

DATE: October 31, 2022

MEMO TO: Terry Wilke, Chair Planning Committee

> Julie Simpson, Chair Finance Committee

FROM: Pati Vitt Director of Natural Resources

<u>RECOMMENDATION</u>: Recommend approval of an Ordinance approving a license agreement with HGS, LLC, for the Development and Operation of a Wetland Mitigation Bank at Prairie Stream Forest Preserve.

STRATEGIC DIRECTIONS SUPPORTED: Conservation; Organizational Sustainability; Leadership

FINANCIAL DATA: If the final design of the mitigation bank is approved by the District and the Federal Mitigation Bank Interagency Review Team (IRT), HGS will (at no cost to the District) engineer, construct, and, for a minimum of five (5) years, maintain the proposed mitigation bank in accordance with the detailed plans and federal requirements. In exchange, HGS will provide a license fee of \$7,500 per acre for a total of \$496,425.00. Under federal law, HGS is also required to provide to the District a long-term maintenance fund/escrow, which is estimated to be \$2,500 per acre for a total of \$165,475.00, that the District can use to manage and maintain the restored areas after HGS sells the Mitigation Bank credits. It is the District's intent that both the license fee and the long-term maintenance fee will be deposited into the Endowment held by the Preservation Foundation.

BACKGROUND: A mitigation bank is a wetland, stream, or other aquatic resource that has been restored, established, enhanced, or preserved by a mitigation bank developer. The values of the restored, enhanced, or created aquatic resources (known as "compensatory mitigation credits") are then purchased by real estate developers or governmental agencies completing public works projects to mitigate, and as compensation for, the unavoidable impacts of their development projects to wetlands and other aquatic resources.

Mitigation banks are governed by Section 404 of the federal Clean Water Act, its regulations, and/or similar state or local wetland regulations. The approval and administration of mitigation banks under federal jurisdiction are administered by the IRT, which is a three-member team with representatives from the US Army Corps of Engineers, US Fish and Wildlife Service, and US Environmental Protection Agency.

The "compensatory mitigation credits" paid by purchasers/developers provide revenue to the mitigation bank developer and also fund the following costs: land value, costs of permit application

and approval, costs of monitoring and management, and the funding of an escrow account for longterm management. The IRT requires the mitigation bank developer to provide for the perpetual ecological management of the bank, either through the owner of the mitigation bank or through the designation of a long-term land management party.

At its May 3, 2021, meeting, the Planning Committee gave staff the direction to (i) work with HGS's parent company (Resource Environmental Solutions, Inc. (RES)) on concept plans for a wetland mitigation bank at Prairie Stream Forest Preserve at no cost to the District and (ii) negotiate a license agreement that would allow HGS to develop and operate the mitigation bank at Prairie Stream. HGS, in consultation with the District.

HGS has submitted to staff a concept plan (which is incorporated into the proposed license agreement), to develop, engineer, install and maintain (for a minimum period of five years) a mitigation bank at Prairie Stream that will:

- Restore wetlands in accordance with the concept plan, at no cost to the District. Specifically, HGS will re-establish an estimated 27.91 acres of wetland, rehabilitate an estimated 21.66 acres of wetland, and enhance 16.62 acres to provide an estimated 66.19 restored acres within the Wetland Mitigation Bank project area.
- Provide the District access through the Wetland Mitigation Bank to an unrestored area just south of the Wetland Mitigation Bank for ongoing management activities including, but not limited to, seeding, mowing, and prescribed burning.
- Include a minimum five-year post-restoration maintenance and management period at no cost to the District.
- Require HGS to perform all obligations under the wetland mitigation banking instrument that will be required by the IRT and other applicable documents.

<u>REVIEW BY OTHERS</u>: Chief Operations Officer, Director of Finance, Corporate Counsel.

STATE OF ILLINOIS

) SS /AKE)

)

COUNTY OF LAKE

BOARD OF COMMISSIONERS LAKE COUNTY FOREST PRESERVE DISTRICT RESCHEDULED REGULAR NOVEMBER MEETING NOVEMBER 15, 2022

MISTER PRESIDENT AND MEMBERS OF THE BOARD OF COMMISSIONERS:

Your **PLANNING COMMITTEE** and **FINANCE COMMITTEE** present herewith "An Ordinance Approving a License Agreement with HGS, LLC for the Development and Operation of a Mitigation Bank at Prairie Stream Forest Preserve" and request its approval.

PLANNING COMMITTEE:

Date:	10.31-2022	Roll Call Vote: Ayes: Nays:
		Voice Vote Majority Ayes; Nays:

FINANCE COMMITTEE:

Date:	Roll Call Vote: Ayes:	Nays:	
	Voice Vote Majority Aves:	Nave	

LAKE COUNTY FOREST PRESERVE DISTRICT LAKE COUNTY, ILLINOIS

AN ORDINANCE APPROVING A LICENSE AGREEMENT WITH HGS, LLC FOR THE DEVELOPMENT AND OPERATION OF A MITIGATION BANK AT PRAIRIE STREAM FOREST PRESERVE

WHEREAS, the Lake County Forest Preserve District (the "District") is the owner of certain real property that is commonly known as Prairie Stream Forest Preserve in Lake County, IL, as shown and more fully detailed on the Site Map attached hereto as Exhibit A (the "Property"); and

WHEREAS, on May 3, 2021 the Planning Committee gave staff the direction to work with Resource Environmental Solutions, Inc. ("RES") on concept plans for a wetland mitigation bank at Prairie Stream Forest Preserve at no cost to the District; and

WHEREAS, HGS, LLC ("Licensee") Sponsor is a wholly owned subsidiary of RES and is in the business of wetland and stream credit generation and brokerage; and

WHEREAS, HGS has submitted to District staff a concept plan for a wetland mitigation bank on the Property consisting of new, enhanced or restored wetlands for the purpose of generating wetland credits; and

WHEREAS, HGS has requested that the District enter into a license agreement with HGS in substantially the form attached hereto (the "License Agreement") under which: (i) the District would grant to HGS a license (a) to enter upon and use the Property (1) to conduct surveys, feasibility studies and analyses of the conditions of the Property, its geology, topography, hydrology, water quality, soils, fauna and flora as well as the historical and present human uses of the Property; and (2) prepare wetland mitigation bank plans and documents for restoration and development of a wetland mitigation bank within the Property (the "Mitigation Bank") to be submitted to the IRT for its review and approval and (b) if the IRT approves such plans (a "Prospectus"), restore and enhance the Property, at no cost to the District, and use such restored areas as the Mitigation Bank, as approved by the Prospectus, (ii) Licensee would maintain, at no cost to the District, the Mitigation Bank for a minimum of five years after the Mitigation Bank is complete and has satisfied the performance criteria required by the IRT, (iii) Licensee would provide a long-term endowment (not less than \$165, 475.00 to be used for maintenance of the restored areas, at no cost to the District, (iv) Licensee would be allowed to generate and sell wetland mitigation credits, and (v) upon termination of the License Agreement, the District would retain fee simple ownership of the restored and enhanced areas of the Property; and

WHEREAS, it is in the best interest of the District to enter into the License Agreement with HGS for the operation of the Mitigation Bank at the Property in substantially the form attached hereto;

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners of the Lake County Forest Preserve District, Lake County, Illinois **THAT**:

<u>Section 1</u>. <u>Recitals</u>. The recitals set forth above are incorporated as a part of this Ordinance by this reference.

<u>Section 2.</u> <u>Approval of License Agreement</u>. The License Agreement is hereby approved, in substantially the form attached hereto.

Section 3: Execution of License Agreement. The Executive Director and Secretary of the District are hereby authorized and directed to execute and attest to the License Agreement on behalf of the District.

<u>Section 4:</u> <u>Effective Date.</u> This Ordinance shall be in full force and effect from and after its passage and approval in the manner provided by law.

PASSED this _____ day of _____, 2022

AYES:

NAYS:

APPROVED this _____ day of _____, 2022

Angelo D. Kyle, President Lake County Forest Preserve District

ATTEST:

Julie Gragnani, Secretary Lake County Forest Preserve District

Exhibit No.

WETLAND MITIGATION BANK

LICENSE AGREEMENT (Prairie Stream Lake Forest Preserve)

This WETLAND MITIGATION BANK LICENSE AGREEMENT (this "Agreement") is made and entered into as of ______, 2022, by and between HGS, LLC, a Virginia limited liability company, with a mailing address at 6575 West Loop South, Suite 300, Bellaire, Texas 77401 ("Licensee") and Lake County Forest Preserve District, a body politic and corporate, organized and existing under the Downstate Forest Preserve District Act, 70 ILCS 805/0/001 et seq., with a mailing address at 1899 West Winchester Road, Libertyville, Illinois 60048 ("District"; Licensee and District are, collectively, the "Parties").

RECITALS

WHEREAS, District owns certain real property commonly known as "Prairie Stream Forest Preserve", which is generally depicted on Exhibit A (the "Property"); and

WHEREAS, the Property incudes streams, wetlands, other aquatic resources and/or habitat or other features that may be suitable for the Mitigation Bank (defined below); and

WHEREAS, Licensee is in the business of wetland and stream credit generation and brokerage in various States, including the State of Illinois; and

WHEREAS, Licensee desires to establish the Mitigation Bank within that portion of the Property that is the Licensed Premises (defined below) in accordance with the Concept Plans (defined below); and

WHEREAS, the District (i) desires that the Mitigation Bank be established and operated in accordance with the Concept Plans and the Mitigation Banking Instrument (defined below) and (ii) agrees that, upon completion of the operation of the Mitigation Bank in accordance with the Concept Plans and the Mitigation Banking Instrument, it will preserve and maintain the Licensed Premises in accordance with the Mitigation Banking Instrument; and

NOW, THEREFORE, for their mutually held interests in enhancement and preservation of the environment, in consideration of the terms, conditions, and restrictions contained herein, and pursuant to the laws of the State of Illinois and all other applicable authority, the Parties hereby agree as follows:

A. PURPOSE

The purpose of this Agreement is:

- 1. To allow Licensee to evaluate the Licensed Premises to determine its suitability for the Mitigation Bank and to seek approvals for the Mitigation Bank from the Mitigation Authority (defined below); and
- 2. Set forth the various instruments and documents that will be required to be executed by the Parties in connection with the foregoing and that will govern the Mitigation Bank and Licensee's operation thereof; and

- 3. To preserve, protect, and enhance the native flora, fauna, soils, water table, aquifer, drainage patterns, streams, wetland resources and other related environmental functions and values of the Licensed Premises; and
- 4. To maintain the natural view shed of the Licensed Premises in its native, enhanced, scenic and open condition; and
- 5. To assure that the Licensed Premises, including its air space, streams and other aquatic resources on or beneath the Licensed Premises, and including, but not limited to, subsurface aquifers, springs, and the water table, will be maintained in its natural condition, as that may be enhanced, as provided herein; and
- 6. To prevent any use of the Licensed Premises that threatens to or will impair, interfere with, or otherwise negatively affect its natural resource functions and values.

