



Fitzgerald Road Preservation Project Project Design Document

Table of Contents

INSTRUCTIONS.....	2
PROTOCOL REQUIREMENTS	2
PROJECT OVERVIEW	6
LOCATION OF PROJECT AREA (Section 1.3 and 1.4).....	6
OWNERSHIP OR ELIGIBILITY TO RECEIVE POTENTIAL CREDITS (Section 1.5).....	7
PRESERVATION COMMITMENT (Section 4.1)	8
DEMONSTRATION OF THREAT OF LOSS (Section 4.2, 4.3, and 4.4).....	8
ATTESTATION OF NO DOUBLE COUNTING OF CREDITS AND NO NET HARM (Section 5).....	9
ADDITIONALITY (Section 6)	10
CARBON QUANTIFICATION DOCUMENTATION (Section 11)	10
CO-BENEFITS QUANTIFICATION DOCUMENTATION (Section 11.6)	13
SOCIAL IMPACTS (Section 12).....	13
MONITORING AND REPORTING (Section 8).....	14
PROJECT OPERATOR SIGNATURE.....	15
ATTACHMENTS	16

INSTRUCTIONS

Project Operators must complete and submit this Project Design Document (PDD) to request credits. City Forest Credits (CFC) then reviews this PDD as part of the validation process along with all other required project documents. An approved third-party verifier then conducts verification.

The Protocol Requirements below are a list of eligibility requirements for informational purposes which are also found in the CFC Tree Preservation Protocol Version 11.40, dated February 7, 2022.

Project Operators will enter data and supporting attachments starting on page 6 under Project Overview where you find “[Enter text here]” as thoroughly as possible and provide numbered attachments for maps and other documentation (ex: 1 – Regional Map).

PROTOCOL REQUIREMENTS

Project Operator (Section 1.1)

Identify a Project Operator for the project. This is the entity or governmental body who takes responsibility for the project for the 40-year duration.

Project Duration and Project Implementation Agreement (Section 1.2, 2.2)

Project Operator must commit to a 40-year duration and sign a Project Implementation Agreement. This is a 40-year agreement between the Project Operator and City Forest Credits (the “Registry”) for an urban forest carbon project.

Location Eligibility (Section 1.3)

Projects must be located in or along the boundary of at least one of the following criteria:

- A. “Urban Area” per Census Bureau maps; see <https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-urban-areas.html>
- B. The boundary of any incorporated city or town created under the law of its state;
- C. The boundary of any unincorporated city, town, or unincorporated urban area created or designated under the law of its state;
- D. The boundary of any regional metropolitan planning agency or council established by legislative action or public charter. Examples include the Metropolitan Area Planning Council in Boston, the Chicago Municipal Planning Agency, the Capital Area Council of Governments (CAPCOG) in the Austin area, and the Southeastern Michigan Council of Governments (SEMCOG)
- E. The boundary of land owned, designated, and used by a municipal or quasi-municipal entity for source water or watershed protection. Examples include Seattle City Light South Fork Tolt River Municipal Watershed (8,399 acres owned and managed by the City and closed to public access);
- F. A transportation, power transmission, or utility right of way, provided the right of way begins, ends, or passes through some portion of A through D.

Ownership or Right to Receive Credits Eligibility (Section 1.5)

Project Operator must demonstrate ownership of property and eligibility to receive potential credits by meeting one of the following:

- A. Own the land and potential credits upon which the Project trees are located; or

- B. Own an easement or equivalent property interest for a public right of way within which Project trees are located and accept ownership of those Project trees by assuming responsibility for maintenance and liability for them; or
- C. Have a written and signed agreement from the landowner, granting ownership to the Project Operator of any credits for carbon storage, other greenhouse gas benefits, and other co-benefits delivered by Project trees on that landowner's land. If the Project Area is on private property, the agreements in this sub-section must be recorded in the public records in the county where the property is located. The recordation requirement can be satisfied if the agreements specified in this sub-section are contained in a recorded easement, covenant, or deed restriction on the property.

Demonstrate Tree Preservation (Section 4.1)

The Project Operator must show that the trees in the Project Area are preserved from removal by a recorded easement, covenant, or deed restriction (referred to hereafter as "Recorded Encumbrance") with a term of at least 40 years. This action is referred to as the "Preservation Commitment." This Recorded Encumbrance must be recorded not later than 12 months after Registry approval of the Project's Application.

Demonstrate Threat of Loss (Section 4.2, 4.3, and 4.4):

The Project Operator must show that prior to the Preservation Commitment:

- Project trees were not preserved from removal through a Recorded Encumbrance or other prohibitions on their removal,
- The Project Area was:
 - In a land use designation that allowed for at least one non-forest use. Non-forest uses include industrial, commercial, transportation, residential, agricultural, or resource other than forest, as well as non-forest park, recreation, or open space uses.
 - Is not in an overlay zone that prohibits all development. Examples include critical areas or wetland designations.
- The Project Area met one of the following conditions:
 - Surrounded on at least 30% of its perimeter by non-forest, developed or improved uses, or
 - Sold, conveyed, or had assessed value within three years of preservation for greater than \$8,000 average price per acre for the bare land, or
 - Would have a fair market value after conversion to a non-forested "highest and best use" greater than the fair market value after preservation in subsection 4.1, as stated in a "highest and best use" study from a state certified general real estate appraiser in good standing

Additionality (Section 6)

Additionality is ensured through the following:

- Prior to the start of the project, the trees in the project area are not protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees.
- The zoning in the project area must currently allow for a non-forest use
- The trees in the project area face a threat or risk of removal or conversion out of forest

- The Project Operator records in the public land records an easement, covenant, or deed restriction specifically protecting the trees for the project duration of 40 years or 100 years (40 or 100 years depending on the protocol version)

Quantification for Credits (Section 11)

The full Protocol describes the following steps for carbon stock and soil carbon quantification in detail:

1. Stored carbon stock present in Project Area (Section 11.1)
Estimate the biomass stock present and adjust for uncertainty to calculate the “Accounting Stock”. This can be done using the US Forest Service General Technical Report NE-343 tables, on-site inventory of some live trees with i-Tree methods and tools, or an on-site forest inventory
2. Areas expected to remain in trees after potential development (Section 11.2)
Calculate the fraction of the Accounting Stock that likely would be emitted as a result of development, to calculate “Avoided Biomass Emissions”
3. Claiming additional credit for growth (Section 11.3)
The Project Operator may elect to also account for ongoing growth of trees within the Project Area after Project Commencement
4. Quantification of soil carbon (Section 11.4)
Calculate “Avoided Soil Carbon Emissions” caused by conversion of soils to impervious surfaces in the Project Area
5. Deduction for displaced development (Section 11.5)
Apply the deductions in Section 11.5 and Appendix B to Biomass and Soil Carbon calculations to adjust for development and emissions that would be displaced by the preservation of the Project Area (leakage deductions). This will reduce the creditable tonnes of Avoided Biomass Emissions and Avoided Soil Carbon Emissions to adjust for displaced development
6. Quantify Co-Benefits (Section 11.6)
The Project Operator will calculate co-benefits separately from CO₂(e). The Registry will supply a spreadsheet template based on their climate zone, and will provide values for rainfall interception, reductions of air compounds, and energy savings.

Social Impacts (Section 12)

The Project Operator will describe how the Project impacts contribute towards achievement of the global UN Sustainable Development Goals (SDGs). The Registry will supply a template to evaluate how the Project aligns with the SDGs.

Attestation of No Net Harm and No Double Counting (Section 5)

The Project Operator will sign an attestation that no project shall cause net harm and no project shall seek credits on trees, properties, or projects that have already received credits.

Validation and Verification by Third-Party Verifiers (Section 13 and 14)

Project compliance and quantification must be verified by a third-party Validation and Verification Body approved by the Registry.

Issuance of Credits to Project Operator (Section 7)

Ex-post credits are issued after the biomass is protected via a recorded encumbrance protecting the trees. Issuance is phased or staged over one and five years at the equivalent of 50 acres of crediting per year. This staged issuance reflects the likely staging of development over time if the project area were to have been developed.

After validation and verification, the Registry issues credits to the Project Operator based on the Project Area size:

- 50 acres or less: all credits are issued after validation and verification
- Greater than 50 but less than 200 acres: credits are issued in the equivalent of 50 acres per year
- Greater than 200 acres: credits are issued in equal amounts over five years

Credits for Reversal Pool Account (Section 7.3):

The Registry will issue 90% of Project credits earned and requested and will hold 10% in the Registry's Reversal Pool Account.

Understand Reversals (Section 9)

If the Project Area loses credited carbon stock, the Project Operator must return or compensate for those credits if the tree loss is due to intentional acts or gross negligence of Project Operator. If tree loss is due to fire, pests, or other acts of god (i.e., not due to the Project Operator's intentional acts or gross negligence), the Registry covers the reversed credits from its Reversal Pool Account of credits held back from all projects.

Monitoring and Reporting (Section 8)

The Project Operator must submit a report every three years for the project duration. The reports must be accompanied by some form of telemetry or imaging that captures tree canopy, such as Google Earth, aerial imagery, or LiDAR. The reports must estimate any loss of stored carbon stock or soil disturbance in the Project Area.

PROJECT OVERVIEW

Project Name: Fitzgerald Road Preservation Project

Project Number: 036

Project Type: Preservation Project (under the Tree Preservation Protocol – version 11.40, dated February 7, 2022)

Project Start Date: November 11th, 2022

Project Location: Rockford Township, unincorporated City of Rockford, Winnebago County, Rockford, IL

Project Operator Name: Natural Land Institute

Project Operator Contact Information: Kerry Leigh, Executive Director/ 815-964-6666

kleigh@naturalland.org

Project Description:

Describe overall project goals as summarized in application (2 paragraphs)

The Fitzgerald Road Preservation Project (the Project) is a 21.1 acre Project Area on a 42.28 acre property that is part of a larger complex of protected lands. Natural Land Institute (NLI) acquired the property in 2020 and has incorporated a preservation commitment to preserve the Project, protecting substantial conservation habitat and community benefits including carbon sequestration, wildlife habitat and open space protection. The surrounding land is facing a continued threat of urban expansion from the City of Rockford.

Preservation of the Project is important as our urban wooded lands are becoming increasingly fragmented and rare in Winnebago County due to urban development pressures and agricultural development. The Project has dry-mesic upland Oak-Hickory forest consisting of *Carya ovata* (shagbark hickory), *Ostrya virginiana* (ironwood), *Quercus alba* (white oak), *Quercus rubra* (red oak), *Quercus velutina* (black oak), and *Viburnum prunifolium* (black-haw). The wet-mesic floodplain forest on the east side is predominantly *Acer saccharinum* (silver maple), *Celtis occidentalis* (hackberry), *Fraxinus pennsylvanica* (green ash), *Quercus macrocarpa* (burr oak), and *Ulmus americana* (American elm). The Project consists of 91.4% canopy cover with 9 acres of mature, approximately 150-year-old trees in the northern portion, 7.85 acres of approximately 95 year old trees mainly in the western portion and 4.25 acres in the west and eastern portions of approximately 75 year old trees. The project is zoned Agriculture but the project area it hasn't been farmed or grazed for the duration above.

LOCATION OF PROJECT AREA (Section 1.3 and 1.4)

Project Area Location

Describe where the Project Area is located and how it meets the location criteria.

Fitzgerald Road Preservation Project meets the following eligibility requirement with Region 1 Planning Council (R1PC) established by law in the state of Illinois as a designated entity for urban planning purposes:

- D. The boundary of any regional metropolitan planning agency or council established by legislative action or public charter.

Filename: B Fitzgerald Road Regional Map

Project Area Parcels

List of parcel(s) in the Project Area.

Jurisdiction / Location	Parcel Number	Description / Notes
Rockford Township, Winnebago County, IL	15-19-226-012	Project Area included in part of parcel – 18.1 acres
Rockford Township, Winnebago County, IL	15-20-102-001	Project Area included in part of parcel – 3.0 acres
		Total 21.1 acres

Project Area Maps

Provide maps of the Project Area with geospatial location vector data in 1) pdf form and 2) any file type that can be imported and read by Google Earth Pro (example KML, KMZ, or Shapefile format). Maps should include relevant urban or town boundaries, legend, and defined Project Area.

Geospatial location (boundaries) of Project Area

Filename: A Fitzgerald Road Geospatial Location shapefiles

Regional-scale map of Project Area

Filename: B Fitzgerald Road Regional Map

Detailed map of Project Area

Filename: C Fitzgerald Road Project Area Map

OWNERSHIP OR ELIGIBILITY TO RECEIVE POTENTIAL CREDITS (Section 1.5)

Project Operator must demonstrate ownership of potential credits or eligibility to receive potential credits. If the Project Operator is not the same as the landowner of the Project Area, provide agreement(s) between Project Operator and landowner authorizing Project Operator to execute this project.

Name of landowner of Project Area and explanation:

Natural Land Institute is the landowner and the Project Operator. Fitzgerald Road was purchased by the Natural Land Institute on December 15, 2020. The Natural Land Institute is a 501(c)3 Conservation Land Trust that has encumbered the Project Area with a deed restriction which prohibits development on the site and explicitly protects the trees from removal as per City Forest Credit's Protocol (see Preservation Commitment section).

Filename: D Fitzgerald Road Warranty Deed

PRESERVATION COMMITMENT (Section 4.1)

Describe the Preservation Commitment terms and provide a complete copy of the recorded document. If Project Area does not have the same boundaries as Preservation Commitment, please state the reasons why.

Preservation Term (years applicable): The Project Area will be protected for 40 years by Natural Land Institute.

Preservation Commitment explanation: Natural Land Institute (NLI) purchased the 42-acre Fitzgerald Road Property in December 2020 to expand and connect two small parcels, the Lind Shagbark Preserve (8.99 ac.) and the McGeachie Preserve (2.84 ac.). The entire preserve is now called the Lind-McGeachie Preserve (53.9 ac.). After NLI secured the property, it wished to protect the trees from removal via carbon crediting and began discussions with City Forest Credits. The Project Area includes 21.1 acres of the Fitzgerald Road addition and does not include any of the previously protected areas. A deed restriction (Declaration of Development Restrictions) with clear protection of the trees in this acreage was recorded on November 14, 2022. This Preservation Commitment ensures uniform and effective stewardship as the deed terms will align with the goals and objectives set forth in the Protocol. Specific language in Paragraph 1 of the recorded deed restriction titled Declaration of Development Restrictions states:

"Removal of Trees. Declarant shall not cut down, destroy, or remove trees located on the Property, except as necessary to control or prevent hazard, disease or fire or to improve forest health, provided however that recreational non-motor-use trails have negligible or de minimis impacts on biomass and carbon stock are permissible."

Filename: E Fitzgerald Road Preservation Commitment

Date signed and date recorded: Signed on November 11, 2022, recorded on November 14, 2022

DEMONSTRATION OF THREAT OF LOSS (Section 4.2, 4.3, and 4.4)

Describe the Project Area land use designation that allows for at least one non-forest use. Describe any overlay zones such as critical areas and their protection buffers, legal encumbrances, and any other pre-existing tree/forest restrictions that may have hindered removal of the Project Trees (in the pre-Preservation Commitment condition). Provide supporting evidence.

The Agricultural Priority 'AG' zoning provides for a non-forest use. The Winnebago Unified Development Ordinance Article 7 Section 7.4 Agriculture Related Business District and Table 7.1 lists uses allowed in the AG District. P stands for permitted and S stands for Special Use Permits.

Land use designation(s): Winnebago County Zoning: Agricultural Priority 'AG'

Filename: F Fitzgerald Road Zoning Maps and Ordinance

Overlay zones or other restrictions: None

Threat of loss (Section 4.4 A, B, or C):

Describe which of the three conditions the Project Area meets and provide supporting evidence such as maps, sale or assessed value documentation, or appraisal information.

In the pre-Preservation Commitment condition, the project trees are not preserved from removal from either development or agricultural production. Permanent protection under the City Forest Carbon Credit program will preserve the carbon sequestration values of the project.

Attachment G (Perimeter Development Map) demonstrates how the project area meets Protocol Section 4.4 A – “was surrounded on at least 30% of its perimeter by non-forest, developed, or improved uses, including residential, commercial, agricultural, or industrial.”

The Fitzgerald Road Parcel boundary is 8550 feet in total. 100% of the perimeter of the property is zoned residential/agricultural and 5,689 feet of the perimeter is adjacent to a developed use. A total of 66.5% of the perimeter is adjacent to a developed use, mostly residential.

