> AM PM	REASON FOR SURVEY <u>Potential Mitigation Site</u>

WEATHER CONDITIONS	Now ☐ storm (heavy rain) ☐ rain (steady rain) ☐ showers (intermittent) ☒ %cloud cover ☐ clear/sunny	Past 24 hours ☒ storm (heavy rain) ☐ rain (steady rain) ☐ showers (intermittent) ☐ %cloud cover ☐ clear/sunny	Has there been a heavy rain in the last 7 days? ☒ Yes ☐ No Air Temperature <u>85</u> °C Other <u>June 23 -0.38" rain, June 21-0.8" rain</u>
	SITE LOCATION/MAP Draw a map of the site and indicate the areas sampled (or attach a photograph)		
STREAM CHARACTERIZATION	Stream Subsystem ☒ Perennial ☐ Intermittent ☐ Tidal Stream Origin ☐ Glacial ☐ Spring-fed ☐ Non-glacial montane ☒ Mixture of origins ☐ Swamp and bog ☐ Other _____ Stream Type ☐ Coldwater ☒ Warmwater Catchment Area _____ km²		

**PHYSICAL CHARACTERIZATION/WATER QUALITY FIELD DATA SHEET
(BACK)**

WATERSHED FEATURES	Predominant Surrounding Landuse ☐ Forest ☐ Commercial ☐ Field/Pasture ☐ Industrial ☒ Agricultural ☐ Other _____ ☐ Residential		Local Watershed NPS Pollution ☐ No evidence ☐ Some potential sources ☒ Obvious sources Local Watershed Erosion ☐ None ☒ Moderate ☐ Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present ☒ Trees ☒ Shrubs ☐ Grasses ☐ Herbaceous dominant species present Silver maple, green ash, hackberry, box elder, honeysuckle		
INSTREAM FEATURES	Estimated Reach Length <u>152</u> m Estimated Stream Width <u>8</u> m Sampling Reach Area <u>1.218</u> m ² Area in km ² (m ² x 1000) <u>1.218.000</u> km ² Estimated Stream Depth <u>0.5</u> m Surface Velocity <u>0.5</u> m/sec Canopy Cover ☐ Partly open ☐ Partly shaded ☒ Shaded High Water Mark <u>4.5</u> m Proportion of Reach Represented by Stream Morphology Types ☐ Riffle _____ % ☒ Run 100 % ☐ Pool _____ % Channelized ☒ Yes ☐ No Dam Present ☐ Yes ☒ No		
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area)		
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present ☐ Rooted emergent ☐ Rooted submergent ☐ Rooted floating ☐ Free floating ☐ Floating Algae ☐ Attached Algae dominant species present <u>N/A</u> Portion of the reach with aquatic vegetation <u>0</u> %		
WATER QUALITY	Temperature <u>79</u> °C Specific Conductance <u>5195</u> uS/cm Dissolved Oxygen _____ pH <u>6.8</u> Turbidity <u>99</u> ppm WQ Instrument Used <u>combo pH&EC Hanna pen</u> Water Odors ☒ Normal/None ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Fishy ☐ Other _____ Water Surface Oils ☐ Slick ☐ Sheen ☐ Globs ☐ Flocks ☒ None ☐ Other _____ Turbidity (if not measured) ☐ Clear ☐ Slightly turbid ☒ Turbid ☐ Opaque ☐ Stained ☐ Other _____		
SEDIMENT/ SUBSTRATE	Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ None ☐ Other _____ Deposits ☐ Sludge ☐ Sawdust ☐ Paper fiber ☒ Sand ☐ Relict shells ☐ Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse ☐ Yes ☒ No		

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	25
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")				
Gravel	2-64 mm (0.1"-2.5")		Muck-Mud	black, very fine organic (FPOM)	
Sand	0.06-2mm (gritty)	25	Marl	grey, shell fragments	
Silt	0.004-0.06 mm	25			
Clay	< 0.004 mm (slick)	25			

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS (FRONT)

STREAM NAME Silver Creek	LOCATION Madison Co., IL	
STATION # RBP 3 RIVERMILE	STREAM CLASS Perennial	
LAT 38.826242 LONG -89.8323245	RIVER BASIN Kaskaskia River	
STORET #	AGENCY SCI Engineering	
INVESTIGATORS Laura Vrabel, PWS		
FORM COMPLETED BY SCI - Laura Vrabel, PWS	DATE 8/26/20 TIME 11:30 AM AM PM	REASON FOR SURVEY Potential Mitigation Bank Site

Parameters to be evaluated in sampling reach	Habitat Parameter	Condition Category			
		Optimal	Suboptimal	Marginal	Poor
	1. Epifaunal Substrate/ Available Cover	Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and not transient).	30-50% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization (may rate at high end of scale).	10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 10% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	SCORE 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	2. Pool Substrate Characterization	Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.	All mud or clay or sand bottom; little or no root mat; no submerged vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
	SCORE 7	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	3. Pool Variability	Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.	Majority of pools large-deep; very few shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools small-shallow or pools absent.
	SCORE 7	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 20-50% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 50-80% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
	SCORE 5	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
	SCORE 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS (BACK)

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.	
SCORE 8	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Channel Sinuosity The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line. (Note - channel braiding is considered normal in coastal plains and other low-lying areas. This parameter is not easily rated in these areas.)	The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.	The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.	Channel straight; waterway has been channelized for a long distance.	
SCORE 3	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.	
SCORE 7 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 7 (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0
9. Vegetative Protection (score each bank) Note: determine left or right side by facing downstream.	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE 8 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 8 (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone) Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.	
SCORE 4 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 4 (RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0

Total Score 90

Appendix 8
Archaeological Phase 1 Survey
and
Environmental Phase 1 Site Assessment



SCI ENGINEERING, INC.