B. CERTAIN DEFINITIONS

The following terms, as used herein, have the following meanings:

- 1. "Applicable Laws" means, collectively, any applicable federal, state and/or local constitutions, statutes, ordinances, rules, regulations, and/or judicial decisions applicable to the Property or the Licensed Premises, respectively; including, but not limited to, environmental statutes, ordinances, rules, and/or regulations.
- 2. "Closing" means recordation of the Site Protection Instrument (defined below) on the date which is ninety (90) days after the Inspection Period ends or on such earlier date as is mutually acceptable to Licensee and District. The Closing shall take place by mail or overnight courier.
- 3. "Concept Plans" means the "Prairie Stream Conceptual Restoration & Wetland Mitigation Bank Plan" updated June 27, 2022, attached to this Agreement as <u>Exhibit B</u>.
- 4. "Effective Date" means the latest date set forth on the signature pages hereto (or if there is no such date, the date on which Licensee receives a fully executed counterpart of this Agreement from District).
- 5. "Expiration Date" means the date upon which (i) the Mitigation Authority has determined in writing that all required performance criteria for the Mitigation Bank have been satisfied, (ii) the Mitigation Authority has accepted and approved the Mitigation Bank, and (iii) all mitigation credits arising from the Mitigation Bank have been released for sale in accordance with the Mitigation Banking Instrument.
- 6. "Farm License" means any license agreement entered into by the District with any person or entity, pursuant to which the District grants such person or entity a license allowing the person or entity to use any portion of the Licensed Premises for agricultural purposes.
- 7. "Foundation" means the Preservation Foundation of the Lake County Forest Preserves, a private, not for profit corporation organized and existing under the Illinois General Not For Profit Corporation Act of 1986 (805 ILCS 105/101.01). The Foundation's primary purpose is to provide financial assistance to District's mission. The Foundation raises funds for a

variety of District's purposes, including land acquisition, habitat restoration, development of trails or other amenities and educational programs.

- 8. "Inspection Period" means the period commencing on the Effective Date and ending upon the earlier of (i) the third anniversary of the Effective Date or, if Licensee (within the last thirty (30) days of the Inspection period) sends written notice of its desire to extend the Inspection Period, a date (identified by Licensee in such notice) that is after the third anniversary but not later than the fourth anniversary of the Effective Date and (ii) the date upon which the Mitigation Authority has approved the Mitigation Banking Instrument governing the Mitigation Bank.
- 9. "License Fee" means a monetary amount equal to the product of \$7,500 multiplied by the number of acres of land within the perimeter boundaries of the Licensed Premises, as determined by the Final Survey obtained as provided in Section C.3. hereof. The License Fee is initially estimated to be \$496,425, but is subject to adjustment, and shall be paid by Licensee at Closing.
- 10. "Licensed Premises" means that approximately 66.19-acre portion of the Property located within the boundary generally depicted in the Concept Plans as the "Wetland Bank Boundary"; the final description, boundaries, and acreage of the Licensed Premises will be established by the Final Survey obtained as provided in Section C.3. hereof. The anticipated boundaries of the Licensed Premise are also generally depicted on Exhibit A.
- 11. "Mitigation Authority" means the Chicago District of the U.S. Army Corps of Engineers, and/or any other federal, state or local governmental authority or agency with jurisdiction over the Mitigation Bank proposed to be established within the Licensed Premises, including without limitation, to the extent they have such jurisdiction individually or as part of an Interagency Review Team, the Illinois Department of Natural Resources, the United States Fish and Wildlife Service, and the United States Environmental Protection Agency.
- 12. "Mitigation Bank" means the use of the Licensed Premises for the restoration, establishment, enhancement and/or preservation of aquatic or other natural resources (including, without limitation, habitat for endangered species) in accordance with the Mitigation Banking Instrument.
- 13. "Mitigation Banking Instrument" means a mitigation banking instrument that (i) authorizes the establishment and operation of a Mitigation Bank within the Licensed Premises in substantial compliance with this Agreement, including the Concept Plans and Task 3 identified in the Scope of Work, (ii) requires Licensee to perform all of the restoration and enhancement work depicted in the Concept Plans, (iii) requires Licensee to perform all maintenance and monitoring work for the Mitigation Bank required under Applicable Laws, (iv) requires Licensee to deposit with the District (or, at the District's written direction, with the Foundation, for the benefit of the District) a Long-Term Maintenance Fund not less than \$165,475, and (v) is otherwise acceptable to the District.
- 14. "Prospectus" means a prospectus for the Mitigation Bank that complies with and is consistent with this Agreement, including Task 2 identified in the Scope of Work.

- 15. "Scope of Work" means Exhibit C attached to this Agreement.
- 16. "Work" means (i) the restoration and enhancement work depicted in the Concept Plans and (ii) maintenance and monitoring work for the Mitigation Bank required under Applicable Laws.

C. INSPECTION AND SURVEY

- 1. As a condition to Licensee's obligation to implement the Mitigation Bank, District grants to Licensee a license (the "Preliminary License") permitting Licensee and its agents to conduct such inspections that Licensee, in its sole discretion, deems appropriate, including but not limited to title examination, environmental and soil testing, engineering studies, legal, financial and other inspections and evaluations of the Property and the transaction contemplated hereby and the other activities identified in this Section C (the "Inspection").
- District hereby authorizes Licensee and its agents, engineers, representatives, and contractors to enter the Property at any reasonable time to conduct the Inspection, and upon request from Licensee and/or Licensee's authorized representatives shall cooperate with such parties to coordinate such entry.
- 3. During the Inspection Period, Licensee shall obtain a survey of the Licensed Premises that identifies a boundary that is substantially the same as the "Wetland Bank Boundary" identified in the Concept Plans, except to the extent deviations from such boundary are approved by both Parties (the "Survey"). The Survey shall certify to the Parties both as to a metes and bounds property description for, and the number of acres within, the Licensed Premises and shall otherwise be in form and content acceptable to both Parties (the Survey, once certified by the surveyor and approved by both Parties, shall be referred to herein as the "Final Survey").
- 4. During the Inspection Period, Licensee shall prepare, and submit to the District for its information and to the Mitigation Authority for its approval, a Prospectus, a Mitigation Banking Instrument, and a construction, management and monitoring/reporting plan (which may be part of the Mitigation Banking Instrument) and use good faith and diligent efforts to obtain approval thereof from the Mitigation Authority.
- 5. During the Inspection Period, Licensee shall use good faith and diligent efforts to undertake the other tasks identified in Task 1 in the Scope of Work.
- 6. If Licensee is not satisfied with the outcome of the Inspection that renders the Licensed Premises unsuitable for Licensee's purposes for any reason in Licensee's sole discretion, Licensee may terminate this Agreement by written notice to District on or before the expiration of the Inspection Period.
- 7. If, within the Inspection Period, the Mitigation Authority has not finally approved a Mitigation Banking Instrument, then either party may terminate this Agreement by sending written notice to the other Party, not later than the date that is sixty (60) days after the Inspection Period, that this Agreement will be terminated. If, within the Inspection Period, the Mitigation Authority has not finally approved a Mitigation Banking Instrument and neither party terminates this Agreement within the 60-day period after the Inspection Period, then this Agreement will remain in force for

consecutive six-month periods following the Inspection Period until terminated by either Party upon sixty (60) days' notice to the other Party and, until such a termination notice is sent and received, Licensee will continue to exercise commercially reasonable efforts to seek approval of the Mitigation Banking Instrument from the Mitigation Authority and proceed to Closing.

8. If this Agreement is terminated by Licensee during the Inspection Period pursuant to Section C.6 or by either Party following the Inspection Period pursuant to Section C.7, any license granted herein will also be terminated, and the Parties shall be released from all further obligations hereunder, except those that expressly survive termination of this Agreement as provided herein.

D. LONG-TERM LICENSE

- 1. If neither Party terminates this Agreement as provided in Section C, then the District grants to Licensee a license to install and operate the Mitigation Bank within the Licensed Premises (the "Long-Term License").
- 2. Licensee shall install and operate the Mitigation Bank, and use the Long-Term License, at no cost to the District, in accordance with this Agreement, the Mitigation Banking Instrument, and Applicable Laws.
- 3. The Long-Term License will be effective as of the earliest to occur of (i) Closing or (ii) the date, if any, upon which the District's Executive Director waives the District's termination right in writing, and will terminate on the Expiration Date, unless terminated earlier as provided herein. On or prior to the Expiration Date, Licensee shall vacate the Licensed Premises.
- 4. District hereby covenants that (a) it shall not sell, convey or transfer fee title to all or any portion of the Licensed Premises during the term of this Agreement, and (b) it shall ensure that Licensee, all Work Contractors and the Mitigation Authority shall have reasonable ingress and egress between the Licensed Premises and a public roadway.
- 5. Licensee acknowledges that (i) the Licensed Premises are, and will remain at all times, the property of the District, (ii) the Agreement grants only contractual license rights only and does not create an easement, a leasehold, or any other real property rights, and (iii) the District shall retain legal possession and control over the Licensed Premises. The District represents that its purposes in entering into this Agreement are set forth in Section A.3-6 of this Agreement, and that this Agreement provides a means for the long-term restoration of the Licensed Premise for the benefit of the public and for the furtherance of the District's statutory mission, all of which is reasonably related to the purposes for which the District was created. Therefore, the Parties agree that this agreement grants a license pursuant to Section 7b of the Downstate Forest Preserve District Act, 70 ILCS 805/7b. Notwithstanding the foregoing, if the Chief County Assessment Office or any other government official or agency determines that the rights under this Agreement create a leasehold interest and, as a result, an *ad valorem* or any other tax is imposed upon such leasehold, then Licensee shall pay all such taxes.
- E. WORK

- 1. Licensee shall perform the Work in a good and workmanlike manner, at no cost to the District, and in accordance with this Agreement, the Mitigation Banking Instrument, and Applicable Laws. Without limiting the preceding sentence, Licensee, at no cost to the District, shall perform the required maintenance and monitoring Work until the Expiration Date (at which point the District shall be deemed to assume all management and maintenance obligations under the Mitigation Banking Instrument).
- 2. The Work shall be confined entirely to the Licensed Premises. If any District property is damaged by Licensee or any Work Contractor (defined below), Licensee shall repair and restore the damaged property to its condition prior to such damage. The Parties acknowledge that reasonable and normal wear, tear, and erosion do not constitute "damage".
- 3. Licensee shall contact the District's Director of Natural Resources at least seven (7) days prior to the commencement of the Work.
- 4. In performing the Work, Licensee shall comply, to the extent they apply to the Work and to the extend they are not preempted by any federal law, with (i) the Illinois Prevailing Wage Act (820 ILCS 130/0.01 et seq.) and (ii) the Illinois Public Construction Bond Act (30 ILCS 550/0.01 et seq.). With respect to the Prevailing Wage Act, the District's assessment is that earthwork, grading, drain tile removal, and similar work are likely subject to the Prevailing Wage Act. Any bond required by the Public Construction Bond Act shall not be released until the Expiration Date.
- 5. Licensee may cause any portion of the Work to be performed by a contractor (a "Work Contractor") but only if and after (i) Licensee has entered into a written contract with such Work Contractor (a "Work Contract"), in which the Work Contractor agrees to comply with all of licensee's obligations under Section E (Work), Section G (Insurance and Liens), Section K (Indemnities), Section L (Termination), and Section Q (Notice), and (ii) the District has first had an opportunity to review the Work Contract to ensure that it includes such provisions. Even if Licensee enters into a Work Contract, Licensee is not relieved of its obligation to perform the Work in accordance with, and to otherwise comply with, this Agreement.