*Filenames: F Fitzgerald Road Parcel Zoning Maps and Ordinance
G Fitzgerald Road Perimeter Development Map*

ATTESTATION OF NO DOUBLE COUNTING OF CREDITS AND NO NET HARM (Section 5)

Complete and attach the following attestation: Attestation of No Double Counting of Credits and Attestation of No Net Harm. Provide any additional notes as relevant.

Natural Land Institute signed the Attestation of No Double Counting of Credits and No Net Harm.

Filename: H Fitzgerald Road Attestations No Double Counting and No Net Harm

ADDITIONALITY (Section 6)

Additionality is demonstrated by carbon projects in several ways, as described in the City Forest Credits Standard Section 4.9.1 and Tree Preservation Protocol.

Project Operator demonstrates that additionality was met through the following:

- Prior to the start of the project, the trees in the project area are not protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees
 - See Demonstration of Threat of Loss section above
- The zoning in the project area must currently allow for a non-forest use
 - See Demonstration of Threat of Loss section above
- The trees in the project area face some threat risk of removal or conversion out of forest
 - See Demonstration of Threat of Loss section above
- The Project Operator records in the public land records an easement, covenant, or deed restriction specifically protecting the trees for the project duration of 40 years or 100 years (40 or 100 years depending on the protocol version)
 - See Preservation Commitment section above

Taken together, the above elements allow crediting only for unprotected trees, at risk of removal, which are then protected by a project action of preservation, providing additional avoided GHG emissions.

Additionality is embedded in the quantification methodology. Projects cannot receive credits for trees that would have remained had development occurred, nor can they receive soil carbon credits for soil that would have been undisturbed had development occurred.

Natural Land Institute has signed an Attestation of Additionality.

Filename(s): I Fitzgerald Road Attestation of Additionality

CARBON QUANTIFICATION DOCUMENTATION (Section 11)

Follow detailed instructions in the Protocol for conducting quantification and use the Carbon Quantification Calculator to show calculations. Ensure that your requested credit issuance schedule (issuance dates) is accurate and complete in the calculator. Project Operators should describe and appropriately reflect in their carbon quantification any and all planned future activities that may affect the percent canopy or carbon stocking in any way.

Summary numbers from Carbon Quantification Calculator

Project Area (acres)	21.1
Does carbon quantification use stratification (yes or no)	No
Accounting Stock (tCO ₂ e)	3,441
On-site avoided biomass emissions (tCO ₂ e)	3,097
On-site avoided soil carbon emissions (tCO ₂ e)	1,519
Deduction for displaced biomass emissions (tCO ₂ e)	567
Deduction for displaced soil emissions (tCO ₂ e)	460

Credits from avoided biomass emissions (tCO ₂ e)	2,530
Credits from avoided soil emissions (tCO ₂ e)	1,059
Total credits from avoided biomass and soil emissions (tCO ₂ e)	3,589
Credits attributed to the project (tCO ₂ e), excluding future growth	3,589
Contribution to Registry Reversal Pool Account	359
Total credits to be issued to the Project Operator (tCO₂e) <i>(excluding future growth)</i>	3,230

GHG Assertion:

Project Operator asserts that the Project results in GHG emissions mitigation of 3,230 tons CO₂e issued to the project.

Approach to quantifying carbon

Describe general approach you used to quantify carbon (e.g. US Forest Service General Technical Report NE-343 Tables, inventory, other). Provide documentation.

Davey Resource Group (DRG) provided on-site plot-sample inventory work to determine the carbon stock. DRG conducted a sample forest assessment adhering to the standards set forth in CFC Tree Preservation Protocol Section 11.1.B. The sample established 21 sample plots sized at 1/10th-acre. Within every plot, each live tree at least 5" in diameter at 4.5' above the ground where the height above the ground is measured on the uphill side of the tree was inventoried. Species, diameter, and overall tree condition were recorded for each tree. Davey Resource Group utilized i-Tree Eco to input the sample plot data to determine the carbon storage. The CFC Carbon Calculator was used for quantification for subsequent steps 11.2, 11.4, and 11.5.

Filename: J Fitzgerald Road Carbon Quantification Calculator, K Fitzgerald Road Plot Location Map, L Fitzgerald Road On-site inventory raw data, M Fitzgerald Road i-Tree Eco

Accounting Stock Measurement Method (11.1)

Describe quantification, including which method used to assess canopy cover (e.g. i-Tree, inventory, other), forest type, and data sources.

DRG completed a sample inventory using randomized 1/10th- acre plots, following section 11.1.B in the CFC Tree Preservation Protocol. DRG used i-Tree Eco to determine the accounting stock and used a standard error of 10%.

Carbon quantification is based on the sample plots. The metric tons of Carbon is 1,043.49. The standard error is 105.02

Biomass tC/ac = (metric tons of carbon – standard error)/project area acres = (1,043.49 – 105.02)/21.1 = 44.48 (cell B11 on attachment J)

Filename: N Fitzgerald Road Carbon Biomass

Stratification

If stratification is used, maps of strata and stratum definitions. If not used, list not applicable.

The Project Area was treated as one stand, thus DRG did not use stratification.

Stand Maps

Describe the methods used to determine forest stands (e.g. GIS) and documentation.

The project area was treated as one stand and DRG used on-site quantification method 11.1.B to quantify the carbon stock.

Forest Age

Provide historical imagery or other materials to support forest age documentation. Describe the method(s) used:

An on-site inventory was completed, so no documentation of forest age is necessary for carbon quantification for this project.

Forest Composition

Describe forest composition and explanation of method(s) used.

The urban forest of Fitzgerald Road has an estimated 2,985 trees with a tree cover of 91 percent. The three most common species are Black cherry (22.6 percent), Shagbark hickory (19.2 percent), and American elm (18.5 percent). DRG completed a sample inventory using randomized 1/10th-acre plots, following section 11.1.B in the CFC Tree Preservation Protocol.

Filename: O Fitzgerald Road Forest Composition Report

Canopy Cover

Provide i-Tree Canopy report that shows estimated percentage of tree cover. Explanation of method(s) used:

An on-site inventory was completed, so no documentation of canopy cover is necessary for carbon quantification for this project. However, an i-Tree Canopy report was completed to quantify the co-benefits and the total canopy cover is 91.4%

Filename: P Fitzgerald Road i-Tree Canopy Report

Area Expected to Remain in Trees after Potential Development (11.2)

Describe how you determined the area expected to remain in trees after potential development (fraction at risk) and explanation of method(s) used:

Fitzgerald Road is zoned agriculture. Section 11.2 in CFC's Preservation Protocol allows for 90% of the Accounting Stock on the Project Area is the "Avoided Biomass Emissions" on agricultural lands.

Filename: F Fitzgerald Road Parcel Zoning Maps and Ordinance

Quantification of Soil Carbon - Existing Impervious Area and Impervious Limits (11.4)

The Project may claim avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces. Describe applicable zoning and development rules, existing impervious area and maximum fraction impervious cover.

Fitzgerald Road is zoned agriculture and 60% of the Project Area is eligible for conversion to impervious surface. The applicable zoning and development rules do limit impervious area under Section 7.7 Bulk and Yards.

Filename: F Fitzgerald Road Parcel Zoning Maps and Ordinance

Future Planned Project Activities

Describe any future project activities that may affect the percent canopy or carbon stocking in any way.

Natural Land Institute has no planned projects other than ecosystem management activities for forest health within the project area. Some trail markers may be installed with no impact on the trees.

CO-BENEFITS QUANTIFICATION DOCUMENTATION (Section 11.6)

Summarize co-benefit quantification and provide supporting documentation. CFC will provide a Co-Benefits Quantification spreadsheet to Project Operators for calculating rainfall interception, reduction of certain air compounds, and energy savings.

Ecosystem Services	Resource Units	Value
Rainfall Interception (m3/yr)	5,220.8	\$37,380.32
Air Quality (t/yr)	0.2185	\$329.00
Cooling – Electricity (kWh/yr)	41,098	\$3,119.34
Heating – Natural Gas (kBtu/yr)	768,462	\$7,480.81
Grand Total (\$/yr)		\$48,309.48

Filename: Q Fitzgerald Road CoBenefit Calculator

SOCIAL IMPACTS (Section 12)

Project Operators shall use the Carbon Project Social Impact template to evaluate the UN Sustainable Development Goals (SDGs) to determine how a Project provides social impacts that contribute towards achievement of the global goals. CFC will provide the template. Summarize the three to five main SDGs from this Project.

SDG 15, Life On Land

This project will protect trees, reducing stormwater runoff and improving aquifer infiltration. Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. The trees in the project will provide enhanced biodiversity for habitat and food for wildlife, including supporting pollinators as it lies within a larger complex of protected areas in the

region, soil health, nutrient and water cycling and photosynthesis. Protecting the soils from erosion is a function of a healthy forest floor that manages and removes invasive species to allow for a robust cover of ephemeral and other native groundcover holding the soils in place and allowing for stormwater infiltration.

SDG 13, Climate Action

This project is a tree protection project that will reduce/remove air pollutants through preserving those Regulating ecosystem services that protecting tree provides. This protection project will also optimize biodiversity and enhance wildlife habitat as it is located within a larger complex of protected lands.

Our organization has a robust community volunteer program where the local community is engaged in forest health management activities and many learning opportunities.

The upland forest will continue to improve infiltration rates and prevent soil erosion, enhance water quality and protect the stream from channel down-cutting and degradation, resulting in cleaner water downstream. Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. This protection project provides climate regulating services as it is a sink for greenhouse gasses including CO₂ and evapotranspiration. This project will prevent deforestation within an agricultural zoning area.

SDG 6, Clean Water and Sanitation

This project is located within the floodplain of Silver Creek, which is culturally important to the community, but has suffered degradation under modern agricultural uses. The upland forest will continue to improve infiltration rates and prevent soil erosion and subsequent siltation and pollution resulting in cleaner water downstream.

Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. Protecting and improving infiltration rates is a significant ecosystem service for this region, and the forest also cleans runoff as it infiltrates into the water supply aquifers.

Filename: R Fitzgerald Road Social Impacts

MONITORING AND REPORTING (Section 8)

Throughout the Project Duration, the Project Operator must report on tree conditions across the Project Area. Monitoring reports are due every three years determined by the date of the verification report. For example, if the verification report is dated January 1, 2021, the first report will be due by January 1, 2024 and every three years thereafter for the duration of the project.

Describe your monitoring plans. If Project Operator plans to claim credits for future growth, describe methods that will be used to quantify future growth.

The Project Area, is encumbered with a deed restriction, held by Natural Land Institute (NLI), a 501(c)3 non-profit organization. The protections afforded by the deed restriction will preserve the current forest and tree canopy and safeguard the Project Area from future threats of timber harvesting. There are no specific future activities planned within the boundaries of the Project Area, except for

management activities for forest health, is allowed under Number 1 in the terms of the deed restriction and will be incorporated into future management plans. Additionally, NLI will reserve the right to quantify the future growth of the Project Trees. NLI is an accredited land trust and has a professional team dedicated to the stewardship of its 49 conservation easements and land owned in fee. NLI has demonstrated its ability to serve in this capacity, having conserved more than 17,000 acres across Illinois and holding 49 conservation easements on over 4000 acres, each of which are monitored annually. Staff members will visit the Fitzgerald Road Preservation Project annually, walking the Project Area and property in their entirety to ensure that the tenets of the deed restriction are being upheld and to resolve any issues with encroachment or non-permitted activities on-site. NLI will submit written monitoring reports every three years attesting to the accuracy of the reports. The reports will include imagery of leaf-on trees. NLI will monitor for tree canopy loss and follow Protocol requirements as necessary.

PROJECT OPERATOR SIGNATURE

Signed on December 12, in 2022, by Kerry Leigh, Executive Director, for Natural Land Institute.



Signature

Kerry Leigh
Printed Name

815-964-6666
Phone

kleigh@naturalland.org; info@naturalland.org
Email

ATTACHMENTS

List the number and name of attachments

- A: Fitzgerald Road Geospatial Location
- B: Fitzgerald Road Regional Map
- C: Fitzgerald Road Project Area Map
- D: Fitzgerald Road Warranty Deed
- E: Fitzgerald Road Preservation Commitment
- F: Fitzgerald Road Parcel Zoning Maps and Ordinance
- G: Fitzgerald Road Perimeter Development Map
- H: Fitzgerald Road Attestations No Double Counting and No Net Harm
- I: Fitzgerald Road Attestations of Additionality
- J: Fitzgerald Road Carbon Quantification Calculator
- K: Fitzgerald Road Plot Location Map
- L: Fitzgerald Road On-site inventory raw data
- M: Fitzgerald Road i-Tree Eco
- N: Fitzgerald Road Carbon Biomass
- O: Fitzgerald Road Forest Composition Report
- P: Fitzgerald Road i-Tree Canopy report
- Q: Fitzgerald Road CoBenefit Calculator
- R: Fitzgerald Road Social Impacts

Attachments

[Deed](#)

[Project Area Map](#)

[Regional Area Map](#)

[Preservation Commitment](#)

[Zoning Maps](#)

[Zoning Description\(s\)](#)

[Threat of Loss Demonstration](#)

[Attestation of No Double Counting and No Net Harm](#)

[Attestation of Additionality](#)

[Carbon Quantification Tool](#)

[Tree Inventory](#)

[Tree Characteristics Chart\(s\)](#)

[iTree Canopy Report](#)

[Cobenefit Calculator](#)

[Social Impacts](#)

Deed

20201039384
Filed for Record in
WINNEBAGO COUNTY IL
LORI GUMMOW, CLERK & RECORDER
12/21/2020 11:39:19 AM
DEED Pages: 3
RECORDING FEE 36.00
RHSP FEE 9.00

WARRANTY DEED
CORPORATION TO CORPORATION

180,250

TUA WW280163COM

THE GRANTOR, **ROCKFORD RESCUE MISSION MINISTRIES**, a non-profit corporation duly organized and existing under and by virtue of the laws of the State of Illinois, and duly authorized to transact business in the State where the following described real estate is located, for valuable consideration and pursuant to authority given by the Board of Directors of said corporation, CONVEYS and WARRANTS to **NATURAL LAND INSTITUTE**, GRANTEE,

THE PROPERTY COMMONLY KNOWN AS: **58XX and 64XX Fitzgerald Road, Rockford, IL 61102**

PROPERTY CODE NO. **15-20-102-001 and 15-19-226-012** AND LEGALLY DESCRIBED AS:

Part of the Northeast Quarter (NE 1/4) of Section 19 and part of the Northwest Quarter (NW 1/4) of Section 20, Township 43 North, Range 1 East of the Third Principal Meridian, Winnebago County, Illinois, bounded and described as follows, to-wit: Beginning at the Northeast corner of said Section 19; thence South, 01 degrees 03'50" East, along the East line of the Northeast Quarter (NE 1/4) of said Section, a distance of Eight Hundred Twenty-five(825.00) feet to the Southwest corner of premises conveyed by Harold V. Nalley and Helen E. Nalley, to Julia M. Lind and Jennie F. Lind by Warranty Deed dated May 5, 1939 in Book 421 of Deeds on Page 320 in the Recorder's Office of Winnebago County, Illinois; thence North, 88 degrees 36'31" East, parallel with the North line of said Section 20, a distance of Two Hundred Thirty-one and Eighty-six Hundredths (231.86) feet; thence South, 0 degrees 03'50" East, parallel with the East line of the Northeast Quarter (1/4) of said Section 19, a distance of One Thousand One Hundred Thirty-nine and Thirty-one Hundredths (1,139.31) feet; thence South, 17 degrees 47'03" West, a distance of Seven Hundred Seventeen and Sixty-nine Hundredths (717.69) feet to the Southeast corner of the Northeast Quarter (NE 1/4) of said Section 19; thence North, 01 degrees 03'50" West, along the East line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of Nine Hundred Ninety-seven and Fifty-four Hundredths (997.54) feet to the Southeast corner of the North 100 acres of the East Half (E 1/2) of said Section 19; thence South, 88 degrees 51'03" West, along the South line of the North 100 acres of the East Half (E 1/2) of said Section 19, a distance of One Thousand Five Hundred Forty-nine and Forty-eight Hundredths (1,549.48) feet to a point One Thousand One Hundred (1,100.00) feet East of the West line of the Northeast Quarter (NE 1/4) of said Section 19; thence North, 01 degrees 14'54" West, parallel with the West

TUA WW280163COM

line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of Eight Hundred Fifty-two and Sixty-five Hundredths (852.65) feet to the South line of premises conveyed by William Opsahl and Jacqueline Opsahl to Wayne E. Holton and Susan M. Holton by Warranty Deed dated December 7, 1989 and recorded in Microfilm No. 8938-1901 in said Recorder's Office; thence North, 88 degrees 51'03" East, along the said Southerly line of the premises conveyed by Opsahl to Holton as aforesaid, a distance of Three Hundred Thirty-four and Sixty-eight Hundredths (334.68) feet; thence North, 01 degrees 14'54" West, along the East line of said premises so conveyed by Opsahl to Holton, said line being parallel with the West line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of One Hundred Eight (108.00) feet to a point on a line Six Hundred Eighty-four (684) feet South of the North line of said Section 19; thence North, 88 degrees 51'03" East, parallel with the North line of Section 19, a distance of One Thousand One Hundred Fifty-one and Nine Tenths (1,151.90) feet to the Southeast corner of premises conveyed by Ralph C. Hess and Mary F. Hess by Trustee's Deed dated January 10, 1967 and recorded on Microfilm No. 6702-1917 in said Recorder's Office; thence North, 01 degrees 03'50" West, along the East line of premises so conveyed to Hess, said line being parallel with the East line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of Six Hundred Eighty-four (684.00) feet to a point on the North line of said Section 19; thence North, 88 degrees 51'03" East, along said North line, a distance of Sixty-six (66.00) feet to the point of beginning; situated in the County of Winnebago and State of Illinois.