EARTH • SCIENCE • SOLUTIONS

GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

July 24, 2020

Mr. Linden Graber
WFI Holdings LLC
248 Southwoods Center
Columbia, Illinois 62236

RE: Phase One Cultural Resource Survey
Lower Kaskaskia Creek Watershed– Wetland and Stream Mitigation Bank
Madison County, Illinois
SCI No. 2020-0311.40

Dear Mr. Graber:

SCI Engineering, Inc. (SCI) has completed the Phase One Cultural Resource Survey (Phase One) at the above referenced site. The Phase One Survey located one cultural resource site. Site 11MS2580 is not considered significant. Therefore, SCI believes further investigations of the project area are unwarranted and recommends clearance of the project area.

Please contact us if you have any questions or comments regarding this report.

Respectfully,

SCI ENGINEERING, INC.

Bryan M. Carlo, MA
Staff Archaeologist

Don L. Booth, MA
Chief Archaeologist

BMC/DLB/lfr/ah

Appendices

- Appendix A – Figures
- Appendix B – Photographic Summary
- Appendix C – IAS Site Form

Public disclosure of site locations reported herein is prohibited by 16 USC 470W-3

N:\Projects\2020\2020-0311 Lower Kaskaskia Wetland Mitigation Bank\CR\Report\2020-0311.40 Lower Kaskaskia Phase One CRS.docx

EXECUTIVE SUMMARY

ProGEA, Inc. (ProGEA) was retained to conduct a Phase I Environmental Site Assessment (ESA) on agricultural cropland located at 9370 Fruit Road in Alhambra, Madison County, Illinois 62001, and commonly known as Plocher Farm (the "Site"). The objective of the assessment was to provide an independent, professional opinion regarding recognized environmental conditions (RECs), as defined by ASTM, associated with the Site. This Phase I ESA was requested for the purpose of qualifying for the landowner liability protections to CERCLA liability.

This Phase I ESA was performed in accordance with ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Any exceptions to, additions to, or deletions from these guidelines are described in Sections 1.2 and 1.3 of the report. Details of the work performed, sources of information, and findings are presented in the report. Limitations of the assessment are described in Sections 1.2 and 1.3.

Environmental professionals involved in the preparation and review of this Phase I ESA meet the qualifications for environmental professionals included in the all appropriate inquiries final rule (40 CFR 312.10). This final report and all appropriate inquiries conducted in conjunction with this report were carried out in accordance with the requirements of the final rule.

The Site consists of one irregular-shaped tract of agricultural cropland encompassing approximately 76.4 acres. On-Site operations consist of dryland crop cultivation. No permanent structures were observed on-Site. A subsurface petroleum pipeline crosses the Site from north to south. No signs of environmental impact were observed related to the pipeline and only the pipeline markers are visible at the Site. No irrigation wells were observed on-Site and there are no wells are registered with the Illinois State Geological Survey (ISGS). No storage or mixing of pesticides, herbicides, or fertilizers were observed on-Site. The current use of the Site is not considered a REC.

Review of aerial photographs (1941 – 2017) and historic topographic maps (1927 – 2012) indicated that the Site has been predominantly vacant and/or agricultural land from at least 1927 until the present. The historical use of the Site is not considered a REC.

No evidence of aboveground storage tanks (ASTs) or underground storage tanks (USTs) was observed at the Site during the assessment. In addition, no features were observed at the Site that would have required ASTs or USTs to be present, and there are no ASTs or USTs registered with the Illinois Environmental Protection Agency (IEPA), Bureau of Land (BOL) or the Illinois Office of the State Fire Marshal (OSFM).

No hazardous wastes are currently generated on-Site. None of the records reviewed indicated the historical use of large quantities of hazardous materials or the generation of hazardous waste at the Site. The Site is used for cultivation of agricultural crops;

EXECUTIVE SUMMARY
(Continued)

therefore, commercially acceptable quantities of pesticides, herbicides, and fertilizers are applied.

The Site was inspected for the presence of sensitive ecological areas by noting environmental indicators (e.g., wetlands vegetation, floodplains) located on or immediately adjoining the Site. Freshwater Emergent Wetland (PEM1A), Freshwater Forested/Shrub Wetland (PFO1A), Freshwater Forested/Shrub Wetland (PFO1Ad), Riverine Wetland (R5UBH), Riverine Wetlands (R4SBC) and Riverine (R2UBHx) areas were depicted on the USFWS, National Wetlands Inventory Map. Indicators of wetland vegetation and soils were not observed during the Site inspection. Based on farming exemptions contained in Section 404 of the Clean Water Act, the farming activities conducted at Plocher Farm appear to be exempt from wetland permitting requirements as long as the on-Site discharges remain part of normal farming, ranching, and forestry activities.

The Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) number 1704360050B, dated April 15, 1982, was reviewed for the subject property. The Site is located within flood Zone C. Areas in Zone C are determined to be outside the 0.2% annual chance floodplain.

A review of applicable records for information regarding threatened/endangered species was made on the USFWS Online Database System website <http://www.eso.fws.gov/>. A total of 8 threatened or endangered species were listed for Madison County, including bird, fish, flowering plant, and mammal species. However, based on a review of available data sources and considering the Site has been developed as agricultural cropland since at least 1927, the likelihood for protected species to occur on the property is low.

Madison County is located in US Environmental Protection Agency (USEPA) Radon Zone 2, according the USEPA Map of Radon Zones. Zone 2 has predicted average screening concentrations greater than 2 pCi/L and less than 4 pCi/L. The USEPA action level is 4.0 pCi/L. Considering there are no long-term residential exposure scenarios at the Site, radon is not expected to represent an environmental concern.

ProGEA conducted a limited historical properties/archeological resources review for the Site. No obvious archeological resources or structures of historical significance were observed at the Site. The Site was not listed on the National Register of Historic Places and was not identified in research conducted through the Natural Resource Conservation Service website.

As part of ProGEA's evaluation of the potential for chemicals of concern (COCs) to be present at the Site or migrate onto the subject property, ProGEA conducted a limited Vapor Encroachment Screening (VES). The goal of the VES is to identify potential vapor impacts in the subsurface or within Site buildings caused by the release of COCs into



Global Vision
Local Insight

Plocher Farm
Phase I Environmental Site Assessment
June 25, 2020

EXECUTIVE SUMMARY
(Continued)

the soil or groundwater at the Site or in near proximity to the Site. As such, ProGEA reviewed all local, state, and federal database information as well as historical maps and aerial photographs. During the Site visit, ProGEA did not observe potential contaminant sources that would contribute or cause COCs to be present at the Site. Additionally, ProGEA did not observe any surrounding facilities that would have potentially caused COCs to migrate onto the subject property. Based on ProGEA's professional opinion, the potential for a Vapor Encroachment Condition (VEC) to be present at the Site is minimal and is not considered an environmental concern.

Any data gaps identified herein are not considered to have significantly affected the ability to identify recognized environmental conditions (RECs) at this Site.

Based on the findings of this assessment, there are no obvious indicators that point to the presence or likely presence of contamination at the site. **This assessment has revealed no evidence of recognized environmental conditions (RECs), as defined by ASTM, in connection with the subject property.**

Appendix 9

Riparian Corridor Credit Worksheet:

Illinois Stream Method

Illinois Stream Mitigation Method

Project Name:
ORM Number
Stream Mitigation Summary Worksheet

Date: 9/24/2020 13:38
Silver Banks Wetland Mitigation Bank

I. Required Mitigation

A. Total Debits = (calculated from worksheets data)

Debits

0

II. Credit Summary

B. Riparian Buffer Enhancement
C. Stream Restoration
D. Total Proposed Non-Bank Mitigation = B + C

Credits

9025

0

9025

Proposed Mitigation Credits (A) = Total Debits (D)

Yes or No

Yes

Illinois Stream Mitigation Method

Project Name: Silver Banks
 ORM Number:
 Riparian Worksheet

Date:

Factor	Reach 1	Reach 2	Reach 3	Reach 4	
Priority	0.2				
Net Benefit Streamside A	1.2				
Net Benefit Streamside B	1.2				
Supplemental Buffer Credit	1.2	0	0	0	0
Monitoring	0.25				
Site Protection	0.4				
Mitigation Construction Timing	0.3				
Temporal Lag (Years)	0				
Sum of Factors (m) =	4.75	0	0	0	0
Linear Feet of Buffer (do not count each bank separate) (lf) =	1900	0	0	0	
Credits (c) = (m) x (lf) =	9025	0	0	0	0
Mitigation Factor	1				
Credits Reach	9025	0	0	0	0

Total Riparian Credits Generated

9025

Buffer width (on one side of the stream) Equal to or greater than	% Buffer that needs planting		
	*Buffer Creation and Restoration Exotic Removal and (51-100%)Planting	Buffer Enhancement Exotic Removal and (10-50%)Planting	Buffer Preservation (<10%)Planting
300 feet	2.4	0.95	0.65
275 feet	2.3	0.9	0.625
250 feet	2.2	0.85	0.6
225 feet	2.1	0.825	0.55
200 feet	2	0.8	0.5
175 feet	1.8	0.75	0.45
150 feet	1.6	0.7	0.4
125 feet	1.4	0.65	0.35
100 feet	1.2	0.6	0.3
75 feet	0.8	0.4	0.2
50 feet Minimum Buffer Width (MBW) for credit	0.4	0.2	0.1
25 feet required	0	0	0