F. DOCUMENT AND LICENSE FEE DELIVERY

Contemporaneously with the Mitigation Authority's approval of the Mitigation Banking Instrument, District shall execute and deliver to Licensee at Closing, in suitable form for recording in the applicable real property records, a declaration of restrictive covenants in favor of the Mitigation Authority, in form and substance customarily required by the Mitigation Authority, that runs with the land and is binding on the District and that limits the activities that may be performed on the Licensed Premises, including (i) preserving the right to view the Licensed Premises in its natural and open condition, (ii) prohibiting the placement of dredged or filled material on the Licensed Premises, (iii) prohibiting the installation of certain structures on the Licensed Premises, (iv) prohibiting the destruction of trees and plants (except as necessary for ecological management), (v) prohibiting the operation of certain vehicles, (vi) prohibiting the application of certain insecticides or herbicides, (vii) prohibiting the modification of the hydrology of the Licensed Premises, and (viii) granting to the Mitigation Authority the authority to enforce such declaration (a "Site Protection Instrument"). In consideration of District's execution and delivery to Licensee of a Site Protection Instrument and in consideration of the Long-Term License granted herein, at Closing, Licensee shall pay the License Fee to the District (or, at the District's written direction, to the Foundation, for the benefit of the District).

G. INSURANCE AND LIENS

- 1. Licensee shall procure and maintain, at all times until the Expiration Date or during which it is present on the Property, at its sole cost and expense commercial general liability insurance naming District as an additional insured with combined limits of not less than \$1,000,000.00 per occurrence for bodily injury (including death) and property damage, and \$2,000,000.00 aggregate (Umbrella/Excess coverage can be used in combination with primary general liability to satisfy this requirement), and shall furnish evidence of such insurance coverage by way of certificates of insurance which shall provide for thirty (30) days' notice of cancellation. All policies shall provide a waiver of subrogation in favor of District and its affiliates. Licensee shall require its agents, engineers, representatives, and contractors performing work to procure and maintain commercial general liability insurance in commercially reasonable amounts (not to exceed the amounts set forth hereinabove) until completion of their respective work or services, naming District and its affiliates and Licensee, respectively, as additional insureds and complying with all other requirements of this provision. Certificates of such insurance, in form reasonably satisfactory to District, shall be delivered to Licensee and forwarded by Licensee to District.
- 2. In exercising the Inspection and its rights under this Agreement, Licensee shall comply with all Applicable Laws and shall not permit any liens to attach to the Property. Should any such liens be filed against or attach to the Property, Licensee shall cause them to be removed of record and fully discharged at Licensee's sole cost and expense within ten (10) days following notice thereof to Licensee.

H. ENFORCEMENT

The Parties and the Mitigation Authority shall have the right to enter the Property to observe the Licensed Premises and to take actions necessary to verify compliance with and to enforce this Agreement. When practicable, Licensee or the Mitigation Authority, as the case may be, shall provide reasonable notice to the District prior to such entry.

I. DISTRICT'S REPRESENTATIONS AND WARRANTIES

District represents and warrants to the best of District's knowledge, as of the Effective Date and as of the Closing, the following are true, complete, and correct:

- 1. District has not received notice of, and has no knowledge of, any pending or threatened condemnation proceedings, administrative actions or similar actions or proceedings relating to the Licensed Premises. No commitments have been made by District to any governmental entity, agency or authority relating to the Licensed Premises other than those otherwise required by Applicable Law.
- 2. No litigation is pending, proposed, threatened, or anticipated with respect to any matter affecting the Licensed Premises.
- 3. The execution, delivery, and performance of this Agreement by District will not require the consent of any third party, and neither this Agreement nor the performance of District hereunder shall constitute a violation of any agreement, contractual commitment, or law applicable to District or the Licensed Premises.

- 4. The execution, delivery and performance of this Agreement are within the powers of District to the extent provided by Applicable Law and all requisite authorization actions and consents necessary to effectuate the various terms of this Agreement have been taken or will be taken before Closing.
- 5. District has no knowledge of and has received no notice from any governmental agency regarding any violation or alleged violation of any Applicable Laws applicable to the Licensed Premises.
- 6. The Licensed Premises, and District's operation and use of the Licensed Premises, complies with all Applicable Laws.
- 7. Neither District nor any third party is currently using the surface of the Licensed Premises for the investigation, exploration, prospecting, drilling, mining, transportation, storage or production of oil, gas, or other minerals or any surface or subsurface matter (including sand or gravel). In addition, no third party has notified District of its plans or intentions, and District currently has no plans or intentions, to use the surface of the Licensed Premises for any such purposes.
- 8. As of the Closing, District has complied with Section J and District is not in default under any contract or agreement affecting the Licensed Premises, and no event exists which, with the passage of time or the giving of notice or both, will become a default by a party to any such contract. District is in compliance with the terms and provisions of the covenants, conditions, restrictions, rights-of-way or easements affecting the Licensed Premises, to the best of District's knowledge.
- 9. All bills and claims for labor performed and materials furnished to or for the benefit of the Property currently due and contracted for by or on behalf of District have been paid in full.
- 10. Licensee agrees that (i) the condition of the Licensed Premises is an "as is", "where is" condition and "with all faults", (ii) the Licensed Premises is subject to all agreements and rights recorded against the Licensed Premises as of the Effective Date and (prior to the commencement of the Long-Term License) may be subject to a Farm License, and (iii) District has not made any express or implied representations, warranties, promises, covenants, agreements or guarantees of any kind or character whatsoever, whether express or implied, oral or written, past, present or future, concerning the Licensed Premises, including, without limitation: the status of title, the condition or suitability of the Licensed Premises or any portion thereof for any particular purpose; any environmental condition; or concerning the presence or absence of any hazardous substance, hazardous waste (as those terms are defined under any state or federal law, rule or regulation relating to the environment) or any petroleum product or asbestos.

J. DISTRICT COVENANTS

District covenants and agrees that:

1. No later than sixty (60) days after the Effective Date, District will deliver to Licensee any accessible (i) environmental reports, assessments, tests and studies for or of the Licensed Premises, (ii) any contract or agreement giving any person or entity the right to use the Licensed

Premises, including any Farm License and all leases (including mineral leases), and (iii) surveys, engineering reports, soil reports, water rights records, and permits of and for the Licensed Premises (collectively, the "Property Information Materials"). In the event District comes into possession or control of any Property Information Materials after the Effective Date, District shall promptly deliver the same to Licensee. District shall afford Licensee access to such additional documents and information in District's possession or control regarding the Property as Licensee may reasonably request.

- 2. For so long as this Agreement remains in effect, District shall not, without the prior written consent of Licensee: (i) convey or grant an interest in the Licensed Premises or any portion thereof to any person or entity other than Licensee that would prevent Licensee from using the Long-Term License or Short-Term License granted herein or (ii) enter into any agreement, lease, easement or contract with respect to all or any portion of the Licensed Premises that would prevent Licensee from using the Long-Term License form using the Long-Term License or Short-Term License granted herein. The District's entry into the Farm License does not violate this covenant. The District further covenants that (i) the Farm License shall allow Licensee to conduct the Inspection and (ii) the District shall terminate the Farm License prior to the commencement of the Long-Term License. The Parties hereby agree that, as a condition to Licensee's obligation to close the transaction, the Licensee shall be permitted and enabled to conduct the Inspection and the Farm License shall be terminated prior to the Closing or earlier commencement of the Long-Term License.
- 3. District shall take no action to adversely modify the Licensed Premises' natural state, flora, fauna and/or wetland character including any of the following: (i) construction of any structure or structures; (ii) cutting, burning, removal or destruction of vegetation (including trees) outside of an established natural area management plan; (iii) building of roads, trails or paths on the Licensed Premises; (iv) changing the elevation of or contours of the Licensed Premises; (v) pumping, draining or causing the Licensed Premises to be drained; (vi) placing, filling, storing, or dumping of refuse, trash, vehicle bodies or parts, rubbish, debris, junk, waste, or similar items on the Licensed Premises; (vii) mechanized land clearing; (viii) deposition of soil, shell, rock or other fill on the Licensed Premises; (ix) grazing of animals on the Licensed Premises; (x) allowing commercial or industrial activities on the Licensed Premises; or (xi) any other activity inconsistent with preserving the Licensed Premises' natural state, flora, fauna and/or wetland character.

K. INDEMNITIES

Licensee shall indemnify and hold District harmless from liability for any damages caused by any negligent acts, omissions, or willful misconduct conducted by Licensee or any party claiming by, through or under Licensee on the Licensed Premises or Property or in the performance of its rights under this Agreement, other than to the extent such damages are caused by the negligence or willful misconduct by District or any party acting by, through or under District. At all times that this Agreement remains effective and for so long as any Site Protection Instrument is binding on the Licensed Premises, District agrees that it shall indemnify and hold Licensee and its successors and assigns harmless from liability for any damages caused by any negligent acts, omissions, or willful misconduct conducted by District or any party claiming by, through or under District on the Licensed Premises and Property or in the performance of its rights under this Agreement, other than to the extent such damages are caused by the negligence or willful misconduct by District or any party claiming by, through or under District on the Licensed Premises and Property or in the performance of its rights under this Agreement, other than to the extent such damages are caused by the negligence or willful misconduct by

Licensee or any party acting by, through or under Licensee. The obligations under this Section K shall survive Closing and/or termination of this Agreement.

L. TERMINATION

- 1. Notwithstanding anything herein to the contrary, if a Party (i) intentionally, willfully, or in a grossly negligent manner commits any act or does anything that damages or affects the Licensed Premises or materially affects its ecological state or otherwise prevents the consummation of the transactions contemplated hereby, or (ii) commits fraud relating to this Agreement, then the other Party shall have the right to immediately terminate this Agreement and pursue any and all remedies available at law or equity, including a suit for damages.
- 2. If District breaches any representation or warranty set forth herein, or fails to perform any of its material obligations under this Agreement for any reason other than default by Licensee or the Parties' termination of this Agreement under its terms, Licensee may, following not less than sixty (60) days' written notice to District: (i) terminate this Agreement, (ii) enforce specific performance of this Agreement against District, or (iii) pursue any other remedies available to Licensee at law or equity, including a suit for damages; provided, that, if such breach is susceptible of being cured, but cannot reasonably be cured within such sixty (60) day time period, then such cure right shall be extended for such reasonable additional period as long as the District is diligently pursuing such cure in good faith.

M. LICENSED PREMISES RESTRICTIONS

Any activity in or use of the Licensed Premises that is inconsistent with the purposes of this Agreement by the District is prohibited; provided, that, upon execution and recordation of the Site Protection Instrument, the District's obligations under this Section M shall be deemed to be reformed to conform to the restrictions set forth in the Site Protection Instrument, and Licensee's rights to enforce such reformed Section M shall continue hereunder. Without limiting the generality of the foregoing, and except when an approved purpose necessary to accomplish the Mitigation Bank approved under any Mitigation Authority permit(s) reliant upon this Agreement, the following activities and uses are expressly prohibited in, on, over, or under the Licensed Premises, subject to the express terms and conditions below:

- 1. <u>Structures</u>. The construction of man-made structures including, but not limited to, the construction, removal, placement, preservation, maintenance or alteration of any buildings, roads, utility lines, billboards, or other advertising. This restriction does not include deer stands, bat boxes, bird nesting boxes, bird feeders, and the placement of signs for safety purposes or boundary demarcation.
- 2. <u>Demolition</u>. The demolition of fencing structures constructed by the Licensee for the purpose of demarcation of the Licensed Premises or for public safety.
- 3. <u>Soils</u>. The removal, excavation, disturbance, or dredging of soil, sand, peat, gravel, or aggregate material of any kind; or any change in the topography of the land, including any discharges of dredged or fill material, ditching, extraction, drilling, driving of piles, mining or excavation of any kind.
- 4. <u>Drainage</u>. The drainage or disturbance of any aquifer, the surface water level or the water table.