Together with all and singular the hereditaments and appurtenances thereto belong, or in anywise appertaining, and the reversion or reversions, remainder or remainders, rents, issues and profits thereof, and all the estate, right, title interest, claim or demand whatsoever, of the GRANTOR, either in law or equity of, in and to the above described premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises as above described, with the appurtenances, unto GRANTEES, forever.

GRANTOR, for itself, and its successors, does covenant, promise and agree to and with the GRANTEES and successors, that it has not done or suffered to be done, anything whereby the said premises hereby granted are, or may be, in any manner encumbered or charged, except as herein recited; and that it will warrant and defend, the said premises against all persons lawfully claiming, or to claim the same, by through or under it, subject only to: Real estate taxes for 2019 and 2020, conditions, restrictions, covenants, easements and ordinances of record.

The warranties passing to GRANTEES hereunder are limited solely to those matters arising from acts of the GRANTOR, its agents or representatives, occurring solely during the period of GRANTOR'S ownership of the subject real estate.

Dated this 15th day of December, 2020.

AFFIX TRANSFER TAX STAMP

OR

"Exempt pursuant to Section 31-45
of the Real Estate Transfer Tax Law."

12/15/20

Date

Buyer, Seller or Representative

ROCKFORD RESCUE MISSION MINISTRIES

By:

Cheryl Pitney

Its:

CEO

Attest:

Its:

State of Illinois

)

)ss

Winnebago County

)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO
HEREBY CERTIFY that Cheryl Pitney,
personally known to me to be the CEO ~~President~~ of the Corporation and ~~being the Secretary of said Corporation~~ and being the
same persons whose names are subscribed to the foregoing instrument, appeared before me this
day in person and acknowledged that as such President and Secretary of said
Corporation and pursuant to authority given by the Board of Directors of said Corporation, signed
and delivered the said instrument as their free and voluntary will for the uses and purposes therein
set forth.

Given under my hand and Notarial Seal this 15 day of December, 2020.

Stephanie Cannon
Notary Public

Drafted by: David L. Davitt/da, 4023 Charles St., Rockford, Illinois 61108-6199

Return to and future taxes to: NATURAL LAND INSTITUTE, 320 South Third St., Rockford, IL
61104



TITLE UNDERWRITERS AGENCY

126 N. Water Street
Rockford, IL 61107
(815)964-9800

Natural Land Institute
320 South Third Street
Rockford, IL 61104

RE: Case No. WW280163COM
58XX and 64XX Fitzgerald Road
Rockford, IL 61102

Enclosed is your Title Insurance Policy. This Policy contains important information about the real estate transaction you have recently completed. It is your guarantee of ownership. Please read it and retain with your other valuable papers.

A complete and permanent file of the records concerning your property will be maintained in our office under the assigned case number. These records will assure prompt processing of future title orders and save valuable time should you wish to sell or obtain a loan on your property.

We appreciate the opportunity of serving you in the acquisition of your property. Whenever you have any future title needs, please call us.

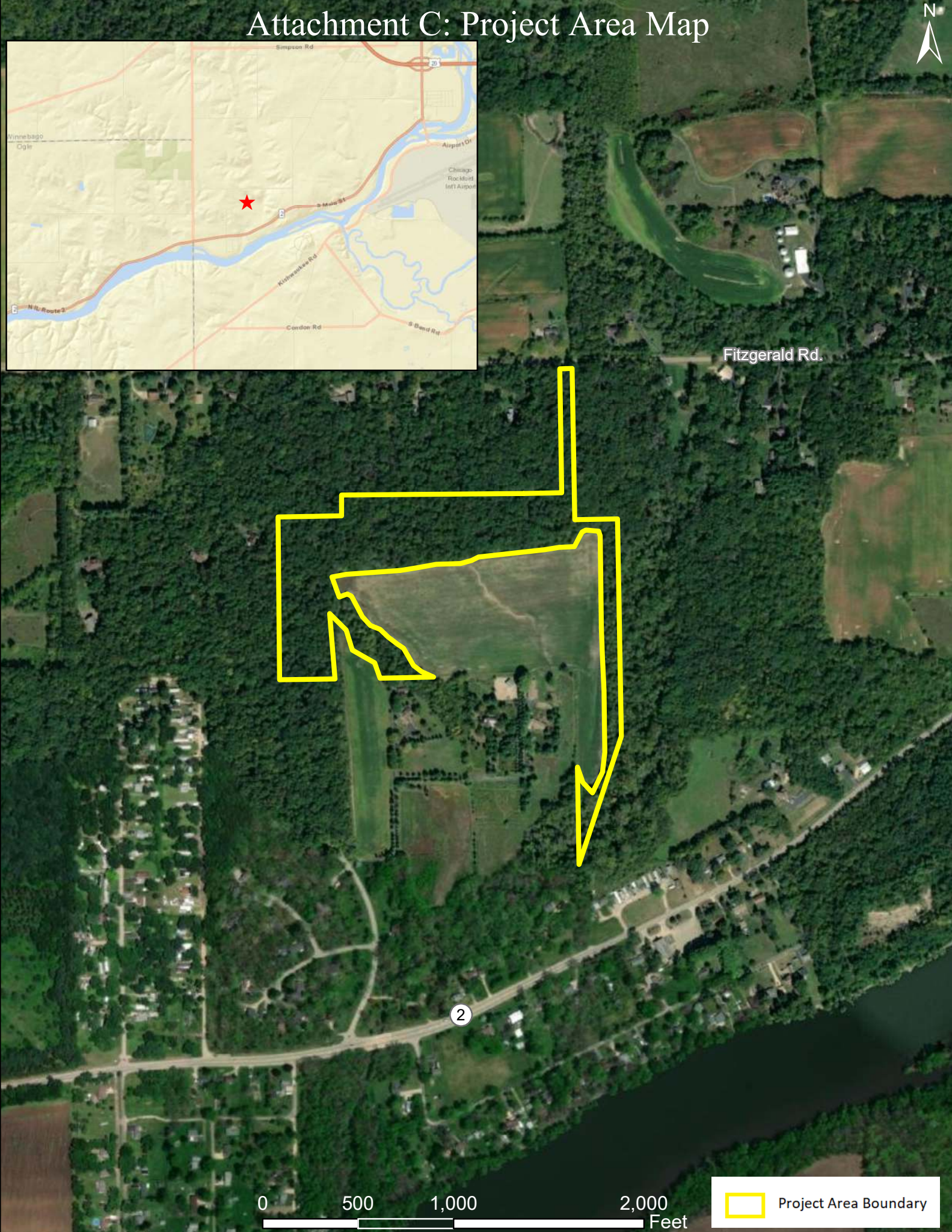
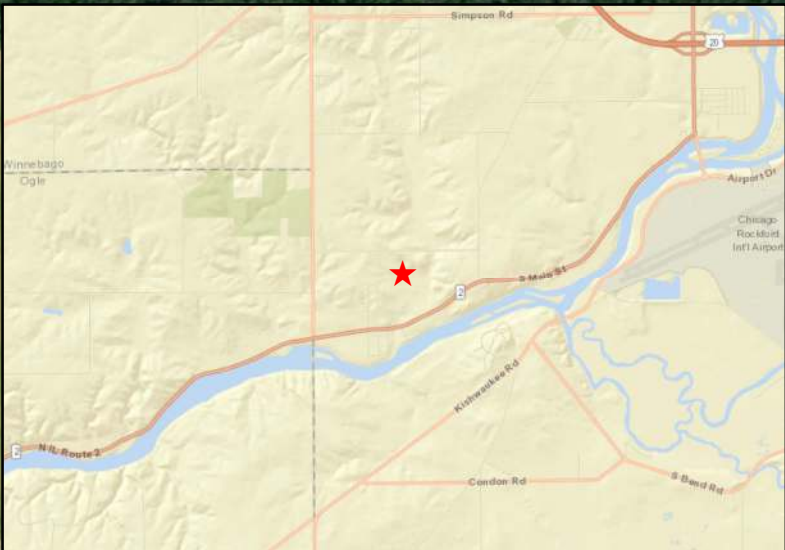
Sincerely,


Sara C Thornton

TITLE UNDERWRITERS AGENCY

Project Area Map

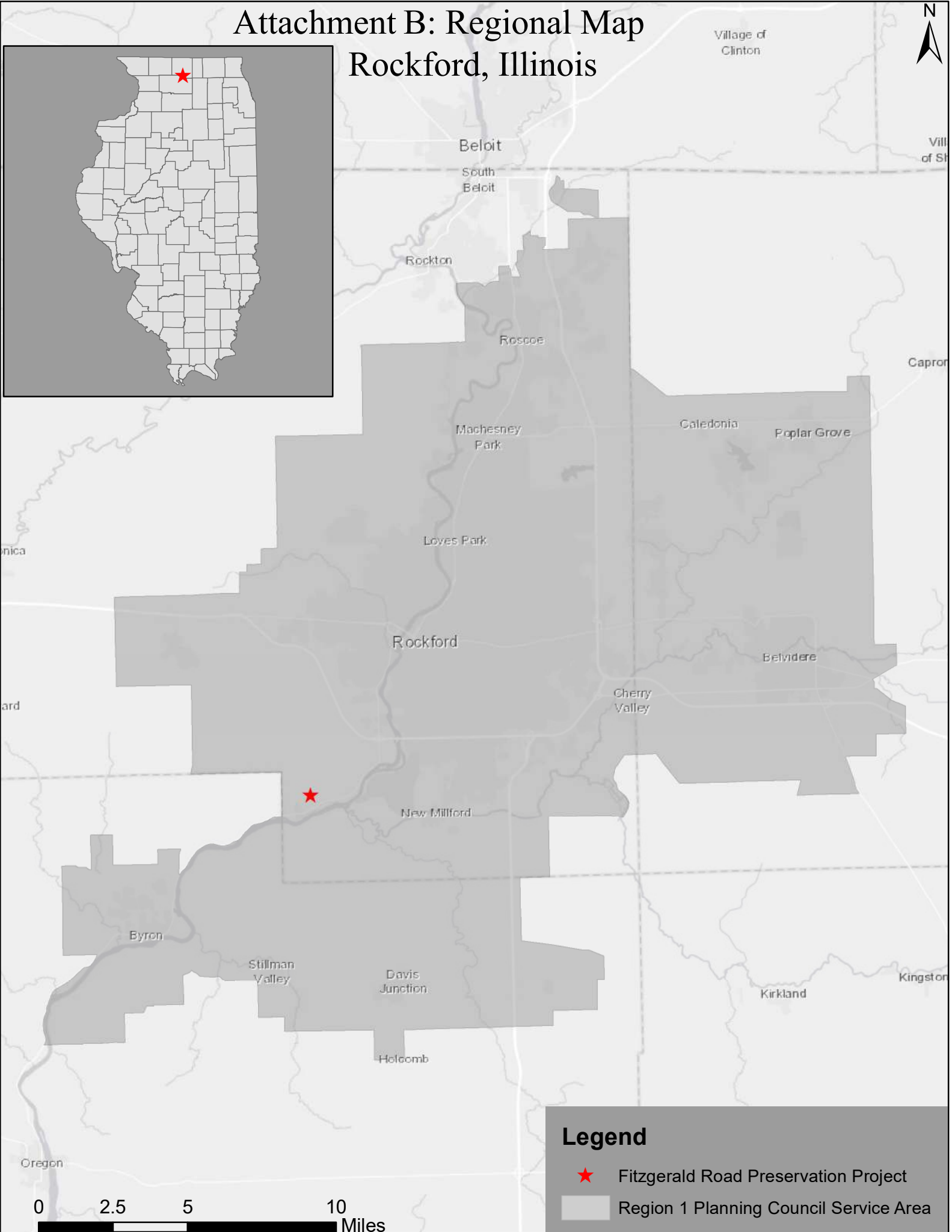
Attachment C: Project Area Map



 Project Area Boundary

Regional Area Map

Attachment B: Regional Map Rockford, Illinois



Legend

- ★ Fitzgerald Road Preservation Project
- Region 1 Planning Council Service Area

Preservation Commitment



DocId:30036021

Tx:40098104

2022034429

Filed for Record in

WINNEBAGO COUNTY IL

LORI SUMMOW, CLERK & RECORDER

11/14/2022 10:39:15 AM

DECLARATION Pages: 5

RECORDING FEE 36.00

RHSP FEE 9.00

[Space Above for Recorder's Use Only]

DECLARATION OF DEVELOPMENT RESTRICTIONS

Grantor: Natural Land Institute- Winnebago County, Illinois
320 South Third Street, Rockford, IL 61104

Grantee: Natural Land Institute- Winnebago County, Illinois
Return to: 320 South Third Street, Rockford, IL 61104

Legal Description:

See Attached Exhibit A.

Assessor's Tax Parcel Identification No(s):

See Attached Exhibit A.

THIS DECLARATION OF DEVELOPMENT RESTRICTIONS (the "DECLARATION") is made this 11th day of November 2022, by Natural Land Institute, an Illinois not for profit corporation ("Declarant"), for the purpose of clarifying the development restrictions on the subject property located in Winnebago County, Illinois.

RECITALS

A. Declarant is the owner of certain property in Winnebago County, State of Illinois, addressed as the Fitzgerald Rd Parcels more particularly described in EXHIBIT A attached hereto and incorporated by reference (the "Property").

B. Declarant purchased the Property from private parties on December 15, 2020.

C. Declarant is an Illinois not for profit corporation established in 1958.

D. Declarant recognizes the value of the Property's mature forest as a climate asset. The trees on the Property store CO₂, reduce storm water runoff, improve air quality, provide energy savings from cooling and heating effects, and improve human health by providing cleaner air and a place for recreation, exercise and the public health benefits of exposure to nature. Clearing of the trees for other uses, such as parking lots, playfields or other uses would seriously impair the climate value of the Property.

E. Declarant is an active participant within the City Forest Credits efforts to develop a forest carbon program, whereby the Declarant will preserve forested stands and earn carbon credits for those preserved trees. Declarant has established a project with the non-profit carbon registry, City Forest Credits, which has developed carbon protocols and issues credits for qualifying tree-preservation and tree planting projects in urban areas.

G. Declarant intends by this Declaration to preserve the trees on the Property for a period of no less than 40 years. It understands that this Declaration will bar the clearing or removing of trees for parking lots, picnic shelters, playfields, visitor centers, or any reason other than forest health, hazard, disease, fire, and small, non-motorized recreational trails.

DECLARATION

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Declarant, as owner of the Property, hereby declares, grants, imposes, conveys, establishes, and accepts the following development restrictions and covenants which shall run with the land and be binding upon all owners of the Property:

1. Removal of Trees. Declarant shall not cut down, destroy, or remove trees located on the Property, except as necessary to control or prevent hazard, disease or fire or to improve forest health, provided however that recreational non-motor-use trails have negligible or de minimis impacts on biomass and carbon stock and are permissible.

2. Run with land. The covenants and restrictions declared, granted, conveyed and established under this Declaration shall run with the land and inure to the benefit of, and be binding upon, Declarant and its heirs, beneficiaries, successors and assigns, and all future owners of the Property.

3. Term and modification. The covenants and restrictions declared, granted, conveyed and established under this Declaration shall remain in effect as long as it is needed to satisfy the requirements of any applicable carbon protocol under which carbon credits may be issued for the carbon preserved in the trees on the Property.

4. Governing law and venue. The terms and provisions of this Declaration shall be governed, construed, and enforced in accordance with the laws of the State of Illinois. Venue for any lawsuit arising out of this Declaration shall be in Winnebago County, Illinois.

5. Severability. In case any one or more of the provisions contained in this Declaration shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions of this Declaration, but this Declaration shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

Dated this 11th Day of Nov., 2022.

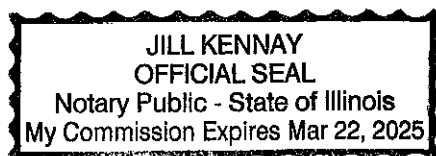
Natural Land Institute, an Illinois not for profit corporation

By: Kerry Leigh
Kerry Leigh
Executive Director

STATE OF ILLINOIS)
)ss
COUNTY OF WINNEBAGO)

I certify that I know or have satisfactory evidence that KERRY LEIGH is the individual who appeared before me, and said person acknowledged that they signed this instrument, on oath stated that they were authorized to execute the instrument and acknowledged it as the President of the Natural Land Institute, to be the free and voluntary act of such for the uses and purposes mentioned in the instrument.

Dated this 11th day of Nov., 2022.



Jill Kennay
Notary Public

EXHIBIT A
LEGAL DESCRIPTION

THE PROPERTY COMMONLY KNOWN AS: 58XX and 64XX Fitzgerald Road, Rockford, IL 61102

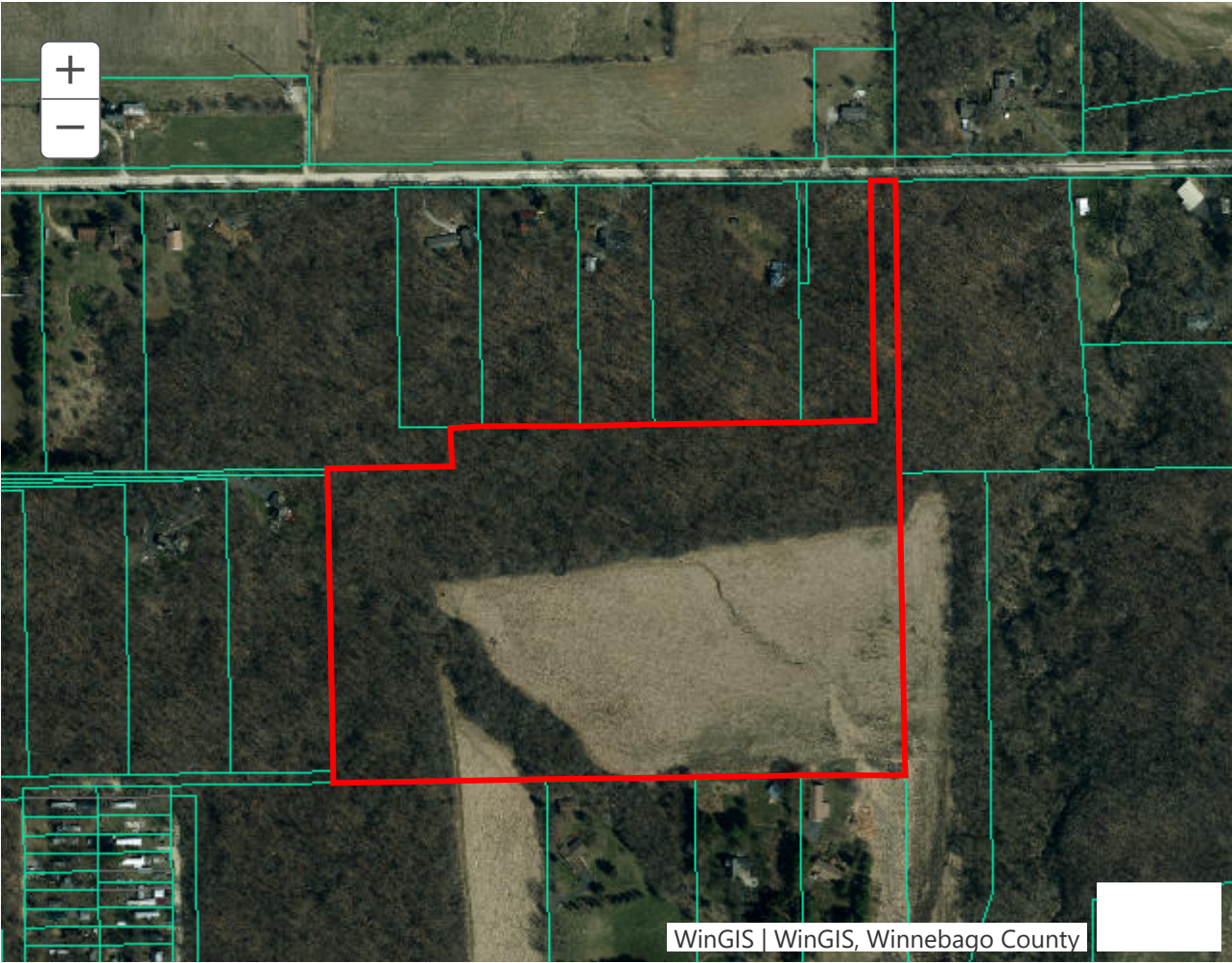
PROPERTY CODE NO. 15-20-102-001 and 15-19-226-012

LEGALLY DESCRIBED AS:

Part of the Northeast Quarter (NE 1/4) of Section 19 and part of the Northwest Quarter (NW 1/4) of Section 20, Township 43 North, Range 1 East of the Third Principal Meridian, Winnebago County, Illinois, bounded and described as follows, to-wit: Beginning at the Northeast corner of said Section 19; thence South, 01 degrees 03'50" East, along the East line of the Northeast Quarter (NE 1/4) of said Section, a distance of Eight Hundred Twenty-five (825.00) feet to the Southwest corner of premises conveyed by Harold V. Nalley and Helen E. Nalley, to Julia M. Lind and Jennie F. Lind by Warranty Deed dated May 5, 1939 in Book 421 of Deeds on Page 320 in the Recorder's Office of Winnebago County, Illinois; thence North, 88 degrees 36'31" East parallel with the North line of said Section 20, a distance of Two Hundred Thirty-one and Eighty-six Hundredths (231.86) feet; thence South, 0 degrees 03'50" East, parallel with the East line of the Northeast Quarter (1/4) of said Section 19, a distance of One Thousand One Hundred Thirty-nine and Thirty-one Hundredths (1,139.31) feet; thence South, 17 degrees 47'03" West, a distance of Seven Hundred Seventeen and Sixty-nine Hundredths (717.69) feet to the Southeast corner of the Northeast Quarter (NE 1/4) of said Section 19; thence North, 01 degrees 03'50" West, along the East line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of Nine Hundred Ninety-seven and Fifty-four Hundredths (997.54) feet to the Southeast corner of the North 100 acres of the East Half (E 1/2) of said Section 19; thence South, 88 degrees 51 '03" West, along the South line of the North 100 acres of the East Half (E 1/2) of said Section 19, a distance of One Thousand Five Hundred Forty-nine and Forty-eight Hundredths (1,549.48) feet to a point One Thousand One Hundred (1,100.00) feet East of the West line of the Northeast Quarter (NE 1/4) of said Section 19; thence North, 01 degrees 14'54" West, parallel with the West line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of Eight Hundred Fifty-two and Sixty-five Hundredths (852.65) feet to the South line of premises conveyed by William Opsahl and Jacqueline Opsahl to Wayne E. Holton and Susan M. Holton by Warranty Deed dated December 7, 1989 and recorded in Microfilm No. 8938-1901 in said Recorder's Office; thence North, 88 degrees 51 '03" East, along the said Southerly line of the premises conveyed by Opsahl to Holton as aforesaid, a distance of Three Hundred Thirty-four and Sixty-eight Hundredths (334.68) feet; thence North, 01 degrees 14'54" West, along the East line of said premises so conveyed by Opsahl to Holton, said line being parallel with the West line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of One Hundred Eight (108.00) feet to a point on a line Six Hundred Eighty-four (684) feet South of the North line of said Section 19; thence North, 88 degrees 51 '03" East, parallel with the North line of Section 19, a distance of One Thousand One Hundred Fifty-one and Nine Tenths (1,151.90) feet to the Southeast corner of premises conveyed by Ralph C. Hess and Mary F. Hess by Trustee's Deed dated January 10, 1967 and recorded on Microfilm No. 6702-1917 in said Recorder's Office; thence North, 01 degrees 03'50" West, along the East line of premises so conveyed to Hess, said

line being parallel with the East line of the Northeast Quarter (NE 1/4) of said Section 19, a distance of Six Hundred Eighty-four (684.00) feet to a point on the North line of said Section 19; thence North, 88 degrees 51 '03" East, along said North line, a distance of Sixty-six (66.00) feet to the point of beginning; situated in the County of Winnebago and State of Illinois.

Zoning Maps



64XX FITZGERALD RD

Pin	Alt.Pin	Property Size
1519226012	235A101B	Sq. Feet: 1498647 Acres: 34.40

Legal Description
BEG NE COR NE1/4 TH W 66 FT S 684 FT W 1150.62 FT S 108 FT W 334.68 FT S 852.65 FT TH E TO E LN NE 1/4 TH N TO POB PT NE1/4 SEC SEC: 19 TWP: 43 RANGE: 1 ACRES: 35.36

Property Use
Vacant Farmland - assd (0020)

Zoning District: AG - Agricultural Priority (AG)

Flood Zone Type	In/Out
X	OUT

X

A

OUT

IN

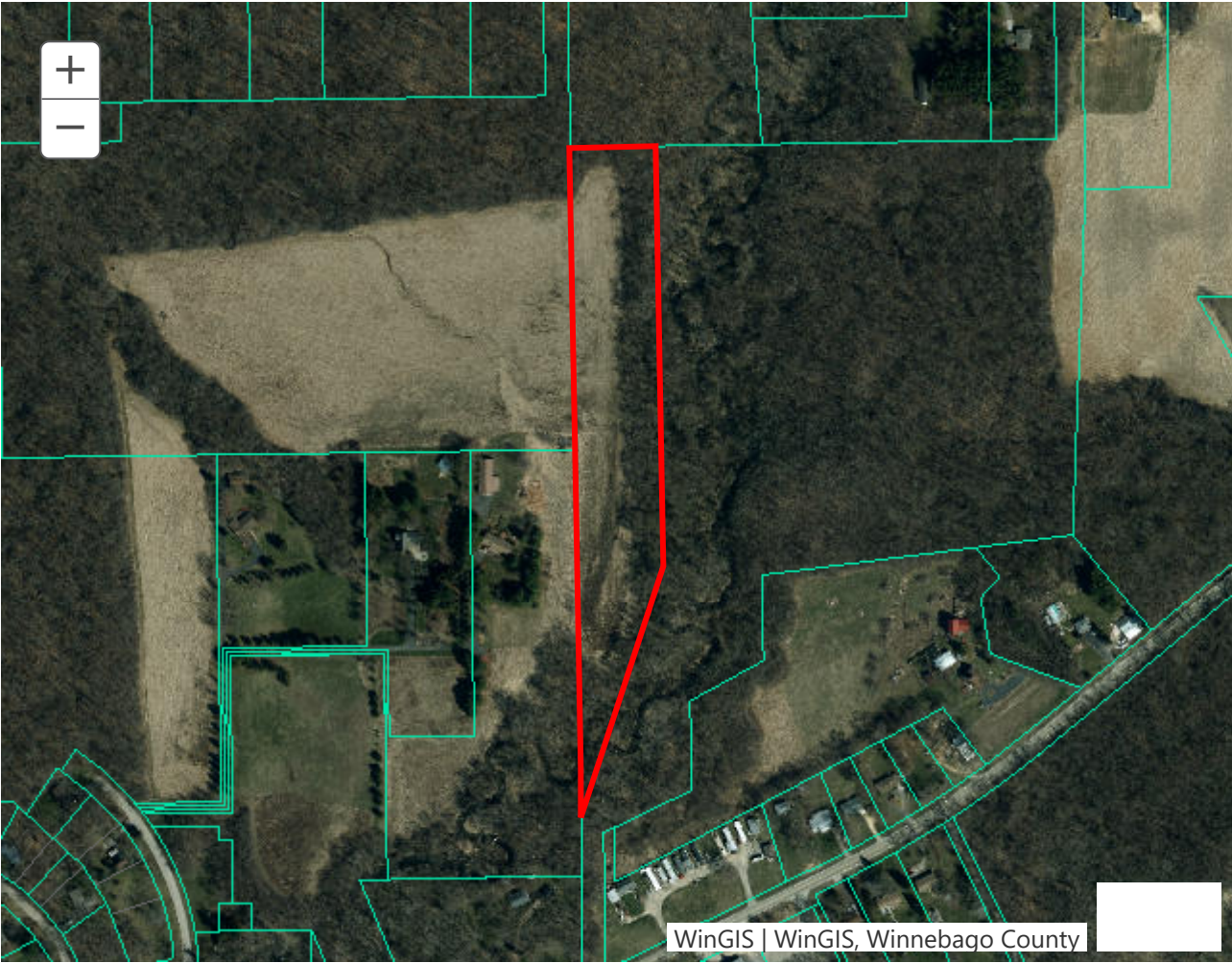
Township
ROCKFORD

Assessor
Ken Crowley

Year	Fair Market Value	Total Tax Bill	Code
2021	\$0.00	\$563.54	064

Sales History

Date	Type	Amount	Doc. No
12/15/2020	FARM	\$180,250.00	20201039384
1/24/2001	TRD	\$82,000.00	112387



58XX FITZGERALD RD

Pin	Alt.Pin	Property Size
1520102001	236B022	Sq. Feet: 342879 Acres: 7.87

Legal Description
BEG 825 FT S OF NW COR NW 1/4 TH E 231.86 FT S 1139.31 FT SW 717.69 FT TO SW COR NW1/4 TH N TO POB
PT NW1/4 SEC SEC: 20 TWP: 43 RANGE: 1 ACRES: 6.92

Property Use
Vacant Farmland - assd (0020)

Zoning District: AG - Agricultural Priority (AG)

Flood Zone Type	In/Out
X	OUT

Township
ROCKFORD

Assessor
Ken Crowley

Year	Fair Market Value	Total Tax Bill	Code
2021	\$0.00	\$106.28	064

Sales History			
Date	Type	Amount	Doc. No
12/15/2020	FARM	\$180,250.00	20201039384

Zoning Description(s)

ARTICLE 7
AGRICULTURAL AND OPEN SPACE DISTRICTS

Sec. 7.4 A-2 Agriculture-Related Business District

7.4.1 Purpose

The A-2 Agriculture-Related Business District is intended to promote business actively and directly used by those engaged in the pursuit of agricultural activities. The A-2 District is intended to implement the agri-business land use policies outlined in the Winnebago County 2030 Land Resource Management Plan. New applications for this district are most appropriate where solely Agriculture is encouraged on the 2030 Land Resource Management Plan, when not in platted subdivisions nor near residential clusters and when deemed that all uses allowed by the District are compatible with adjacent properties.

7.4.2 Uses

Uses are allowed in the A-2 District in accordance with Table 7.1.

7.4.3 Bulk and Yard Standards

All development in the A-2 District is subject to the bulk and yard standards of Table 7.2.

Sec. 7.5 OS Open Space District

7.5.1 Purpose

The OS Open Space District is intended to accommodate and protect current and future lands intended for public and private open space needs in the County. Only uses that are compatible with or otherwise support recreational, resource conservation or other open space needs are allowed within the district. The OS District is not intended to primarily accommodate new development but rather to respond directly to the County's open space needs.

7.5.2 Uses

Uses are allowed in the OS District in accordance with Table 7.1.

7.5.3 Bulk and Yard Standards

All development in the OS District is subject to the bulk and yard standards of Table 7.2.

Sec. 7.6 Permitted and Special Uses

7.6.1 Use Table

Table 7.1: Agricultural and Open Space Districts Permitted and Special Uses lists permitted and special uses for the agricultural and open space districts. A "P" indicates that a use is permitted within that district. A "S" indicates that a use is a special use in that district and must obtain a special use permit. No letter (i.e., a blank space), or the absence of the use from the table, indicates that use is not permitted within that district.