- 5. <u>Waste or Debris</u>. The storage, dumping, depositing, abandoning, discharging, or releasing of any gaseous, liquid, solid, or hazardous waste substance, materials or debris of whatever nature on, in, over, or underground or into surface or ground water.
- 6. <u>Non-Native Species</u>. The planting or introduction of non-native or invasive species.
- 7. <u>Herbicides, Insecticides, and Pesticides</u>. The use of herbicides, insecticides, or pesticides, or other chemicals, except as may be necessary to control invasive species that threaten the natural character of the Licensed Premises. State-approved municipal application programs necessary to protect public health and welfare and herbicide, insecticide, and pesticide use by a licensee of a Farm License, if such use complies with the requirements of the United States Department of Agriculture Natural Resource Conservation Service, are not included in this prohibition.
- 8. <u>Removal of Vegetation</u>. The mowing, cutting, pruning, removal; disturbance, destruction, or collection of any trees, shrubs, or other vegetation, except for pruning, cutting or removal for:
 - a. safety; or
 - b. control in accordance with accepted scientific forestry management practices for diseased or dead vegetation; or
 - c. control of non-native species and noxious weeds; or
 - d. scientific nature study.
- 9. <u>Agricultural Activities</u>. The conversion of, or expansion into, any portion of the Licensed Premises for agricultural, horticultural, aquacultural, silvicultural, livestock production or grazing activities. Licensee acknowledges that the portion of the Licensed Premises generally depicted on <u>Exhibit D</u> as "Active Farm Field" is already used for agricultural purposes and that the continued use of such portion for agricultural purposes, prior to the commencement of the Long-Term License, is not prohibited.
- 10. <u>Restricted Public Access</u>. During construction and establishment of the Mitigation Bank, the District shall take reasonable steps to prohibit general public access to areas designated by Licensee as sensitive areas.
- 11. <u>Other</u>. Other acts, uses, excavation, or discharges, which adversely affect fish or wildlife habitat or the preservation of lands, waterways, or other aquatic resources located within the Licensed Premises.

N. RESERVED RIGHTS

1. This Agreement will not prevent the District, or any subsequent owner of the Property and/or portions of the Property, from (i) using the area(s) of the Property outside of the Licensed Premises for any purpose or (ii) using the Licensed Premises in a manner that is consistent with the purposes of this Agreement, including, but not limited to, and subject to review by Licensee, agreements for the extraction of natural gas (regardless of source) or oil, and injection or release of water and other

substances to facilitate such extraction, but excluding injection wells subject to state or federal underground injection control programs. The activities subject to such agreement may only occur at subterranean depths at which there can be no impairment of or detectable impact to water quality or quantity, native flora, fauna, soils, water table, aquifer, drainage patterns, and other related environmental functions and values of the Property, or on other resources described in this Agreement. No surface activities or uses, incident to such extraction are permitted in the Licensed Premises. District and Licensee shall provide the Mitigation Authority notice of District's intent to enter into an agreement allowing subsurface activities at least sixty (60) days prior to executing the agreement.

- 2. If the success of the Mitigation Bank authorized by the Mitigation Authority requires any related or unanticipated infrastructure modifications, utility relocation, drainage ditches, or stormwater controls within the identified Licensed Premises, or if a situation requires measures to remove threat to life or property within the identified Licensed Premises, said activities must be approved in writing by the Mitigation Authority subject to terms and conditions set forth in the written approval. The District and Licensee accept the obligation to place any other and/or subsequent responsible party on reasonable prior notice of their need to request such Mitigation Authority approval.
- 3. Enhancements, Maintenance and Repair. This Agreement is not intended to prohibit future necessary or desired maintenance, repair, or enhancements to the Property, where such actions are approved by the Mitigation Authority as appropriate through the Mitigation Banking Instrument or by a separate permit.

O. ECONOMIC BENEFITS FROM MITIGATION BANK

District acknowledges and agrees that any revenue from the sale of mitigation credits created by the Mitigation Bank shall be paid solely to Licensee and/or its affiliates, and not to District.

P. CASUALTY

District shall be responsible for all risks of damage, loss or injury to the Licensed Premises and its ecological state and for all property-owner liability prior to Closing. If, prior to Closing, the Licensed Premises or any part thereof (including vegetation) shall be destroyed or materially damaged or if the ecological state of the Licensed Premises or any part thereof is materially altered by fire, flood, erosion, weather, wind, disease, infestation or other casualty, in whole or in part, if Licensee, in Licensee's sole discretion, concludes that such casualty renders the Licensed Premises unsuitable for Licensee's purposes, and Licensee notifies District in writing of such conclusion prior to Closing, then this Agreement shall terminate.

Q. NOTICE

Any notice required by this Agreement shall be hand-delivered, or sent in writing, postage prepaid by U.S. mail, by nationally recognized overnight courier, by hand delivery, or by electronic mail, addressed to Licensee or District (and such other notice parties as may be listed for either Licensee or District, as the case may be), to the address of the party set forth on the signature page of this Agreement. Such notice shall be deemed given (a) upon hand delivery, (b) three (3) business days after it is mailed, (c) one (1) business day after sending by overnight courier, or (d) upon transmission by electronic mail upon entry into the recipient's electronic mail server. Notices sent by electronic mail must be promptly followed by notice sent pursuant to one of the other methods set forth above.

R. OTHER MATTERS

- 1. This Agreement will inure to the benefit of and bind the Parties hereto and their respective representatives, successors, and assigns.
- 2. District shall keep confidential all information obtained from Licensee except for disclosures required or allowed by Applicable Law, including but not limited to the Illinois Freedom of Information Act. District's obligations under this Section R.2. shall survive the Closing, expiration, or termination of this Agreement.
- 3. This Agreement shall be governed by the law of the State of Illinois, without reference to its choice of law provisions. Any warranties, representations, or covenants by the parties agreed to herein shall survive the Closing and the recording of the Site Protection Instrument and shall not be merged into the Site Protection Instrument.
- 4. This Agreement including its exhibits shall constitute the entire agreement between District and Licensee with respect to the Mitigation Bank and supersedes any other written or oral agreements between District and Licensee. This Agreement may be modified only by the written agreement of both Parties.
- 5. This Agreement may not be assigned by any Party without the prior written consent of the other Party, which consent may be withheld in the sole discretion of the other Party. In the case of an approved assignment, the assignee must assume all obligations of the assigning Party hereunder. The pledge or collateral assignment of this Agreement, or any rights and/or remedies hereunder, by any Party to its primary lender(s) as collateral for such Party's obligations under any secured credit facility will not be deemed an assignment under this Agreement.
- 6. This Agreement may be executed in multiple counterparts, including a facsimile or .pdf scanned version thereof, each of which shall be considered to be an original thereof. The Parties agree that the electronic signature of a Party to this Agreement shall be as valid as an original signature of such Party and shall be effective to bind such Party to this Agreement and to the public.
- 7. Each Party agrees, and advises the other, to seek their own legal advice with respect to entering into this Agreement, and any particular issue or term related thereto. The Parties hereto acknowledge that the Parties and their counsel have reviewed and revised this Agreement and agree that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting Party shall not be employed in the interpretation of this Agreement or any exhibits or amendments hereto.
- 8. Time is of the essence of this Agreement.
- 9. If the day for performance of any obligation hereunder, or the last day of a particular time period provided for herein, falls on a Saturday, Sunday, or legal holiday recognized by national banks in Lake County, Illinois, such day for performance, and the expiration of such time period, as the case may be, shall be the next day which is not a Saturday, Sunday or such legal holiday.

- 10. The Parties agree that in discussing, negotiating, and entering into this Agreement, neither Party is relying on representations of the other Party except as to the Party's authority to enter in and perform under the Agreement and the specific representations made in the Agreement.
- 11. If any portion of this Agreement is held invalid or inoperative, then so far as is reasonable and possible the remainder of this Agreement shall be deemed valid and operative, and, to the greatest extent legally possible, effect shall be given to the intent manifested by the portion held invalid or inoperative. The failure by any Party to enforce against the other any term or provision of this Agreement shall not be deemed to be a waiver of such Party's right to enforce against the other Party the same or any other such term or provision in the future.
- 12. Section headings are included for convenience of reference only and are not intended to define or limit the scope of any provision of this Agreement and should not be used to construe or interpret this Agreement. Whenever the words "include", "includes" or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation", whether or not they are in fact followed by those words or words of like import.

{Signature Page Follows}

IN WITNESS WHEREOF, District and Licensee have executed this Agreement as of the Effective Date.

DISTRICT:

LAKE COUNTY FOREST PRESERVE DISTRICT

By:	
Name:	
Date:	

Address:

Libertyville, Illinois 60048
Attn:
E-Mail:

LICENSEE:

HGS, LLC

Address:

c/o Resource Environmental Solutions, LLC 6575 West Loop South, Suite 300 Bellaire, TX 77401 Attn: Lilly Van Maele E-Mail: <u>lvanmaele@res.us</u>