TABLE 7.1: AGRICULTURAL AND OPEN SPACE DISTRICTS PERMITTED AND SPECIAL USES					
USE	AG	A-1	A-2	OS	USE STANDARD
RESIDENTIAL					
Accessory Living Quarters	P	P	P		Section 15.3.1
Bed and Breakfast	S	S	P		Section 15.3.4
Caretaker's Dwelling or Caretaker's Dwelling Unit(s) - Accessory to an Agricultural Use (20 acre minimum per dwelling / unit)	P	P	P		
Day Care Home	P	P	P		Section 15.3.10
Dwelling, Single-Family – Must meet standards of Section 7.7.2 A., 7.7.2 B. or 7.7.2 C.	P	P	P		Section 7.7.2 A., 7.7.2 B. or 7.7.2 C.
Dwelling, Single-Family – Must meet standards of Section 7.7.2 D.	S	S			Section 7.7.2 D.
OPEN SPACE					
Campgrounds (when not gov't owned and operated; 6 acre minimum)	S	S	S	S	
Cemetery, Crematorium or Mausoleum (500 foot setback from residence(s))	S	S	P/S*	S	* Special use required for lots less than 6 acres
Country Club	S	S	P	S	
Driving Range	S	S	P/S*	S	* Special use required if operating after dusk under lights
Forest Preserve	P	P	P	P	
Golf Course	S	S	P	S	
Outdoor Recreation	S	S	P	S	

ARTICLE 7
AGRICULTURAL AND OPEN SPACE DISTRICTS

TABLE 7.1: AGRICULTURAL AND OPEN SPACE DISTRICTS PERMITTED AND SPECIAL USES					
USE	AG	A-1	A-2	OS	USE STANDARD
Park or Playground	P	P	P	P	
Sports Club (not inclusive of shooting)	S	S	P	S	
Tourist Facility	S	S	P		
Wildlife Rehabilitation Facility (for native animals)			P/S*	S	*Special use required for non-native animals
INSTITUTIONAL					
Community Residence - Small	S	S	P		
Education Facility, Agricultural - Accessory to Principal Agricultural Use (5 acre minimum except in A-2)	P/S*	P/S*	P	S	*Special use required for lots less than 5 acres
Education Facility, Primary and Secondary (5 acre minimum except in A-2)	P/S*	P/S*	P	S	*Special use required for lots less than 5 acres
Education Facility, Vocational	S	S	S	S	
Government Facility (3 acre minimum except in A-2)	P/S*	P/S*	P	P/S*	*Special use required for lots less than 3 acres
Penal and Correctional Institutions			S		
Place of Worship (5 acre minimum except in A-2)	P/S*	P/S*	P	S	*Special use required for lots less than 5 acres
Group Quarters (accessory to Place of Worship)	S	S	P	S	
Retreat Center			S		
Social Club or Lodge	S	S	P	S	Section 15.3.27
AGRICULTURAL					
Agriculture (excludes uses listed in this section)	P	P	P	P	
Agri-business (i.e. apple orchards, pumpkin patches, U-picks, etc.)	S	S	P		
AG Road Stands (for produce grown on-site; temporary)	P	P	P	P	Section 18.5.3
Concentrated Animal Feeding Operation (CAFO)	S	S	S		Section 15.3.7
Feedlot	P	P	P		
Forestry	P	P	P		
Grain Storage and/or Elevator	P	P	P		
Slaughterhouse			S		Section 15.3.26
Stable	P	P	P	P	
Stockyard	P	P	P		
Vineyard	P	P	P	P	
COMMERCIAL					
Agricultural Sales and/or Service Establishment	S	S	P		
Animal Hospital	S	S	P		Section 15.3.3
Bait Shop (as an accessory to the occupant of the residence)	S	S	P		
Broadcast Facilities (Radio, TV)	S	S	P		
Contractor Shop, not inclusive of Landscape or Tree Service Business (enclosed within a building, no outdoor storage and as an accessory to the occupant of the residence)	S	S	P		Section 15.3.8
Greenhouse/Nursery (commercial, retail sales directly to public; outside display/storage is limited to flowers, plants, shrubs and trees)	S	S	P		
Kennel (as an accessory to the occupant of the residence)	S	S	S		Section 15.3.3
Landscape or Tree Service Business (enclosed within a building, no outdoor storage and as an accessory to the occupant of the residence)			P		Section 15.3.8
Medical Cannabis Cultivation Center			S		Section 15.3.15
Medical or Dental Clinic/Office (enclosed within a building, no outdoor storage and as an accessory to the occupant of the residence)	S	S	P		
Outdoor Entertainment, not including horse events or rodeos	S	S	S		
Reuse of an Existing AG Building as an accessory to the occupant of the residence (Building must be 10 years or older; only for a use not hereby mentioned in this Table and must be a permitted use within CN District or IL			S		

ARTICLE 7
AGRICULTURAL AND OPEN SPACE DISTRICTS

TABLE 7.1: AGRICULTURAL AND OPEN SPACE DISTRICTS PERMITTED AND SPECIAL USES

USE	AG	A-1	A-2	OS	USE STANDARD
District)					
Riding Academy, Horse Events, or Rodeos	S/P*	S/P*	S/P*	S*	*Only a riding academy is permitted
Small Engine Service and Repair or Small Automotive Service and Repair (enclosed within a building, no outdoor storage and as an accessory to the occupant of the residence)			S		
Shooting Range or Club	S	S	S		
Wedding and/or Reception Facility	S	S	S		
Winery (accessory to a vineyard)	S	S	P/S*		*Special use required for lots less than 6 acres
Zoo or Animal Sanctuary			S	S	
INDUSTRIAL					
Airport or Restricted Landing Area	S	S	S	S	
Batch Plant or Crushing & Storage Facility (Asphalt or Concrete)	S	S	S		
Ethanol Plant			P*		*1,200 foot setback from residence(s) and residential zoning
Junk Yard			S		
Composting Facility	S	S	S		
Meteorological Tower	P	P	P		
Mining, Excavating, Oil and Gas Drilling, or Rock Strata Fracturing (Fracking)	S	S	S	S	Section 15.3.17
Contractor Storage Yard (accessory to Landscape or Tree Service Business)			S		Section 15.3.29
Power Plant, but not inclusive of a Solar Farm and a Wind Power Generating Facility	S	S	S		
Research and Development Facility – Agriculture Related			P		
Sawmill	S	S	P		Section 15.3.25
Solar Farm			P		Section 15.3.28
Wind Energy System (private; site service only; 1 per lot; 1 acre min.)	P/S*	P/S*	P/S*	S	*Special use required for lots less than 1 acre Section 18.3.17 & Table 18.1
Wind Power Generating Facility (commercial)	P	P	P		Article 17
Wrecking Yard			S		Section 15.3.14
OTHER					
Filling of or dumping in pits, quarries, lowlands and similar (clean fill only; filling with refuse and/or food waste prohibited)	S	S	S	S	
Parking Structure			S	S	
Parking for one (1) Semi-cab with one (1) Accessory Trailer, if applicable or for one (1) Heavy Commercial Vehicle other than a Semi-cab / Trailer (as an accessory to the occupant of the residence, on a parcel of land no less than 5 acres and not within a recorded subdivision plat)	S*	S*	S*		*Vehicle and trailer must be licensed and in street operable condition; shall not exceed 15 consecutive days without being driven off-site (unless adjacent road is temporary posted preventing said); shall not exceed weight limits of adjacent roads; shall be driven by the occupant of the residence on the subject property; shall be parked behind building setback line on an appropriate surface or within an enclosed structure; and an abandoned or inoperable vehicle is considered junk and in violation of this permit. This permit does not apply to AG related vehicles used for AG

ARTICLE 7
AGRICULTURAL AND OPEN SPACE DISTRICTS

TABLE 7.1: AGRICULTURAL AND OPEN SPACE DISTRICTS PERMITTED AND SPECIAL USES					
USE	AG	A-1	A-2	OS	USE STANDARD
					pursuits.
Utilities	P/S*	P/S*	P	S	*Special use required for lots greater than 3 acres in size and/or for any size lot within 1,200 feet of a residential subdivision. Section 15.3.30
Wireless Telecommunications	P	P	P	S	Section 15.3.32

Sec. 7.7 Bulk and Yard Standards

7.7.1 Bulk and Yard Standards Table


Table 7.2: Agricultural and Open Space Districts Bulk and Yard Standards contains the bulk and yard standards for the agricultural and open space districts.

TABLE 7.2 AGRICULTURAL AND OPEN SPACE DISTRICTS BULK AND YARD STANDARDS				
	AG	A-1	A-2	OS
BULK STANDARDS				
MINIMUM LOT AREA	Agriculture: None, but subject to State Plat Act as well as any applicable septic and well regulations Single-Family Dwelling: See Section 7.7.2 All Other Uses: 25,000sf, unless noted in Table 7.1	Agriculture: None, but subject to State Plat Act as well as any applicable septic and well regulations Single-Family Dwelling: See Section 7.7.2 All Other Uses: 25,000sf, unless noted in Table 7.1	Agriculture: None, but subject to State Plat Act as well as any applicable septic and well regulations Single-Family Dwelling: See Section 7.7.2 All Other Uses: 25,000sf, unless noted in Table 7.1	Agriculture or Natural Area: None, but subject to State Plat Act as well as any applicable septic and well regulations All Other Uses: 25,000sf, unless noted in Table 7.1
MINIMUM LOT WIDTH	Agriculture: None, but subject to State Plat Act as well as any other applicable codes and ordinances. Single-Family Dwelling: See Section 7.7.2 All Other Uses: 250 ft at building setback line and on public road.	Agriculture: None, but subject to State Plat Act as well as any other applicable codes and ordinances. Single-Family Dwelling: See Section 7.7.2 All Other Uses: 250 ft at building setback line and on public road.	Agriculture: None, but subject to State Plat Act as well as any other applicable codes and ordinances. Single-Family Dwelling: See Section 7.7.2 All Other Uses: 150 ft at building setback line and on public road.	Agriculture or Natural Area: None, but subject to State Plat Act as well as any other applicable codes and ordinances. All Other Uses: 250 ft at building setback line and on public road.
MAXIMUM BUILDING HEIGHT	Single-Family Dwelling: 35 ft All Other Uses: 50 ft, unless noted elsewhere	Single-Family Dwelling: 35 ft All Other Uses: 50 ft, unless noted elsewhere	Single-Family Dwelling: 35 ft All Other Uses: 50 ft, unless noted elsewhere	35 ft, unless noted elsewhere
MAXIMUM IMPERVIOUS SURFACE	Single-Family Dwelling: 40% All Other Uses: 60%	Single-Family Dwelling: 40% All Other Uses: 60%	Single-Family Dwelling: 40% All Other Uses: 65%	35%
MINIMUM YARD STANDARDS				
FRONT YARD	30 ft	30 ft	30 ft	30 ft
INTERIOR SIDE YARD	10 ft	10 ft	10 ft	10 ft
CORNER SIDE YARD	30 ft	30 ft	30 ft	30 ft
REAR YARD	25 ft	25 ft	25 ft	25 ft

Threat of Loss Demonstration

Attachment G: Perimeter Development Map

Legend

 Fitzgerald Road Preservation Project

Zoning

 Agricultural

Total project area perimeter = 8,550'
Perimeter adjacent to developed use = 5,689'
Perimeter percentage adjacent to developed use = 66.5%

0 375 750 1,500 Feet

Attestation of No Double Counting and No Net Harm



Fitzgerald Road Protection Project Attestation of No Double Counting of Credits & No Net Harm

I am the Executive Director of the Natural Land Institute and make this attestation regarding the no double counting of credits and no net harm from this tree preservation project, Fitzgerald Road Protection Project.

1. Project Description

The Project that is the subject of this attestation is described more fully in both our Application and our Project Design Document (PDD), both of which are incorporated into this attestation.

2. No Double Counting by Applying for Credits from another Registry

Natural Land Institute has not and will not seek credits for CO₂ for the project trees or for this project from any other organization or registry issuing credits for CO₂ storage.

3. No Double Counting by Seeking Credits for the Same Trees or Same CO₂ Storage

Natural Land Institute has not and will not apply for a project including the same trees as this project nor will it seek credits for CO₂ storage for the project trees or for this project in any other project or more than once.

4. No Net Harm

The trees preserved in this project will produce many benefits, as described in our Application and PDD. Like almost all urban trees, the project trees are preserved for the benefits they deliver to people, communities, and the environment in a metropolitan area.

The project trees will produce many benefits and will not cause net harm. Specifically, they will not:

- Displace native or indigenous populations
- Deprive any communities of food sources
- Degrade a landscape or cause environmental damage

Signed on November 4th in 2022, by Kerry Leigh, Executive Director, for Natural Land Institute.

Signature

815-964-6666
Phone

kleigh@naturalland.org; info@naturalland.org
Email

Attestation of Additionality



Fitzgerald Road Preservation Project Attestation of Additionality

I am the Executive Director of the Natural Land Institute and make this attestation regarding additionality from this tree preservation project, Fitzgerald Road Preservation Project.

- Project Description
 - The Project that is the subject of this attestation is described more fully in our Application and our Project Design Document (PDD), both of which are incorporated into this attestation.
- Prior to the start of the project, the trees in the project area were not protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees
- The zoning in the project area currently allows for a non-forest use
- The trees in the project area face a threat or risk of removal or conversion out of forest
- Natural Land Institute recorded in the public land records an easement, covenant, or deed restriction specifically protecting the trees for the project duration of 40 years
- Additionality is also embedded in the quantification methodology that our project followed. Projects cannot receive, and our project will not receive, credits for trees that would have remained had development occurred, nor can they receive soil carbon credits for soil that would have been undisturbed had development occurred. Our project also had to apply a discount to credited carbon for potential displaced development due to the project.
- Project Implementation Agreement for Project Duration
 - Natural Land Institute signed a Project Implementation Agreement with City Forest Credits for 40 years.

Signed on November 11th in 2022, by Kerry Leigh, Executive Director, for Natural Land Institute.

Signature

Kerry Leigh
Printed Name

815-964-6666
Phone

kleigh@naturalland.org; info@naturalland.org
Email

Carbon Quantification Tool

City Forest Credits - Preservation Protocol Carbon Quantification Calculator

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Project Operator Natural Land Institute
Project Name Fitzgerald Road
Project Location Winnebago County
Date 11/21/2022

Carbon Quantification Summary

21.1	Total Project Area Acres
44.48	Biomass tC/ac
163.09	Biomass tCO2e/ac
3,441	Accounting Stock, tCO2e
90%	Fraction at risk of tree removal
3,097	Avoided Biomass Emissions, tCO2e
60%	Avoided impervious surface, percent
13	Avoided impervious surface, acres
1,519	Avoided Soil Carbon Emissions, tCO2e
18.3%	Displacement
567	Displaced Biomass Emissions, tCO2e
460	Displaced Soil Emissions
2,530	Credits from Avoided Biomass Emissions, tCO2e
1,059	Credits from Avoided Soil Emissions, tCO2e
3,589	Total Credits attributed to the project, tCO2e
359	Registry Reversal Pool Account (10%), tCO2e
3,230	Total credits issued to the project, tCO2e
153	Total credits issued to the project, tCO2e/acre

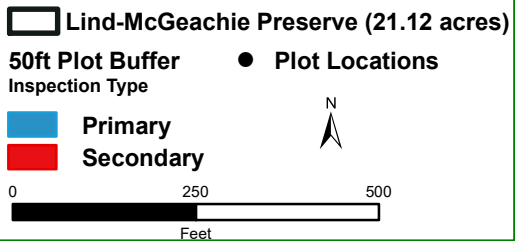
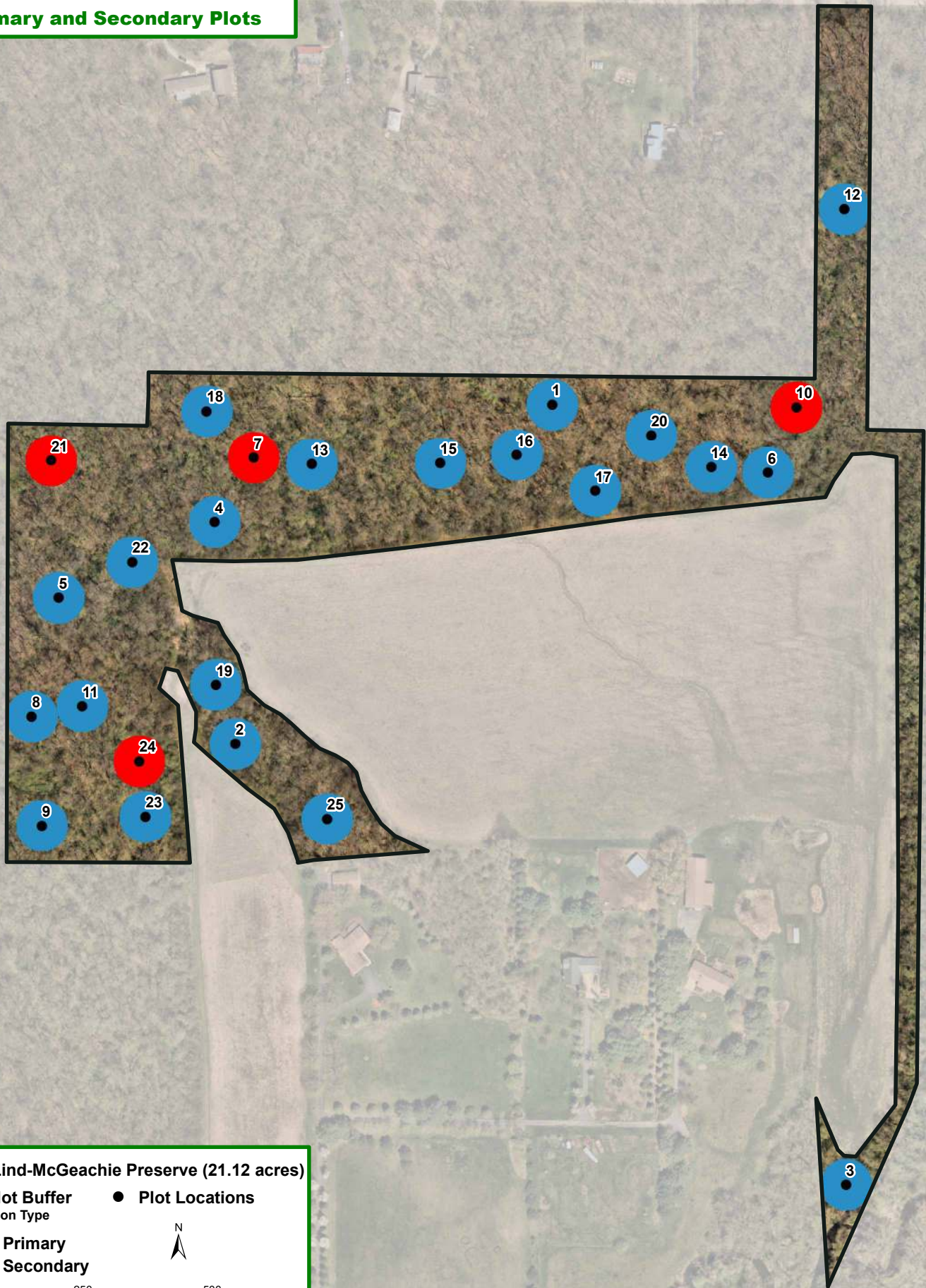
Protocol Section Supplemental information/notes

	include project area for all parcels enrolled in carbon project
11.1.8	A complete inventory was performed on all trees within the project area that had a diameter at breast height of 5 inches or more, corresponding to method 11.1.B , include i-Tree eco results
11.1.8	
11.1.8	
11.2	Based on zoning - see 11.2 in preservation protocol
11.2	
11.4	Based on zoning - see 11.4 in preservation protocol
11.4	
11.4	
11.5	Fraction of avoided development that cannot be served by development or re-development of existing non-treed properties within the urban area
	Assumes that redevelopment causes increase in impervious surface on redeveloped parcels

Year	Credits Issued This Year	Credits Issued
1	3,230	3,230
2	-	3,230
3	-	3,230
4	-	3,230
5	-	3,230

Tree Inventory

**Lind-McGeachie Preserve
National Land Institute
Primary and Secondary Plots**



Plot	ID	Survey Date	Species	Land Use	DBH 1 (in)	DBH 1: Height (ft)	DBH 1: Measured?	DBH 2 (in)	DBH 2: Height (ft)	DBH 2: Measured?	DBH 3 (in)	DBH 3: Height (ft)	DBH 3: Measured?	DBH 4 (in)	DBH 4: Height (ft)	DBH 4: Measured?	Crown: Condition
1	1	11/8/2022	Pin oak (Quercus palustris)	Forest	21.2	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
1	2	11/8/2022	American elm (Ulmus americana)	Forest	8.1	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
1	3	11/8/2022	Pin oak (Quercus palustris)	Forest	22.6	4.5	TRUE	18.7	4.5	TRUE			TRUE			TRUE	70% - 75%
1	4	11/8/2022	American elm (Ulmus americana)	Forest	7.3	4.5	TRUE			TRUE			TRUE			TRUE	20% - 25%
1	5	11/8/2022	Boxelder (Acer negundo)	Forest	5.9	4.5	TRUE			TRUE			TRUE			TRUE	25% - 30%
1	6	11/8/2022	Black cherry (Prunus serotina)	Forest	5.5	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
1	7	11/8/2022	Pin oak (Quercus palustris)	Forest	25	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
1	8	11/8/2022	Boxelder (Acer negundo)	Forest	5.2	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
1	9	11/8/2022	Pin oak (Quercus palustris)	Forest	17	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
1	10	11/8/2022	Shagbark hickory (Carya ovata)	Forest	8.2	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
1	11	11/8/2022	American elm (Ulmus americana)	Forest	6.2	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
1	12	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	5.7	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
1	13	11/8/2022	White oak (Quercus alba)	Forest	8.4	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
2	1	11/8/2022	Black cherry (Prunus serotina)	Forest	7.8	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
2	2	11/8/2022	American elm (Ulmus americana)	Forest	5.1	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
2	3	11/8/2022	Siberian elm (Ulmus pumila)	Forest	12.8	4.5	TRUE			TRUE			TRUE			TRUE	80% - 85%
2	4	11/8/2022	Siberian elm (Ulmus pumila)	Forest	29.1	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
2	5	11/8/2022	Siberian elm (Ulmus pumila)	Forest	11.2	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
2	6	11/8/2022	American elm (Ulmus americana)	Forest	8.1	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
2	7	11/8/2022	American elm (Ulmus americana)	Forest	5.4	4.5	TRUE			TRUE			TRUE			TRUE	80% - 85%
2	8	11/8/2022	Black cherry (Prunus serotina)	Forest	11.3	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
2	9	11/8/2022	Boxelder (Acer negundo)	Forest	6.5	4.5	TRUE			TRUE			TRUE			TRUE	1% - 5%
2	10	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	17.8	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
2	11	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	16.2	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
2	12	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	7.1	4.5	TRUE			TRUE			TRUE			TRUE	80% - 85%
2	13	11/9/2022	Black cherry (Prunus serotina)	Forest	15.1	4.5	TRUE			TRUE			TRUE			TRUE	
2	14	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	7.5	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
2	15	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	15.1	4.5	TRUE			TRUE			TRUE			TRUE	80% - 85%
2	16	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	8.9	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
3	1	11/8/2022	American elm (Ulmus americana)	Forest	9.9	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
3	2	11/8/2022	Silver maple (Acer saccharinum)	Forest	14.7	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
3	3	11/8/2022	American elm (Ulmus americana)	Forest	11.7	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
3	4	11/8/2022	Boxelder (Acer negundo)	Forest	12.6	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
3	5	11/8/2022	Silver maple (Acer saccharinum)	Forest	35.2	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
3	6	11/8/2022	American elm (Ulmus americana)	Forest	11.1	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
3	7	11/8/2022	Boxelder (Acer negundo)	Forest	6.1	4.5	TRUE			TRUE			TRUE			TRUE	30% - 35%
3	8	11/8/2022	Boxelder (Acer negundo)	Forest	10.1	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
3	9	11/8/2022	Eastern cottonwood (Populus deltoides)	Forest	39.3	4.5	TRUE			TRUE			TRUE			TRUE	
3	10	11/8/2022	Boxelder (Acer negundo)	Forest	10.3	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
3	11	11/8/2022	Boxelder (Acer negundo)	Forest	16	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
3	12	11/8/2022	Boxelder (Acer negundo)	Forest	8	4.5	TRUE			TRUE			TRUE			TRUE	40% - 45%
3	13	11/8/2022	Boxelder (Acer negundo)	Forest	10.2	4.5	TRUE			TRUE			TRUE			TRUE	35% - 40%
3	14	11/8/2022	American elm (Ulmus americana)	Forest	17.5	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
3	15	11/8/2022	American elm (Ulmus americana)	Forest	10.5	4.5	TRUE			TRUE			TRUE			TRUE	80% - 85%
4	1	11/9/2022	Shagbark hickory (Carya ovata)	Forest	7.7	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
4	2	11/9/2022	Eastern cottonwood (Populus deltoides)	Forest	14.9	4.5	TRUE			TRUE			TRUE			TRUE	
4	3	11/9/2022	Black cherry (Prunus serotina)	Forest	17.4	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
4	4	11/9/2022	Boxelder (Acer negundo)	Forest	10.7	4.5	TRUE	9.8	4.5	TRUE			TRUE			TRUE	35% - 40%
4	5	11/9/2022	Black cherry (Prunus serotina)	Forest	14.6	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
4	6	11/9/2022	Pin oak (Quercus palustris)	Forest	15.5	4.5	TRUE			TRUE			TRUE			TRUE	50% - 55%
4	7	11/9/2022	Boxelder (Acer negundo)	Forest	6.2	4.5	TRUE			TRUE			TRUE			TRUE	15% - 20%
4	8	11/9/2022	Black cherry (Prunus serotina)	Forest	15.2	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
4	9	11/9/2022	Black cherry (Prunus serotina)	Forest	13.5	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
4	10	11/9/2022	Shagbark hickory (Carya ovata)	Forest	13.1	4.5	TRUE	12.2	4.5	TRUE			TRUE			TRUE	90% - 95%
4	11	11/9/2022	Shagbark hickory (Carya ovata)	Forest	13.5	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
4	12	11/9/2022	Shagbark hickory (Carya ovata)	Forest	6.1	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
4	13	11/9/2022	Shagbark hickory (Carya ovata)	Forest	6.6	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
4	14	11/9/2022	Shagbark hickory (Carya ovata)	Forest	8.5	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
4	15	11/9/2022	Black cherry (Prunus serotina)	Forest	19.2	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
4	16	11/9/2022	Black cherry (Prunus serotina)	Forest	13.3	4.5	TRUE			TRUE			TRUE			TRUE	
4	17	11/9/2022	Black cherry (Prunus serotina)	Forest	13.7	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
4	18	11/9/2022	Black cherry (Prunus serotina)	Forest	9.4	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
4	19	11/9/2022	Shagbark hickory (Carya ovata)	Forest	9	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
4	20	11/9/2022	Black cherry (Prunus serotina)	Forest	12.7	4.5	TRUE			TRUE			TRUE			TRUE	15% - 20%
4	21	11/9/2022	Black cherry (Prunus serotina)	Forest	8.6	4.5	TRUE			TRUE			TRUE			TRUE	
4	22	11/9/2022	Shagbark hickory (Carya ovata)	Forest	9.1	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
4	23	11/9/2022	Black cherry (Prunus serotina)	Forest	17.1	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
5	1	11/9/2022	Shagbark hickory (Carya ovata)	Forest	12.8	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
5	2	11/9/2022	Shagbark hickory (Carya ovata)	Forest	6.1	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
5	3	11/9/2022	Shagbark hickory (Carya ovata)	Forest	10.5	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
5	4	11/9/2022	Shagbark hickory (Carya ovata)	Forest	8.6	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
5	5	11/9/2022	American elm (Ulmus americana)	Forest	7.3	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
5	6	11/9/2022	Boxelder (Acer negundo)	Forest	13.2	4.5	TRUE			TRUE			TRUE			TRUE	35% - 40%
5	7	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	5	4.5	TRUE			TRUE			TRUE			TRUE	40% - 45%
5	8	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	7.8	4.5	TRUE			TRUE			TRUE			TRUE	90% - 95%
5	9	11/9/2022	Black cherry (Prunus serotina)	Forest	8.2	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
5	10	11/9/2022	American elm (Ulmus americana)	Forest	11.2	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
6	1	11/8/2022	Black cherry (Prunus serotina)	Forest	10.9	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
6	2	11/8/2022	Black cherry (Prunus serotina)	Forest	7.2	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
6	3	11/8/2022	Black cherry (Prunus serotina)	Forest	6.7	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
6	4	11/8/2022	Black cherry (Prunus serotina)	Forest	6.4	4.5	TRUE			TRUE			TRUE			TRUE	55% - 60%
6	5	11/8/2022	Shagbark hickory (Carya ovata)	Forest	17.7	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
6	6	11/8/2022	American elm (Ulmus americana)	Forest	6	4.5	TRUE			TRUE			TRUE			TRUE	50% - 55%
6	7	11/8/2022	Shagbark hickory (Carya ovata)	Forest	6.2	4.5	TRUE			TRUE			TRUE			TRUE	95% - 99%
6	8	11/8/2022	American elm (Ulmus americana)	Forest	9.4	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
6	9	11/8/2022	Black cherry (Prunus serotina)	Forest	16.2	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
6	10	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	7.2	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
6	11	11/8/2022	Pin oak (Quercus palustris)	Forest	11.7	4.5	TRUE			TRUE			TRUE			TRUE	80% - 85%
6	12	11/8/2022	Black cherry (Prunus serotina)	Forest	7	4.5	TRUE			TRUE			TRUE			TRUE	70% - 75%
6	13	11/8/2022	Black cherry (Prunus serotina)	Forest	15.3	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
6	14	11/8/2022	Pin oak (Quercus palustris)	Forest	11.4	4.5	TRUE			TRUE			TRUE			TRUE	75% - 80%
6	15	11/8/2022	Black cherry (Prunus serotina)	Forest	10.9	4.5	TRUE			TRUE			TRUE			TRUE	65% - 70%
6	16	11/8/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE			TRUE			TRUE			TRUE	60% - 65%
6	17	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	11.1	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
6	18	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	6	4.5	TRUE			TRUE			TRUE			TRUE	85% - 90%
6	19	11/8/2022	Black cherry (Prunus serotina)														