EXHIBIT A

General Depiction of Property and Licensed Premises

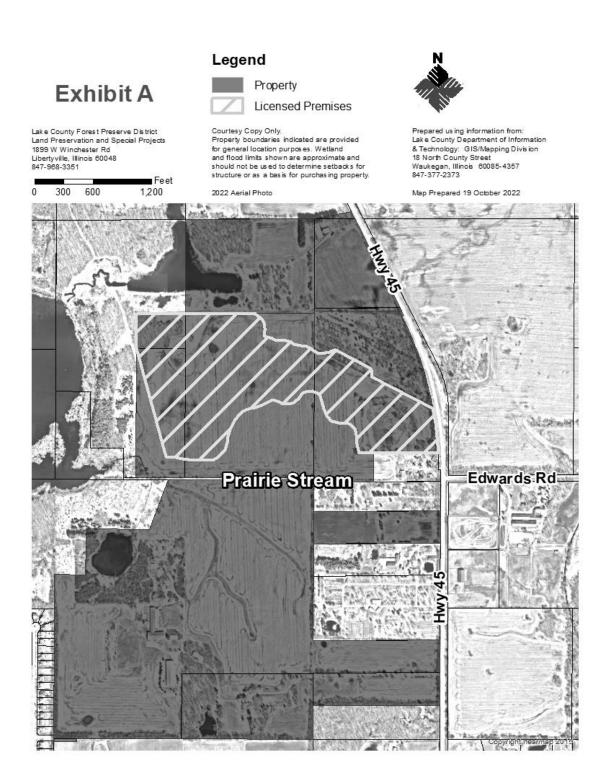
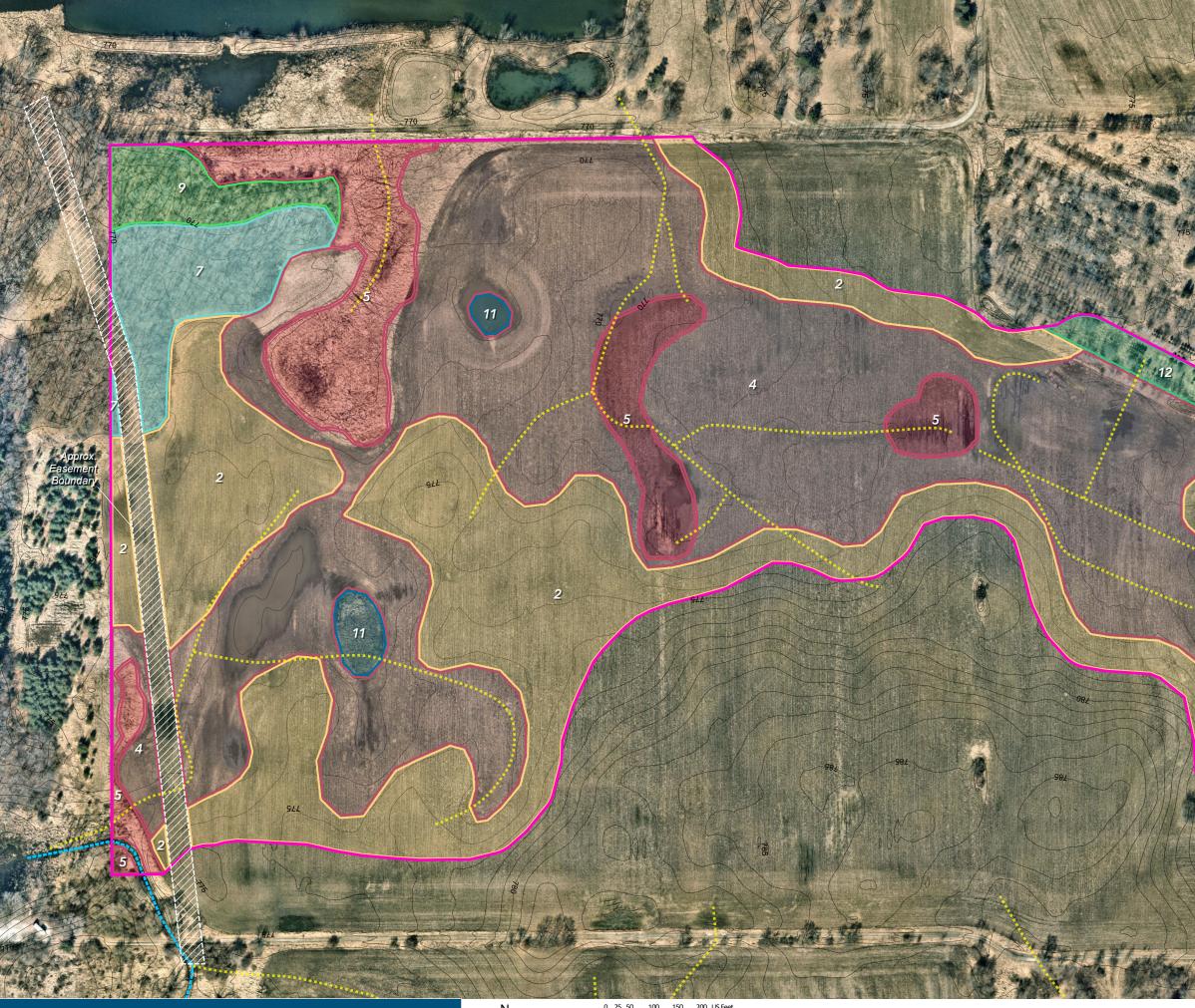


EXHIBIT B

Concept Plans

(To be attached hereto)



0 25 50 100 150 200 US Feet

LEGEND

- Wetland Bank Boundary (66.19 ac)
- ••••• Site Access
- Intermittent Drainage

Drain Tiles

CONTOUR (1FT)

—— Index

— Intermediate

RESTORATION & ENHANCEMENT TARGETS

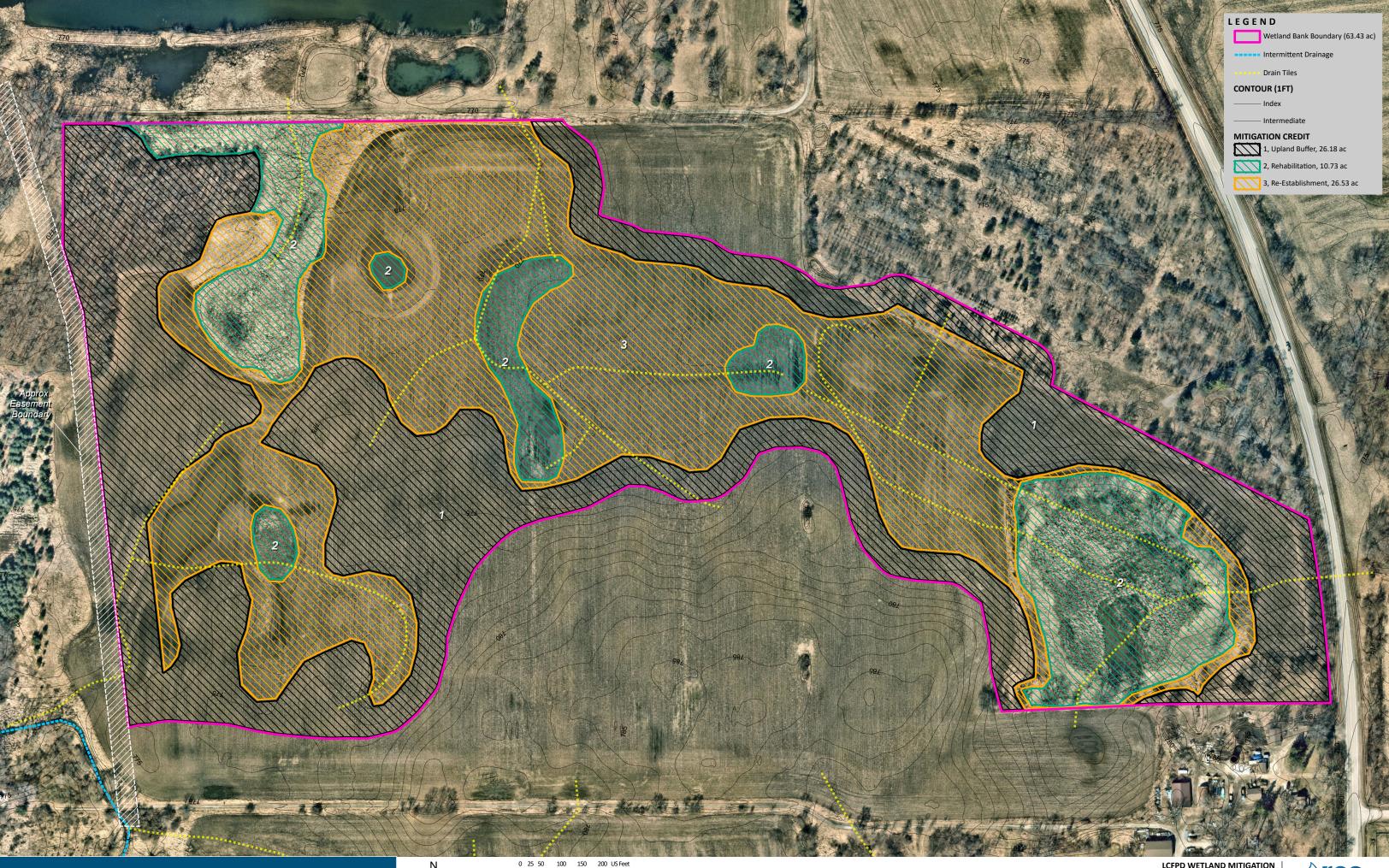
2,Mesic Prairie Restoration, 21.66 ac 4,Wet Prairie/Sedge Meadow Restoration, 27.91 ac 5,Wet Prairie/Sedge Meadow Enhancement, 5.43 ac 7,Dry-Mesic Oak Woodland Enhancement, 2.25 ac 9,Mesic Oak Woodland Enhancement, 1.21 ac 11,Emergent Wetland Enhancement, 5.77 ac 12,Mesic Savanna/Prairie Restoration, 0.79 ac

LCFPD WETLAND MITIGATION PROJECT #: 102799 (TSCHWARTZ) Map created on: 4/1/2022 Imagery Source: 2018 Leaf-Off



0

8



PRAIRIE STREAM CREDIT CALCULATION MAP

0 25 50 100 150 200 US Feet 1 inch equals 200 feet NAD 1983 StatePlane Illinois East FIPS 1201 Feet LCFPD WETLAND MITIGATION PROJECT #: 102799 (TSCHWARTZ) Map created on: 4/20/2022 Imagery Source: 2018 Leaf-Off



EXHIBIT C

Scope of Work

(To be attached hereto)

PRAIRIE STREAM

CONCEPTUAL RESTORATION & WETLAND MITIGATION BANK PLAN

LAKE COUNTY FOREST PRESERVE DISTRICT

Updated June 27, 2022

Prepared by: Resource Environmental Solutions LLC



CONTENTS

A. EXISTING & TARGET VEGETATION COMMUNITIES
B. EXISTING VEGETATION COMMUNITIES MAP
C. RESTORATION TARGET COMMUNITIES MAP
D. WETLAND MITIGTION BANK CREDIT MAP
E. NATIVE SEED MIXTURES & EMERGENT PLANT PLUGS

A. EXISTING & TARGET VEGETATION COMMUNITIES

Agricultural Row Crop \rightarrow Mesic Prairie Restoration (Upland Buffer)

Acres: 21.66

Existing Dominant Species: Glycine max

Restoration Target Community = Mesic Prairie: 1) broadcast herbicide ground layer \rightarrow 2) drill seed using Mesic Prairie Seed Mixture \rightarrow 3) install straw mulch on highly erodible slopes.

5-Year Maintenance & Monitoring: Mow twice during the first growing season and once during the first half of second growing season. Conduct three trips per year to spot herbicide herbaceous and woody invasives. Conduct prescribed burn in fall of third growing season or spring of fourth growing season. Project Ecologist monitor and report annually related to vegetation performance standards.

Agricultural Row Crop → Wet Prairie/Sedge Meadow Restoration (Re-Establishment) Acres: 27.91

Existing Dominant Species: Glycine max

Restoration Target Community = Wet Prairie/Sedge Meadow: 1) broadcast herbicide ground layer \rightarrow 2) drill seed using Wet Prairie/Sedge Meadow Seed Mixture \rightarrow 3) disable existing drain tiles.

5-Year Maintenance & Monitoring: Mow twice during the first growing season and once during the first half of second growing season. Conduct three trips per year to spot herbicide herbaceous and woody invasives. Conduct prescribed burn in fall of third growing season or spring of fourth growing season. Project Ecologist monitor and report annually related to hydrology & vegetation performance standards. Project Ecologist conduct wetland delineation in year 5 to document Credits.

Tree Farm → *Mesic Savanna/Prairie Restoration (Upland Buffer)* Acres: 0.79

Existing Dominant Species: Variety of native and non-native/cultivar trees & shrubs, *Elaeagnus umbellate*, *Rhamnus cathartica*, *Phleum pratense*, *Vitis riparia*, *Phalaris arundinacea*, *Dipsacus sylvestris*, *Trifolium pratense*

Restoration Target Community = Mesic Savanna/Prairie Restoration: 1) remove all non-native and invasive native trees & shrubs \rightarrow 2) mow ground layer \rightarrow 3) broadcast herbicide ground layer \rightarrow 4) grub and drag soil then drill or broadcast seed using Mesic Prairie Seed Mixture.

5-Year Maintenance & Monitoring: Mow twice during the first growing season and once during the first half of second growing season. Conduct three trips per year to spot herbicide herbaceous and woody invasives. Conduct prescribed burn in fall of third growing season or spring of fourth growing season. Project Ecologist monitor and report annually related to vegetation performance standards.

Acres: 5.43

Existing Dominant Species: Phalaris arundinacea

Restoration Target Community = Wet Prairie/Sedge Meadow: 1) mow ground layer \rightarrow 2) broadcast herbicide ground layer (2X) \rightarrow 3) scarify soils \rightarrow 4) drill or broadcast seed using Wet Prairie/Sedge Meadow Seed Mixture \rightarrow 5) disable existing drain tiles.

5-Year Maintenance & Monitoring: Mow twice during the first growing season and once during the first half of second growing season. Conduct three trips per year to spot herbicide herbaceous and woody invasives. Conduct prescribed burn in fall of third growing season or spring of fourth growing season. Project Ecologist monitor and report annually related to hydrology & vegetation performance standards. Project Ecologist conduct wetland delineation in year 5 to document Credits.

Mesic & Dry Mesic Oak Woodland → Mesic & Dry Mesic Oak Woodland Enhancement (Upland Buffer) Acres: 3.46

Existing Dominant Species: Quercus alba, Quercus macrocarpa, Carya ovata, Zanthoxylum americanum, Rhamnus cathartica, multiflora rose, Lolium perenne, Parthenocissus quinquefolia

Enhancement Target Community = Mesic & Dry Mesic Oak Woodland: 1) remove all non-native and invasive native trees & shrubs \rightarrow 2) mow ground layer \rightarrow 3) broadcast herbicide ground layer \rightarrow 4) grub and drag soil then drill or broadcast seed using Mesic/Dry Mesic Woodland Seed Mixture.

5-Year Maintenance & Monitoring: Mow twice during the first growing season and once during the first half of second growing season. Conduct three trips per year to spot herbicide herbaceous and woody invasives. Conduct prescribed burn in fall of third growing season or spring of fourth growing season. Project Ecologist monitor and report annually related to vegetation performance standards.

Emergent Wetland → Emergent Wetland Enhancement (Rehabilitation) Acres: 5.77

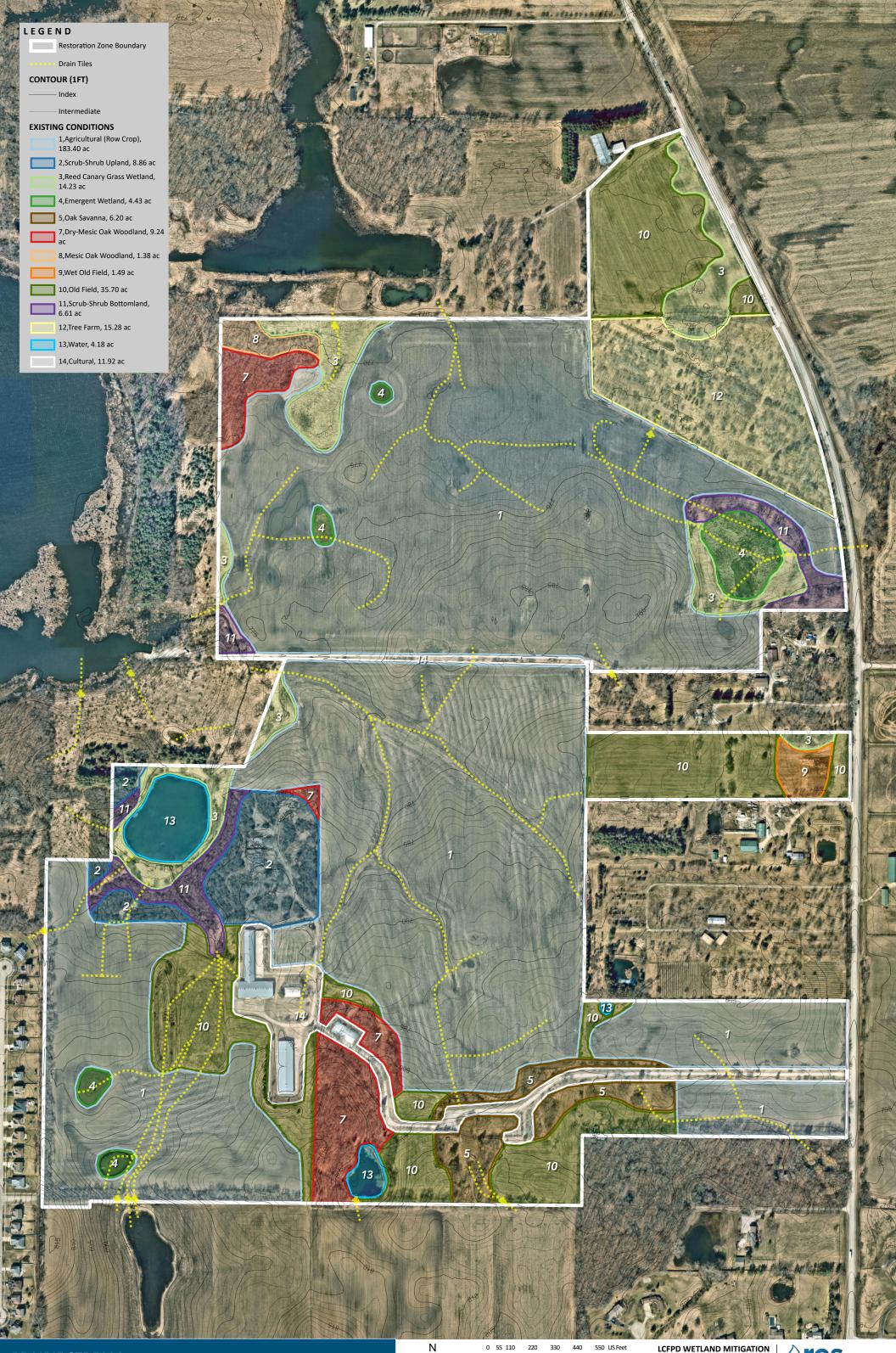
Existing Dominant Species: Typha latifolia, Typha angustifolia, Cyperus rotundus, Amaranthus sp., Juncus persica, Scirpus fluviatilis, Alisma subcordatum, Scirpus acutus

Enhancement Target Community = Emergent Wetland: 1) spot herbicide non-native and invasive herbaceous and woody species \rightarrow 2) install supplemental Emergent Wetland Seed Mixture and plant plugs \rightarrow 3) disable existing drain tiles.

5-Year Maintenance & Monitoring: Conduct three trips per year to spot herbicide herbaceous and woody invasives. Conduct prescribed burn in fall of third growing season or spring of fourth growing season. Project Ecologist monitor and report annually related to hydrology & vegetation performance standards. Project Ecologist conduct wetland delineation in year 5 to document Credits.

Type of Mitigation Credit	Acres Proposed	Range of Credit per/Acre for Mitigation Type	Total Credits Proposed	Percent Proposed	Percent of Total Credits Allowed for Mitigation
Establishment	0 Ac	100%	0	0%	No Maximum
Re-establishment	26.53 Ac	100%	26.53	70.69%	No Maximum
Rehabilitation	10.73 Ac	10-50%	5.37	14.31%	50%
Upland Buffer	26.18 Ac	10-25%	5.63	15.00%	15%
Preservation	0 Ac	10-15%	0	0%	15%
Totals	63.44 Ac	n/a	37.53	100%	n/a

Prairie Stream Wetland Mitigation Bank Conceptual Plan Proposed Credits



PRAIRIE STREAM EXISTING VEGETATION COMMUNITIES MAP

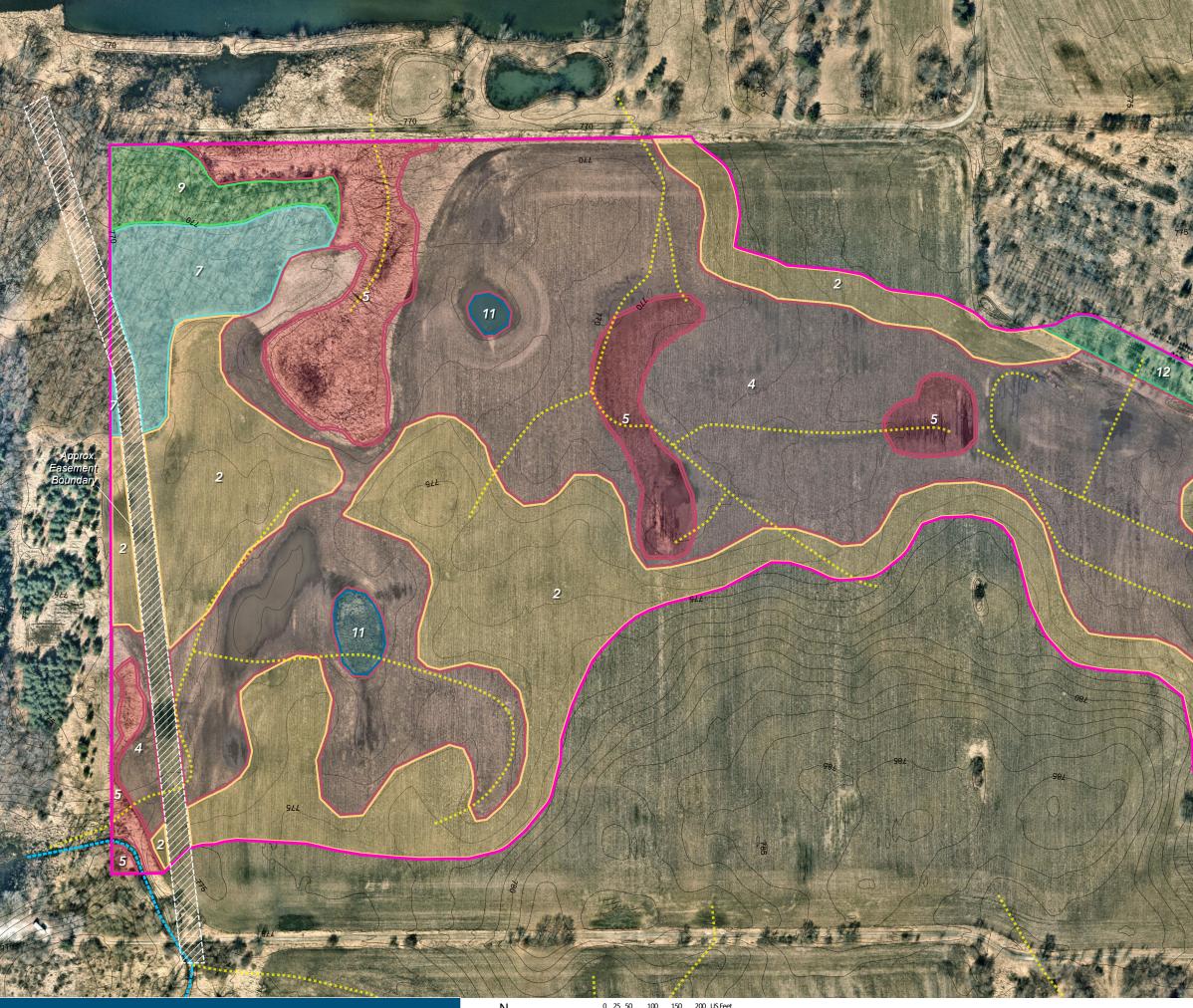
0 55 110 220 330 440 550 US Feet

1 inch equals 401 feet NAD 1983 StatePlane Illinois East FIPS 1201 Feet

 \wedge

LCFPD WETLAND MITIGATION PROJECT #: 21-0230 (TSCHWARTZ) Map created on: 6/22/2021 Imagery Source: 2018 Leaf-Off





0 25 50 100 150 200 US Feet

LEGEND

- Wetland Bank Boundary (66.19 ac)
- ••••• Site Access
- Intermittent Drainage

Drain Tiles

CONTOUR (1FT)