12	8	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	6.2	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
12	9	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	10.6	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
12	10	11/8/2022	American elm (Ulmus americana)	Forest	9.8	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
12	11	11/8/2022	Black cherry (Prunus serotina)	Forest	8.6	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
12	12	11/8/2022	White oak (Quercus alba)	Forest	6.8	4.5	TRUE		TRUE	TRUE	TRUE	65%- 70%		
13	13	11/8/2022	Pin oak (Quercus palustris)	Forest	9.9	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
12	14	11/8/2022	Bur oak (Quercus macrocarpa)	Forest	8.7	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
12	15	11/8/2022	American elm (Ulmus americana)	Forest	5.6	4.5	TRUE		TRUE	TRUE	TRUE		0%	
12	16	11/8/2022	Shagbark hickory (Carya ovata)	Forest	6.6	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
12	17	11/8/2022	Black cherry (Prunus serotina)	Forest	11.1	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
12	18	11/8/2022	Pin oak (Quercus palustris)	Forest	18.5	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
12	19	11/8/2022	Black cherry (Prunus serotina)	Forest	7.7	4.5	TRUE		TRUE	TRUE	TRUE	60%- 65%		
13	1	11/8/2022	American elm (Ulmus americana)	Forest	7.4	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
13	2	11/8/2022	Black cherry (Prunus serotina)	Forest	22.8	4.5	TRUE		TRUE	TRUE	TRUE	45%- 50%		
13	3	11/8/2022	White oak (Quercus alba)	Forest	12.4	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
13	4	11/8/2022	American elm (Ulmus americana)	Forest	7.4	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
13	5	11/8/2022	Shagbark hickory (Carya ovata)	Forest	13.2	4.5	TRUE	13.7	4.5	TRUE	TRUE	95%- 99%		
13	6	11/8/2022	American elm (Ulmus americana)	Forest	6.5	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
13	7	11/8/2022	American elm (Ulmus americana)	Forest	7	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
13	8	11/8/2022	Boxelder (Acer negundo)	Forest	7.8	4.5	TRUE		TRUE	TRUE	TRUE	45%- 50%		
13	9	11/8/2022	American elm (Ulmus americana)	Forest	9.3	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
13	10	11/8/2022	Boxelder (Acer negundo)	Forest	12.6	4.5	TRUE		TRUE	TRUE	TRUE	50%- 55%		
13	11	11/8/2022	American elm (Ulmus americana)	Forest	6.4	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
13	12	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	9.6	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
13	13	11/8/2022	American elm (Ulmus americana)	Forest	7.5	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
13	14	11/8/2022	Boxelder (Acer negundo)	Forest	13.8	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
13	15	11/8/2022	Boxelder (Acer negundo)	Forest	8.8	4.5	TRUE	6.5	4.5	TRUE	8.1	4.5	70%- 75%	
14	1	11/8/2022	American elm (Ulmus americana)	Forest	8.8	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
14	2	11/8/2022	Boxelder (Acer negundo)	Forest	6.2	4.5	TRUE		TRUE	TRUE	TRUE	35%- 40%		
14	3	11/8/2022	Shagbark hickory (Carya ovata)	Forest	14.1	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
14	4	11/8/2022	American elm (Ulmus americana)	Forest	7	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
14	5	11/8/2022	Pin oak (Quercus palustris)	Forest	11.3	4.5	TRUE		TRUE	TRUE	TRUE	65%- 70%		
14	6	11/8/2022	American elm (Ulmus americana)	Forest	7.3	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
14	7	11/8/2022	Boxelder (Acer negundo)	Forest	6.8	4.5	TRUE		TRUE	TRUE	TRUE	55%- 60%		
14	8	11/8/2022	Pin oak (Quercus palustris)	Forest	21.5	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
14	9	11/8/2022	American elm (Ulmus americana)	Forest	9	4.5	TRUE		TRUE	TRUE	TRUE	50%- 55%		
14	10	11/8/2022	Shagbark hickory (Carya ovata)	Forest	7.4	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
14	11	11/8/2022	Pin oak (Quercus palustris)	Forest	18.8	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
14	12	11/8/2022	American elm (Ulmus americana)	Forest	7.7	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
14	13	11/8/2022	Black cherry (Prunus serotina)	Forest	14.1	4.5	TRUE		TRUE	TRUE	TRUE	60%- 65%		
14	14	11/8/2022	Black cherry (Prunus serotina)	Forest	14.9	4.5	TRUE		TRUE	TRUE	TRUE	55%- 60%		
14	15	11/8/2022	American elm (Ulmus americana)	Forest	6	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
15	1	11/8/2022	Shagbark hickory (Carya ovata)	Forest	10.6	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
15	2	11/8/2022	Shagbark hickory (Carya ovata)	Forest	14.7	4.5	TRUE	13.9	4.5	TRUE	TRUE	95%- 99%		
15	3	11/8/2022	American elm (Ulmus americana)	Forest	6.7	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
15	4	11/8/2022	Shagbark hickory (Carya ovata)	Forest	8.8	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
15	5	11/8/2022	Black cherry (Prunus serotina)	Forest	13.8	4.5	TRUE		TRUE	TRUE	TRUE	50%- 55%		
15	6	11/8/2022	Shagbark hickory (Carya ovata)	Forest	15.1	4.5	TRUE	6.8	4.5	TRUE	6.9	4.5	95%- 99%	0%
15	7	11/8/2022	Shagbark hickory (Carya ovata)	Forest	8	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
15	8	11/8/2022	Shagbark hickory (Carya ovata)	Forest	13	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
15	9	11/8/2022	White oak (Quercus alba)	Forest	11.7	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
15	10	11/8/2022	Boxelder (Acer negundo)	Forest	7	4.5	TRUE		TRUE	TRUE	TRUE		0%	
15	11	11/8/2022	American elm (Ulmus americana)	Forest	6.7	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
15	12	11/8/2022	American elm (Ulmus americana)	Forest	11.2	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
15	13	11/8/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE		TRUE	TRUE	TRUE	65%- 70%		
15	14	11/8/2022	Shagbark hickory (Carya ovata)	Forest	6	4.5	TRUE		TRUE	TRUE	TRUE	95%- 99%		
16	1	11/8/2022	American elm (Ulmus americana)	Forest	11.7	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
16	2	11/8/2022	American elm (Ulmus americana)	Forest	5.2	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
16	3	11/8/2022	White oak (Quercus alba)	Forest	7.2	4.5	TRUE		TRUE	TRUE	TRUE	60%- 65%		
16	4	11/8/2022	White oak (Quercus alba)	Forest	12.2	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
16	5	11/8/2022	American elm (Ulmus americana)	Forest	7.6	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
16	6	11/8/2022	Black cherry (Prunus serotina)	Forest	6.7	4.5	TRUE		TRUE	TRUE	TRUE		0%	
16	7	11/8/2022	White oak (Quercus alba)	Forest	14	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
16	8	11/8/2022	American elm (Ulmus americana)	Forest	7.7	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
16	9	11/8/2022	Pin oak (Quercus palustris)	Forest	15.5	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
16	10	11/8/2022	Pin oak (Quercus palustris)	Forest	25.5	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
16	11	11/8/2022	White oak (Quercus alba)	Forest	10.5	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
16	12	11/8/2022	White oak (Quercus alba)	Forest	13.2	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
16	13	11/8/2022	Shagbark hickory (Carya ovata)	Forest	7.5	4.5	TRUE		TRUE	TRUE	TRUE	95%- 99%		
16	14	11/8/2022	White oak (Quercus alba)	Forest	37.7	3	TRUE		TRUE	TRUE	TRUE	80%- 85%		
16	15	11/8/2022	American elm (Ulmus americana)	Forest	5.8	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
17	1	11/8/2022	Black cherry (Prunus serotina)	Forest	21.8	4.5	TRUE		TRUE	TRUE	TRUE	50%- 55%		
17	2	11/8/2022	Boxelder (Acer negundo)	Forest	7.4	4.5	TRUE		TRUE	TRUE	TRUE	50%- 55%		
17	3	11/8/2022	American elm (Ulmus americana)	Forest	9.1	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
17	4	11/8/2022	Boxelder (Acer negundo)	Forest	13.4	4.5	TRUE		TRUE	TRUE	TRUE	25%- 30%		
17	5	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	6.8	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
17	6	11/8/2022	Black cherry (Prunus serotina)	Forest	17.1	4.5	TRUE		TRUE	TRUE	TRUE	40%- 45%		
17	7	11/8/2022	Black cherry (Prunus serotina)	Forest	13.6	4.5	TRUE		TRUE	TRUE	TRUE	60%- 65%		
17	8	11/8/2022	Shagbark hickory (Carya ovata)	Forest	17.1	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
17	9	11/8/2022	Shagbark hickory (Carya ovata)	Forest	10.5	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
17	10	11/8/2022	Black cherry (Prunus serotina)	Forest	13.7	4.5	TRUE		TRUE	TRUE	TRUE	65%- 70%		
17	11	11/8/2022	Pin oak (Quercus palustris)	Forest	24.5	4.5	TRUE		TRUE	TRUE	TRUE		0%	
17	12	11/8/2022	American elm (Ulmus americana)	Forest	10.8	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
17	13	11/8/2022	Black cherry (Prunus serotina)	Forest	16.5	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
17	14	11/8/2022	Shagbark hickory (Carya ovata)	Forest	5.8	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
17	15	11/8/2022	Pin oak (Quercus palustris)	Forest	29.1	4.5	TRUE		TRUE	TRUE	TRUE	80%- 85%		
17	16	11/8/2022	Black cherry (Prunus serotina)	Forest	10.8	4.5	TRUE		TRUE	TRUE	TRUE	10%- 15%		
17	17	11/8/2022	Black cherry (Prunus serotina)	Forest	17.4	4.5	TRUE		TRUE	TRUE	TRUE	55%- 60%		
18	1	11/8/2022	American elm (Ulmus americana)	Forest	13.5	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
18	2	11/8/2022	White oak (Quercus alba)	Forest	35.7	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
18	3	11/8/2022	American elm (Ulmus americana)	Forest	5.4	4.5	TRUE		TRUE	TRUE	TRUE	95%- 99%		
18	4	11/8/2022	American elm (Ulmus americana)	Forest	8.8	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
18	5	11/8/2022	Shagbark hickory (Carya ovata)	Forest	11.8	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
18	6	11/8/2022	Boxelder (Acer negundo)	Forest	12.7	4.5	TRUE		TRUE	TRUE	TRUE	45%- 50%		
18	7	11/8/2022	American elm (Ulmus americana)	Forest	13.6	4.5	TRUE		TRUE	TRUE	TRUE	75%- 80%		
18	8	11/8/2022	Black cherry (Prunus serotina)	Forest	9.4	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
18	9	11/8/2022	Black cherry (Prunus serotina)	Forest	9.2	4.5	TRUE		TRUE	TRUE	TRUE	65%- 70%		
18	10	11/8/2022	Pin oak (Quercus palustris)	Forest	30.1	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
18	11	11/8/2022	Norway maple (Acer platanoides)	Forest	12.1	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
19	1	11/9/2022	Boxelder (Acer negundo)	Forest	11.1	4.5	TRUE		TRUE	TRUE	TRUE	55%- 60%		
19	2	11/9/2022	Boxelder (Acer negundo)	Forest	14.9	4.5	TRUE		TRUE	TRUE	TRUE	45%- 50%		
19	3	11/9/2022	Boxelder (Acer negundo)	Forest	17.8	4.5	TRUE	13.7	4.5	TRUE	TRUE	20%- 25%		
19	4	11/9/2022	Boxelder (Acer negundo)	Forest	9.7	4.5	TRUE		TRUE	TRUE	TRUE		0%	
19	5	11/9/2022	Black cherry (Prunus serotina)	Forest	7.6	4.5	TRUE		TRUE	TRUE	TRUE	55%- 60%		
19	6	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	11.2	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
19	7	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	11	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
19	8	11/9/2022	Black cherry (Prunus serotina)	Forest	20.3	4.5	TRUE		TRUE	TRUE	TRUE	70%- 75%		
19	9	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	7.4	4.5	TRUE		TRUE	TRUE	TRUE	85%- 90%		
20	1	11/8/2022	Pin oak (Quercus palustris)	Forest	18.9	4.5	TRUE	20.4	4.5	TRUE	18.4	4.5	75%- 80%	
20	2	11/8/2022	Shagbark hickory (Carya ovata)	Forest	8	4.5	TRUE		TRUE	TRUE	TRUE	90%- 95%		
20	3	11/8/2022	White oak (Quercus alba)	Forest	6.2	4.								

22	8	11/9/2022	Black cherry (Prunus serotina)	Forest	7	4.5	TRUE	TRUE	TRUE	TRUE	10% - 15%
22	9	11/9/2022	Pin oak (Quercus palustris)	Forest	20.5	4.5	TRUE	TRUE	TRUE	TRUE	65% - 70%
22	10	11/9/2022	Pin oak (Quercus palustris)	Forest	7.4	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
22	11	11/9/2022	Shagbark hickory (Carya ovata)	Forest	11.9	4.5	TRUE	TRUE	TRUE	TRUE	95% - 99%
22	12	11/9/2022	Shagbark hickory (Carya ovata)	Forest	8.1	4.5	TRUE	TRUE	TRUE	TRUE	95% - 99%
22	13	11/9/2022	Shagbark hickory (Carya ovata)	Forest	12.6	4.5	TRUE	TRUE	TRUE	TRUE	95% - 99%
22	14	11/9/2022	American elm (Ulmus americana)	Forest	5.3	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
22	15	11/9/2022	Shagbark hickory (Carya ovata)	Forest	9.1	4.5	TRUE	TRUE	TRUE	TRUE	95% - 99%
22	16	11/9/2022	Shagbark hickory (Carya ovata)	Forest	6.3	4.5	TRUE	TRUE	TRUE	TRUE	0%
23	1	11/9/2022	Northern red oak (Quercus rubra)	Forest	18.3	4.5	TRUE	TRUE	TRUE	TRUE	75% - 80%
23	2	11/9/2022	Black cherry (Prunus serotina)	Forest	24.4	4.5	TRUE	TRUE	TRUE	TRUE	55% - 60%
23	3	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	8	4.5	TRUE	TRUE	TRUE	TRUE	80% - 85%
23	4	11/9/2022	Boxelder (Acer negundo)	Forest	14.1	4.5	TRUE	TRUE	TRUE	TRUE	50% - 55%
23	5	11/9/2022	Boxelder (Acer negundo)	Forest	7.5	4.5	TRUE	TRUE	TRUE	TRUE	0%
23	6	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	7.5	4.5	TRUE	TRUE	TRUE	TRUE	85% - 90%
23	7	11/9/2022	Boxelder (Acer negundo)	Forest	10.1	4.5	TRUE	TRUE	TRUE	TRUE	25% - 30%
23	8	11/9/2022	Black cherry (Prunus serotina)	Forest	14.5	4.5	TRUE	TRUE	TRUE	TRUE	65% - 70%
23	9	11/9/2022	Boxelder (Acer negundo)	Forest	10.1	4.5	TRUE	TRUE	TRUE	TRUE	25% - 30%
23	10	11/9/2022	American elm (Ulmus americana)	Forest	9	4.5	TRUE	TRUE	TRUE	TRUE	70% - 75%
23	11	11/9/2022	Shagbark hickory (Carya ovata)	Forest	12.9	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
23	12	11/9/2022	Boxelder (Acer negundo)	Forest	5.6	4.5	TRUE	TRUE	TRUE	TRUE	0%
23	13	11/9/2022	American elm (Ulmus americana)	Forest	7.1	4.5	TRUE	TRUE	TRUE	TRUE	70% - 75%
23	14	11/9/2022	Black cherry (Prunus serotina)	Forest	25.2	4.5	TRUE	TRUE	TRUE	TRUE	75% - 80%
23	15	11/9/2022	Northern hackberry (Celtis occidentalis)	Forest	8.2	4.5	TRUE	TRUE	TRUE	TRUE	80% - 85%
23	16	11/9/2022	Boxelder (Acer negundo)	Forest	19.2	4.5	TRUE	11.8	4.5	TRUE	45% - 50%
23	17	11/9/2022	Black cherry (Prunus serotina)	Forest	19.1	4.5	TRUE	TRUE	TRUE	TRUE	65% - 70%
25	1	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	9.4	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
25	2	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	10.8	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
25	3	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	9.7	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
25	4	11/8/2022	Black cherry (Prunus serotina)	Forest	9.3	4.5	TRUE	TRUE	TRUE	TRUE	70% - 75%
25	5	11/8/2022	Boxelder (Acer negundo)	Forest	22.4	4.5	TRUE	TRUE	TRUE	TRUE	45% - 50%
25	6	11/8/2022	Pin oak (Quercus palustris)	Forest	12.8	4.5	TRUE	TRUE	TRUE	TRUE	80% - 85%
25	7	11/8/2022	Pin oak (Quercus palustris)	Forest	12.7	4.5	TRUE	TRUE	TRUE	TRUE	65% - 70%
25	8	11/8/2022	Pin oak (Quercus palustris)	Forest	18.7	4.5	TRUE	TRUE	TRUE	TRUE	85% - 90%
25	9	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	6	4.5	TRUE	TRUE	TRUE	TRUE	90% - 95%
25	10	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	5.5	4.5	TRUE	TRUE	TRUE	TRUE	75% - 80%
25	11	11/8/2022	Black cherry (Prunus serotina)	Forest	25.2	4.5	TRUE	TRUE	TRUE	TRUE	75% - 80%
25	12	11/8/2022	Black cherry (Prunus serotina)	Forest	12.5	4.5	TRUE	TRUE	TRUE	TRUE	45% - 50%
25	13	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	8.5	4.5	TRUE	TRUE	TRUE	TRUE	85% - 90%
25	14	11/8/2022	Northern hackberry (Celtis occidentalis)	Forest	12	4.5	TRUE	TRUE	TRUE	TRUE	85% - 90%

ID	Stratum	Date	Crew	Size (ac)	Stake	% Tree	% Measured	Complete?
1	Wooded	11/8/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
2	Wooded	11/9/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
3	Wooded	11/8/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
4	Wooded	11/9/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
5	Wooded	11/9/2022	NP	0.1	FALSE	75% - 80%	100	TRUE
6	Wooded	11/8/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
7	Wooded			0.1	FALSE	-- Not Entered	100	FALSE
8	Wooded	11/9/2022	NP	0.1	FALSE	80% - 85%	100	TRUE
9	Wooded	11/9/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
10	Wooded			0.1	FALSE	-- Not Entered	100	FALSE
11	Wooded	11/9/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
12	Wooded	11/8/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
13	Wooded	11/8/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
14	Wooded	11/8/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
15	Wooded	11/8/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
16	Wooded	11/8/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
17	Wooded	11/8/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
18	Wooded	11/8/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
19	Wooded	11/9/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
20	Wooded	11/8/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
21	Wooded			0.1	FALSE	-- Not Entered	100	FALSE
22	Wooded	11/9/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
23	Wooded	11/9/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
24	Wooded			0.1	FALSE	-- Not Entered	100	FALSE
25	Wooded	11/8/2022	NP	0.1	FALSE	95% - 99%	100	TRUE