—— Index

— Intermediate

RESTORATION & ENHANCEMENT TARGETS

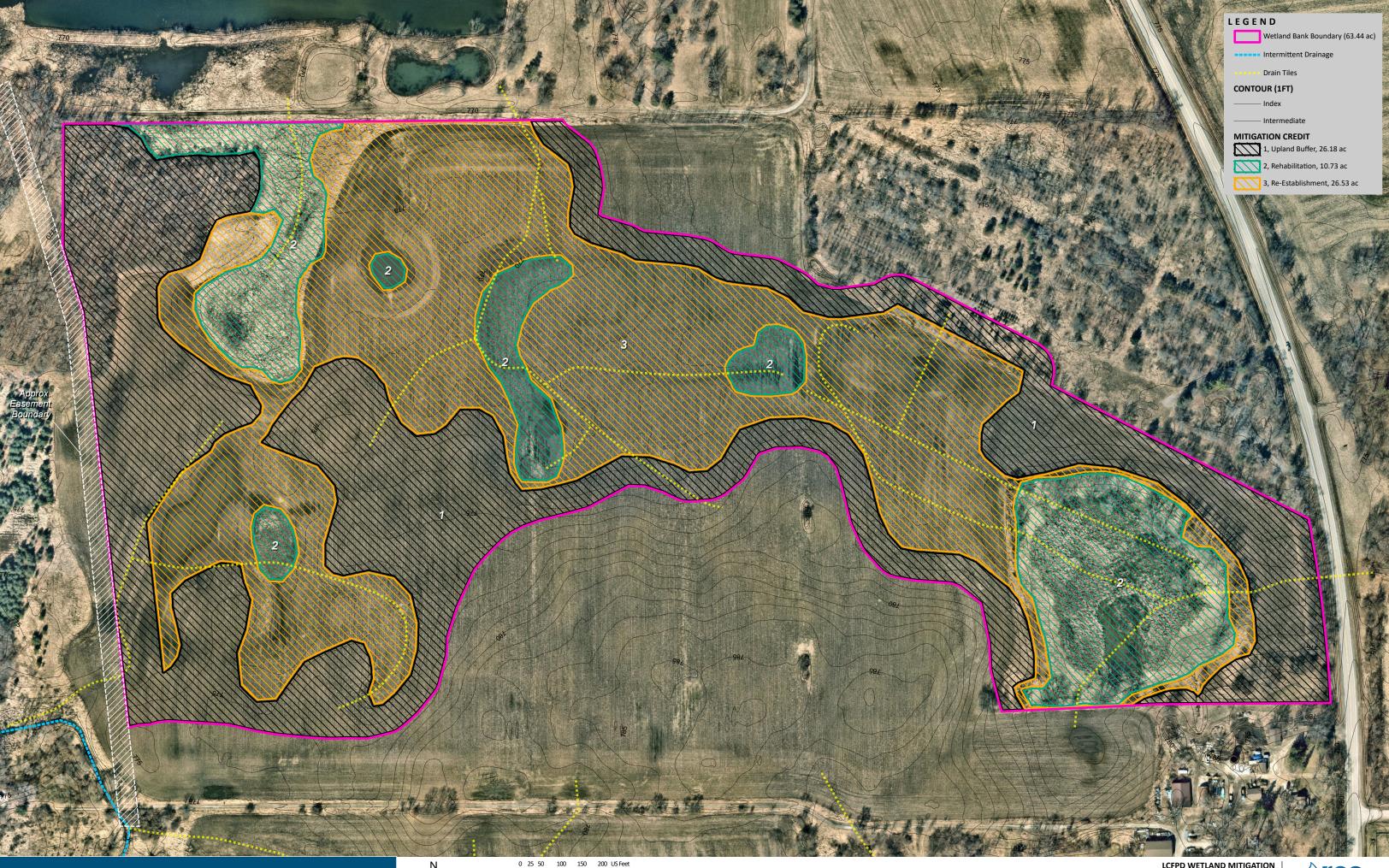
2,Mesic Prairie Restoration, 21.66 ac 4,Wet Prairie/Sedge Meadow Restoration, 27.91 ac 5,Wet Prairie/Sedge Meadow Enhancement, 5.43 ac 7,Dry-Mesic Oak Woodland Enhancement, 2.25 ac 9,Mesic Oak Woodland Enhancement, 1.21 ac 11,Emergent Wetland Enhancement, 5.77 ac 12,Mesic Savanna/Prairie Restoration, 0.79 ac

LCFPD WETLAND MITIGATION PROJECT #: 102799 (TSCHWARTZ) Map created on: 4/1/2022 Imagery Source: 2018 Leaf-Off



0

8



PRAIRIE STREAM CREDIT CALCULATION MAP

0 25 50 100 150 200 US Feet 1 inch equals 200 feet NAD 1983 StatePlane Illinois East FIPS 1201 Feet LCFPD WETLAND MITIGATION PROJECT #: 102799 (TSCHWARTZ) Map created on: 4/20/2022 Imagery Source: 2018 Leaf-Off



E. NATIVE SEED MIXTURES & EMERGENT PLANT PLUGS (Preliminary List, Species Composition may change based on site conditions and availability) Prairie Seed Mixture

Mesic Prairie Seed Mixture						
Scientific name	Common Name	% of Mix	Seeds/Oz.	# Seeds	Oz./Acre	Ibs./Acre
Grasses & Sedges:						
Andropogon gerardii	Big bluestem	0.05	8188	108900	13.3	
Bouteloua curtipendula	Side oats grama	0.1	9375	217800	23.2	
Carex bicknellii	Copper-shouldered oval sedge	0.05	23600	108900	4.6	
Panicum virgatum	Switch grass	0.1	18000	217800	12.1	
Schizachyrium scoparium	Little bluestem	0.25	8800	880000	100.0	
Total Grasses and Sedges		0.55	67963	1533400	153.2	9.6
Forbs:						
Amorpha canescens	Lead plant	0.02	16000	43560	2.7	
Asclepias tuberosa	Butterfly weed	0.1	3500	217800	62.2	
Baptisia leucantha	White wild indigo	0.005	1600	10890	6.8	
Dalea purpurea	Purple prairie clover	0.02	20000	43560	2.2	
Echinacea pallida	Pale purple coneflower	0.015	5200	32670	6.3	
Echinacea purpurea	Purple coneflower	0.03	6600	65340	9.9	
Eryngium yuccifolium	Rattlesnake master	0.02	8000	43560	5.4	
Monarda fistulosa	Wild bergamot	0.02	78000	43560	0.6	
Oligoneuron rigidum	Stiff goldenrod	0.02	46000	43560	0.9	
Parthenium integrifolium	Wild quinine	0.02	6800	43560	6.4	
Penstomen digitalis	Foxglove beard tongue	0.04	115000	87120	0.8	
Ratibida pinnata	Yellow coneflower	0.03	25250	65340	2.6	
Rudbeckia hirta	Black eyed Susan	0.04	110000	87120	0.8	
Silphium laciniatum	Compass plant	0.0015	700	3267	4.7	
Symphyotrichum novae-angliae	New England aster	0.03	76000	65340	0.9	
Symphyotrichum laeve	Smooth blue aster	0.03	48000	65340	1.4	
Tradescantia ohiensis	Spiderwort	0.015	7900	32670	4.1	
Verbena stricta	Hoary vervain	0.02	32000	43560	1.4	
Zizia aurea	Golden Alexanders	0.03	12000	65340	5.4	
Total Forbs		0.5065	618550	1103157	125.4	7.8
Total All Species		1.0565	686513	2636557	278.7	17.4
Temporary Cover Crop:						
Avena sativa	Common oats				320.0	20.0
Elymus canadensis	Canada wild rye				16.0	1.0

Scientific name	Common Name	% of Mix	Seeds/Oz.	# Seeds	Oz./Acre	Ibs./Acre
Grasses, Sedges & Rushes:					<u> </u>	<u> </u>
Andropogon gerardii	Big bluestem	0.04	8188	95832	11.7	
Carex comosa	Bristly sedge	0.1	141000	239580	1.7	
Carex scoparia	Pointed broom sedge	0.1	83250	239580	2.9	
Carex vulpinoidea	Fox Sedge	0.1	142000	239580	1.7	
Glyceria striata	Fowl mana grass	0.02	113400	47916	0.4	
Juncus dudleyi	Dudley's rush	0.02	2270000	227000	0.1	
Juncus torreyi	Torrey's rush	0.02	1220000	122000	0.1	
Juncus effusus	Common Rush	0.02	1000000	100000	0.1	
Leersia oryzoides	Rice cut grass	0.02	94500	47916	0.5	
Panicum virgatum	Switch grass	0.09	18000	215622	12.0	
Scirpus atrovirens	Dark green rush	0.02	187500	47916	0.3	
Total Grasses & Sedges		0.55	5277838	1622942	31.4	2.0
Forbs:						•
Alisma subcordatum	Water plantain	0.01	4540	23958	5.3	
Asclepias incarnata	Swamp milkweed	0.025	4540	59895	13.2	
Boltonia asteroides	False aster	0.03	284000	71874	0.3	
Eryngium yuccifolium	Rattlesnake master	0.02	8000	47916	6.0	
Eupatorium perfoliatum	Common boneset	0.03	125000	71874	0.6	
Eutrochium maculatus	Spotted Joe-Pye weed	0.03	110000	71874	0.7	
Helenium autumnale	Sneezeweed	0.03	141750	71874	0.5	
Lobelia cardinalis	Cardinal flower	0.02	567000	113400	0.2	
Lobelia siphilitica	Great blue lobelia	0.02	520000	104000	0.2	
Mimulus ringins	Monkey flower	0.02	1500000	150000	0.1	
Penstomen digitalis	Foxglove beard tongue	0.04	115000	95832	0.8	
Penthorum sedoides	Ditch stonecrop	0.02	1300000	130000	0.1	
Pycnanthemum virginianum	Common mountain mint	0.03	331250	71874	0.2	
Physostegia virginiana	Obedient plant	0.02	25000	47916	1.9	
Oligoneuron riddellii	Riddell's goldenrod	0.03	94500	71874	0.8	
Senna hebecarpa	Wild senna	0.005	1800	11979	6.7	
Symphyotrichum novae-angliae	New England aster	0.03	76000	71874	0.9	
Veronia fasciculata	Common ironweed	0.02	76000	47916	0.6	
Zizia aurea	Golden Alexanders	0.02	76000	47916	0.6	
Total Forbs		0.45	5360380	1383846	39.6	2.5
Total All Species		1	10638218	3006788	71.1	4.4
Temporary Cover Crop:	• • • • • • • • • • • • • • • • • • •	•			•	
Avena sativa	Common oats				320.0	20.0
Elymus virginicus	Virginia wild rye				48.0	3.0

Scientific name	Common Name	% of Mix	Seeds/Oz.	# Seeds	Oz./Acre	lbs./Acre
Grasses:						
Bromus pubescens	Woodland brome	0.06	7000	104544	14.9	
Cinna arundinacea	Common wood reed	0.1	56700	174240	3.1	
Elymus hystrix	Bottlebrush grass	0.11	5000	191664	38.3	
Elymus vilosus	Silky wild rye	0.11	7800	191664	24.6	
Total Grasses & Sedges		0.38	76500	662112	80.9	5.1
Forbs:						
Ageratina altissima	White snakeroot	0.02	150000	34848	0.2	
Aquilegia canadensis	Wild columbine	0.03	28000	52272	1.9	
Campanula americana	Tall bellflower	0.02	71000	34848	0.5	
Echinacea purpurea	Purple coneflower	0.03	6600	52272	7.9	
Eupatorium purpureum	Purple joe-pye-weed	0.06	47000	104544	2.2	
Penstemon digitalis	Foxglove beard tongue	0.03	180000	52272	0.3	
Ratibida pinnata	Yellow coneflower	0.02	25250	34848	1.4	
Rudbeckia hirta	Black eyed Susan	0.05	110000	87120	0.8	
Rudbeckia triloba	Brown eyed susan	0.04	33000	69696	2.1	
Solidago flexicaulis	Zig zag goldenrod	0.02	84000	34848	0.4	
Symphyotrichum urophyllum	Arrow-leaved aster	0.03	135000	52272	0.4	
Tradescantia ohiensis	Common spiderwort	0.015	8000	26136	3.3	
Veronicastrum virginiana	Culver's root	0.04	284000	69696	0.2	
Zizia aurea	Golden Alexanders	0.03	12000	52272	4.4	
Total Forbs		0.435	1173850	757944	26.0	1.6
Total All Species		0.815	1173850	1420056	106.9	6.7
Temporary Cover Crop:						
Avena sativa	Common oats				320.0	20.0
Elymus canadensis	Canada wild rye				16.0	1.0

Mesic & Dry-Mesic Oak Woodla Scientific name	Common Name	0/ of Mix	Seede/Or	# Coode	Or /Aara	Ibe /Aer
Grasses:	Common Name	% of Mix	Seeds/Oz.	# Seeds	Oz./Acre	Ibs./Acre
	Woodland brome	0.00	7000	404544	110	
Bromus pubescens	Common wood reed	0.06	7000	104544	14.9	
Cinna arundinacea Elymus hystrix	Bottlebrush grass	0.1	56700	174240	3.1	
Elymus vilosus	Silky wild rye	0.11	5000	191664	38.3	
Total Grasses & Sedges		0.11	7800 76500	191664 662112	24.6 80.9	5.1
Forbs:		0.55	78300	002112	80.5	0.1
Ageratina altissima	White snakeroot	0.02	150000	34848	0.2	
Aquilegia canadensis	Wild columbine	0.02	28000	52272	1.9	
Campanula americana	Tall bellflower	0.02	71000	34848	0.5	
Echinacea purpurea	Purple coneflower	0.03	6600	52272	7.9	
Eupatorium purpureum	Purple joe-pye-weed	0.06	47000	104544	2.2	
Penstemon digitalis	Foxglove beard tongue	0.03	180000	52272	0.3	
Ratibida pinnata	Yellow coneflower	0.02	25250	34848	1.4	
, Rudbeckia hirta	Black eyed Susan	0.05	110000	87120	0.8	
Rudbeckia triloba	Brown eyed susan	0.04	33000	69696	2.1	
Solidago flexicaulis	Zig zag goldenrod	0.02	84000	34848	0.4	
Symphyotrichum urophyllum	Arrow-leaved aster	0.03	135000	52272	0.4	
Tradescantia ohiensis	Common spiderwort	0.015	8000	26136	3.3	
Veronicastrum virginiana	Culver's root	0.04	284000	69696	0.2	
Zizia aurea	Golden Alexanders	0.03	12000	52272	4.4	
Total Forbs		0.435	1173850	757944	26.0	1.6
Total All Species		0.815	1173850	1420056	106.9	6.7
Temporary Cover Crop:						
Avena sativa	Common oats				320.0	20.0
					16.0	1.0
-	Canada wild rye	% of Mix	Seeds/Oz.	# Seeds	Oz./Acre	lbs./Acre
Mesic Savanna/Prairie Seed Mix	ture	% of Mix	Seeds/Oz.	# Seeds		Ibs./Acre
Scientific name Grasses:	ture	0.1	Seeds/Oz. 8188	# Seeds		Ibs./Acre
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii	ture Common Name Big bluestem	0.1	8188	217800	Oz./Acre 26.6	Ibs./Acre
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix	Example 2 Common Name Big bluestem Bottlebrush grass	0.1	8188 5000	217800 108900	Oz./Acre 26.6 21.8	lbs./Acre
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum	Big bluestem Bottlebrush grass Switch grass	0.1 0.05 0.15	8188 5000 118000	217800 108900 326700	Oz./Acre 26.6 21.8 2.8	Ibs./Acre
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium	Example 2 Common Name Big bluestem Bottlebrush grass	0.1 0.05 0.15 0.2	8188 5000 118000 8800	217800 108900 326700 660000	Oz./Acre 26.6 21.8 2.8 75.0	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses	Big bluestem Bottlebrush grass Switch grass	0.1 0.05 0.15	8188 5000 118000	217800 108900 326700	Oz./Acre 26.6 21.8 2.8	Ibs./Acre
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs:	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem	0.1 0.05 0.15 0.2 0.5	8188 5000 118000 8800 139988	217800 108900 326700 660000 1313400	Oz./Acre 26.6 21.8 2.8 75.0 126.1	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine	0.1 0.05 0.15 0.2 0.5	8188 5000 118000 8800 139988 28000	217800 108900 326700 660000 1313400 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower	0.1 0.05 0.15 0.2 0.5 0.03 0.03	8188 5000 118000 8800 139988 28000 6600	217800 108900 326700 660000 1313400 65340 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master	0.1 0.05 0.15 0.2 0.5 0.03 0.03 0.02	8188 5000 118000 8800 139988 28000 6600 8000	217800 108900 326700 660000 1313400 65340 65340 43560	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master Wild bergamot	0.1 0.05 0.15 0.2 0.5 0.03 0.03 0.03 0.02 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000	217800 108900 326700 660000 1313400 65340 65340 43560 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod	0.1 0.05 0.15 0.2 0.5 0.03 0.03 0.02	8188 5000 118000 8800 139988 28000 6600 8000	217800 108900 326700 660000 1313400 65340 65340 43560	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master Wild bergamot	0.1 0.05 0.15 0.2 0.5 0.03 0.03 0.03 0.02 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000	217800 108900 326700 660000 1313400 65340 65340 43560 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod	0.1 0.05 0.15 0.2 0.5 0.03 0.03 0.03 0.02 0.03 0.02	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue	0.1 0.05 0.15 0.2 0.5 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.04 0.04 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta	ture Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Wild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.04 0.03 0.04	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6 0.8	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6 0.8 2.0	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum laeve	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.04 0.04 0.03 0.04 0.03 0.03 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340 87120 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6 0.8 2.0 1.4	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum laeve Tradescantia ohiensis	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.04 0.04 0.03 0.04 0.03 0.03 0.03 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340 87120 65340 32670	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 2.6 0.8 2.0 1.4 4.1	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum laeve Tradescantia ohiensis	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort Culver's root	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.015 0.04	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000 284000	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340 87120 65340 87120 65340 87120 87120	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6 0.8 2.0 1.4 4.1 0.3	
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia hirta Rudbeckia triloba Symphyotrichum Iaeve Tradescantia ohiensis Veronicastrum virginiana Zizia aurea	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.015 0.04 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000 284000 12000	217800 108900 326700 660000 1313400 65340 65340 43560 87120 65340 87120 65340 87120 65340 87120 65340 87120 65340 32670 87120 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6 0.8 2.0 1.4 4.1 0.3 5.4	7.9
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum laeve Tradescantia ohiensis Veronicastrum virginiana Zizia aurea Total Forbs	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort Culver's root	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03 0.04 0.03 0.03 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000 284000 12000 801850	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340 87120 65340 32670 87120 65340 87120 65340 87120 65340 87120	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 2.6 0.8 2.0 1.4 4.1 0.3 5.4 36.8	7.9
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum Iaeve Tradescantia ohiensis Veronicastrum virginiana Zizia aurea Total Forbs Total All Species	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort Culver's root	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.015 0.04 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000 284000 12000	217800 108900 326700 660000 1313400 65340 65340 43560 87120 65340 87120 65340 87120 65340 87120 65340 87120 65340 32670 87120 65340	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 0.9 0.8 2.6 0.8 2.0 1.4 4.1 0.3 5.4	7.9
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum laeve Tradescantia ohiensis Veronicastrum virginiana Zizia aurea Total Forbs Total All Species	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort Culver's root Golden Alexanders	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03 0.04 0.03 0.03 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000 284000 12000 801850	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340 87120 65340 32670 87120 65340 87120 65340 87120 65340 87120	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 2.6 0.8 2.0 1.4 4.1 0.3 5.4 36.8 162.9	7.9 7.9
Mesic Savanna/Prairie Seed Mix Scientific name Grasses: Andropogon gerardii Elymus hystrix Panicum virgatum Schizachyrium scoparium Total Grasses Forbs: Aquilegia canadensis Echinacea purpurea Eryngium yuccifolium Monarda fistulosa Oligoneuron rigidum Penstomen digitalis Ratibida pinnata Rudbeckia hirta Rudbeckia triloba Symphyotrichum laeve Tradescantia ohiensis	Common Name Big bluestem Bottlebrush grass Switch grass Little bluestem Vild columbine Purple coneflower Rattlesnake master Wild bergamot Stiff goldenrod Foxglove beard tongue Yellow coneflower Black eyed Susan Brown eyed susan Smooth blue aster Common spiderwort Culver's root	0.1 0.05 0.15 0.2 0.5 0.3 0.03 0.03 0.02 0.03 0.02 0.04 0.03 0.04 0.03 0.04 0.03 0.03 0.03	8188 5000 118000 8800 139988 28000 6600 8000 78000 46000 115000 25250 110000 33000 48000 8000 284000 12000 801850	217800 108900 326700 660000 1313400 65340 65340 43560 65340 43560 87120 65340 87120 65340 87120 65340 32670 87120 65340 87120 65340 87120 65340 87120	Oz./Acre 26.6 21.8 2.8 75.0 126.1 2.3 9.9 5.4 0.8 2.6 0.8 2.0 1.4 4.1 0.3 5.4 36.8	7.9

Emergent Wetland Seed Mixture						
Scientific name	Common Name	% of Mix	Seeds/Oz.	# Seeds	Oz./Acre	lbs./Acre
Grasses & Rush:						
Eleocharis erythropoda	Spike rush	0.2	78000	87120	1.1	
Juncus effusus	Common Rush	0.2	1000000	87120	0.1	
Leersia oryzoides	Rice cut grass	0.1	94500	43560	0.5	
Total Grasses & Rush		0.5	1172500	217800	1.7	0.1
Forbs:						
Alisma subcordatum	Water plantain	0.06	4540	26136	5.8	
Mimulus ringins	Monkey flower	0.22	1500000	150000	0.1	
Penthorum sedoides	Ditch stonecrop	0.22	1300000	130000	0.1	
Total Forbs		0.5	2804540	306136	6.0	0.4
Total All Species		1	3977040	523936	7.6	0.5

Scientific name	Common Name	Plugs/Ac	Spacing	Planting Zone (to NWL)
Acorus calamus	Sweet flag	200	5.0' O.C.	0" to 6" below NWL
Iris virginica	Blue flag iris	300	5.0' O.C.	6" above to 3" below NWL
Carex hyalinolepis	Lake sedge	200	5.0' O.C.	0" to 6" below NWL
Juncus effusus	Common rush	200	5.0' O.C.	6" above to 3" below NWL
Pontedaria cordata	Pickerel weed	150	10.0' O.C.	12" to 18" below NWL
Sagittaria latifolia	Arrowhead	150	8.0' O.C.	6" to 12" below NWL
Schoenoplectus fluviatilis	River bulrush	100	5.0' O.C.	0" to 6" below NWL
Schoenoplectus tabernaemontani	Soft stemmed bulrush	100	5.0' O.C.	Between 1' and 2' below NWL
Sparganium eurycarpum	Burreed	600	4.0' O.C.	0" to 12" below NWL

EXHIBIT D

General Depiction of Active Farm Field