Plot	Land Use	% of Plot
1	Forest	100
2	Forest	100
3	Forest	100
4	Forest	100
5	Forest	100
6	Forest	100
7		
8	Forest	100
9	Forest	100
10		
11	Forest	100
12	Forest	100
13	Forest	100
14	Forest	100
15	Forest	100
16	Forest	100
17	Forest	100
18	Forest	100
19	Forest	100
20	Forest	100
21		
22	Forest	100
23	Forest	100
24		
25	Forest	100

Carbon Biomass

Location: Rockford, Winnebago, Illinois, United States of America
Project: Fitzgerald Rd, Series: Fitzgerald Rd, Year: 2022 Generated:
11/9/2022



Species	Trees		Carbon Storage	
	Number	SE	(metric ton)	SE
Boxelder	362	±86	88.06	±25.97
Norway maple	10	±10	2.98	±2.83
Silver maple	20	±19	30.35	±28.80
Shagbark hickory	573	±124	115.99	±28.78
Northern hackberry	332	±90	11.72	±3.90
Eastern cottonwood	20	±13	50.11	±43.61
Black cherry	673	±152	297.08	±71.96
White oak	121	±58	107.04	±65.79
Bur oak	10	±10	1.07	±1.02
Pin oak	271	±56	242.54	±58.45
Northern red oak	10	±10	7.37	±6.99
American elm	553	±87	64.50	±11.99
Siberian elm	30	±29	24.69	±23.42
Total	2,984	±193	1,043.49	±105.02

Biomass tC/acre calculation: Davey Resource Group conducted a sample forest assessment adhering to the standards set in CFC Tree Preservation Protocol Section 11.1.B. The sample established 28 sample plots sized at 1/10th-acre. Within every plot, each live tree at least 5" in diameter at 4.5' above the ground where the height above the ground is measured on the uphill side of the tree was inventoried. Species, diameter, and overall tree condition were recorded for each tree. Davey Resource Group utilized i-Tree Eco to input the sample plot data to determine the carbon storage.

Carbon quantification is based on the sample plots. The metric tons of Carbon is 1,043.49. The standard error is 105.02

Biomass tC/ac = (metric tons of carbon – standard error)/project area acres

$$(1,043.49 - 105.02)/21.1 = 44.48 \text{ (cell B11 on attachment J)}$$

Tree Characteristics Chart(s)

I. Tree Characteristics of the Urban Forest

The urban forest of Fitzgerald Road has an estimated 2,985 trees with a tree cover of 91 percent. The three most common species are Black cherry (22.6 percent), Shagbark hickory (19.2 percent), and American elm (18.5 percent).

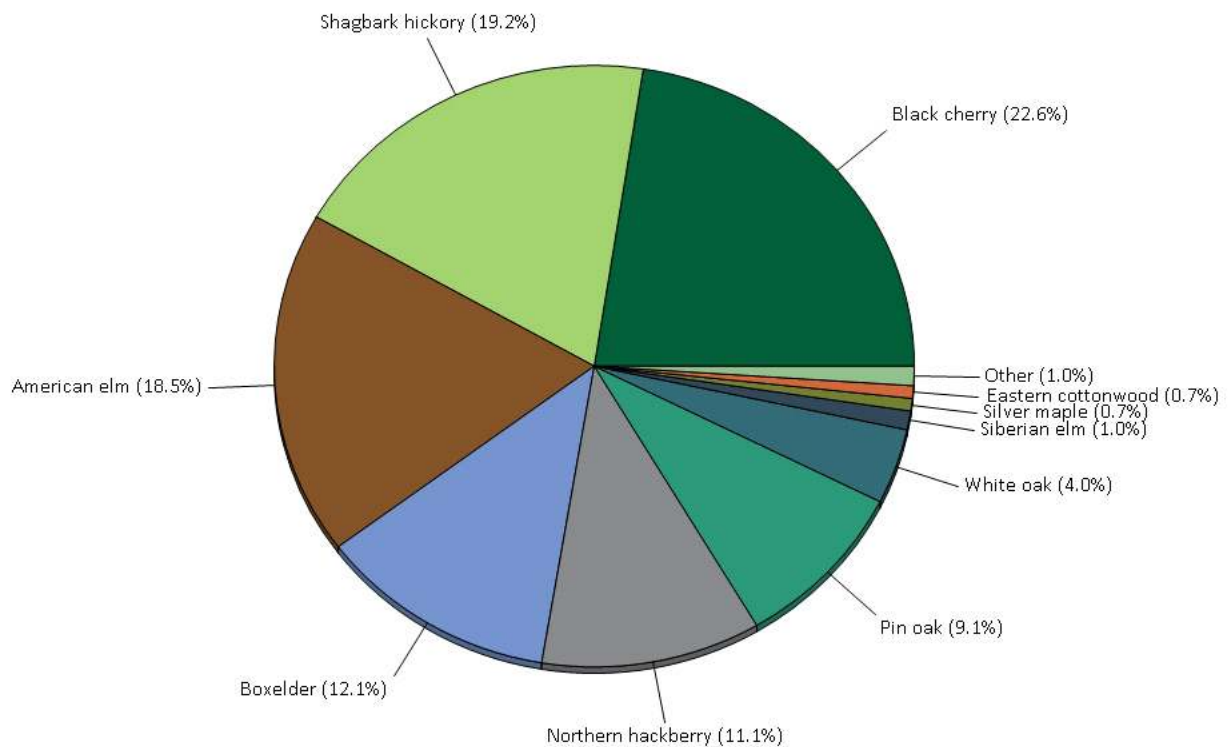


Figure 1. Tree species composition in LindMcGeachie

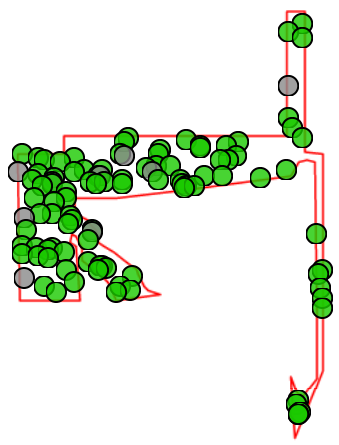
The overall tree density in Fitzgerald Road is 349 trees/hectare.

iTree Canopy Report

i-Tree Canopy

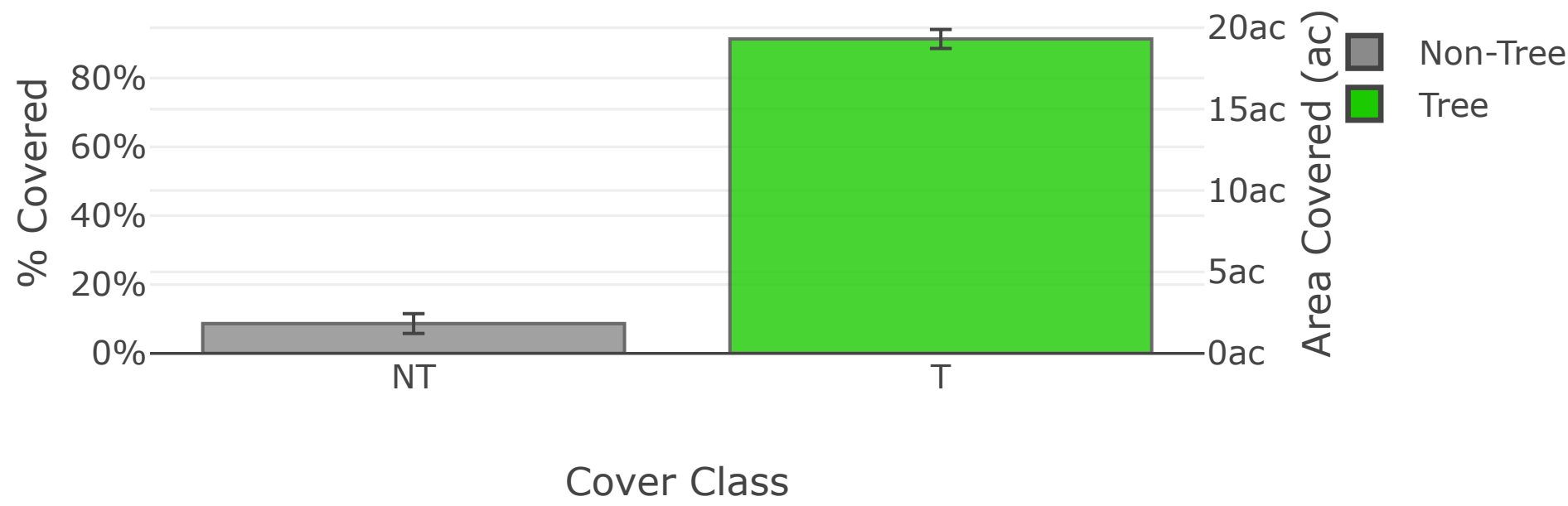
Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 11/9/2022



Google

Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
NT	Non-Tree	All other surfaces	9	8.65 ± 2.88	1.83 ± 0.61
T	Tree	Tree, non-shrub	95	91.35 ± 2.76	19.31 ± 0.58
Total			104	100.00	21.14

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO ₂ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	26.36	±0.80	96.66	±2.92	\$4,496	±136
Stored in trees (Note: this benefit is not an annual rate)	662.04	±19.98	2,427.46	±73.26	\$112,911	±3,408

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 1.365 T of Carbon, or 5.005 T of CO₂, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO₂, per ac and rounded. Value (USD) is based on \$170.55/T of Carbon, or \$46.51/T of CO₂ and rounded. (English units: T = tons (2,000 pounds), ac = acres)

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (USD)	±SE
CO	Carbon Monoxide removed annually	17.41	±0.53	\$1	±0
NO2	Nitrogen Dioxide removed annually	94.95	±2.87	\$1	±0
O3	Ozone removed annually	945.67	±28.54	\$66	±2
SO2	Sulfur Dioxide removed annually	59.84	±1.81	\$0	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	45.95	±1.39	\$137	±4
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	316.77	±9.56	\$48	±1
Total		1,480.59	±44.69	\$254	±8

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in lb/ac/yr @ \$/lb/yr and rounded:
CO 0.902 @ \$0.04 | NO2 4.917 @ \$0.01 | O3 48.968 @ \$0.07 | SO2 3.098 @ \$0.00 | PM2.5 2.379 @ \$2.99 | PM10* 16.403 @ \$0.15 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (gal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	9.99	±0.30	\$0	±0
E	Evaporation	824.50	±24.88	N/A	N/A
I	Interception	829.11	±25.02	N/A	N/A
T	Transpiration	1,115.67	±33.67	N/A	N/A
PE	Potential Evaporation	6,247.59	±188.56	N/A	N/A
PET	Potential Evapotranspiration	5,097.51	±153.85	N/A	N/A

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in gal/ac/yr @ \$/gal/yr and rounded:
AVRO 0.517 @ \$0.01 | E 42.694 @ N/A | I 42.933 @ N/A | T 57.771 @ N/A | PE 323.509 @ N/A | PET 263.956 @ N/A (English units: gal = gallons, ac = acres)

About i-Tree Canopy

The concept and prototype of this program were developed by David J. Nowak, Jeffery T. Walton, and Eric J. Greenfield (USDA Forest Service). The current version of this program was developed and adapted to i-Tree by David Ellingsworth, Mike Binkley, and Scott Maco (The Davey Tree Expert Company)

Limitations of i-Tree Canopy

The accuracy of the analysis depends upon the ability of the user to correctly classify each point into its correct class. As the number of points increase, the precision of the estimate will increase as the standard error of the estimate will decrease. If too few points are classified, the standard error will be too high to have any real certainty of the estimate.



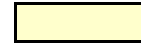
Additional support provided by:



Use of this tool indicates acceptance of the [EULA](#).

Cobenefit Calculator

Light yellow background denotes an input cell ->



Directions

- 1) Use i-Tree Canopy, or another tool, to estimate the amount of deciduous and coniferous tree cover area (acres) (Cell C20 and D20).
- 2) Use i-Tree Canopy, or another tool, to estimate the amount of non-tree cover area (acres) (Cell F20) in the project area.
- 3) In Cell G20 the total area of the project is calculated (acres). Prompt i-Tree Canopy to provide an estimate of the project area by clicking on the gear icon next to the upper right portion of the image and selecting "Report By Area."
- 4) Total Project Area, cell G17 should equal 100%.

Table 1. Tree Cover

	Deciduous Tree Cover	Coniferous Tree Cover	Total Tree Cover	Non-Tree	Total Project Area
Percent (%)	100%	0%	100%	0%	100%
Area (sq miles)	0.070	0.000	0.070	0.000	0.07
Area (m2)	182,107	0	182,107	0	182,107
Area (acres)	45	0.00	45.00	0.00	45.00

Using the information you provide on tree canopy cover, the tool provides estimates of co-benefits in Resource Units and \$ per year.

Table 2. Co-Benefits per year with current tree canopy cover.

Ecosystem Services	Resource Units Totals	Total \$
Rain Interception (m3/yr)	12,172.9	\$87,156.20
Air Quality (t/yr)		
O3	0.2323	\$351.91
NOx	0.0388	\$58.73
PM10	0.1189	\$153.11
Net VOCs	0.1196	\$203.36
Air Quality Total	0.5095	\$767.10
Energy (kWh/yr & kBtu/yr)		
Cooling - Elec.	95,825	\$7,273.08
Heating - Nat. Gas	1,791,752	\$17,442.30
Energy Total (\$/yr)		\$24,715.38
Grand Total (\$/yr)		\$112,638.68

Social Impacts

City Forest Carbon Project

Social Impacts



UN Sustainable Development Goals

The 17 United Nations Sustainable Development Goals (SDGs) are an urgent call for action and global partnership among all countries, representing key benchmarks for creating a better world and environment for everyone. Well-designed and managed urban forests make significant contributions to the environmental sustainability, economic viability and livability of cities. They help mitigate climate change and natural disasters, reduce energy costs, poverty and malnutrition, and provide ecosystem services and public benefits. See more details in the CFC Carbon Project Social Impact Reference Guide.

Instructions

This template sets out all relevant SDGs and lists various urban forest project activities that fall within each SDG. Evaluate the SDGs to determine how your carbon project provides social impacts that may contribute towards achievement of the global goals. Check the box(es) that contain one of your project activities and describe in no fewer than two sentences how your project activities align with the corresponding SDG. On page 12, select the icon for three to five of the most relevant SDGs to your project and provide any additional information.

SDG 3 - Good Health and Well Being

Goal: Ensure healthy lives and promote well-being for all at all ages.

Examples of project activities include, but are not limited to:

- ☒ Plant or protect trees to reduce or remove air pollutants
- ☐ If planting trees, select trees for reduced pollen counts and irritant production
- ☐ Plant or protect trees to create shade, provide UV exposure protection, reduce extreme heat negative effects, and/or reduce temperatures to relieve urban heat effects
- ☒ Design project to buffer sounds, optimize biodiversity, or create nature experiences
- ☐ Locate project near vulnerable populations, such as children or elderly
- ☐ Locate project near high volume roads to screen pollutants
- ☒ Locate project near people to encourage recreation, provide new parks or green space, or otherwise promote an active lifestyle
- ☐ Locate project near schools, elderly facilities, or mental health services to promote nature-based wellness, attention restoration, or other mental well-being
- ☐ Locate project in area with conditions of project-defined high inequity to trees, such as at schools, affordable or subsidized housing, formerly redlined neighborhoods, areas with high property vacancy rates, or area with high proportion of renters
- ☒ Reduce stormwater runoff or improve infiltration rates
- ☐ Design project to reduce human exposure to specific pollutants or toxins
- ☐ Other

This project is a tree protection project that will reduce/remove air pollutants through preserving those Regulating ecosystem services that protecting tree provides. The trees in the project will provide enhanced biodiversity for habitat and food for wildlife, including supporting pollinators as it lies within a larger complex of protected areas in the region. It will also create nature experiences as it is open to the public for passive recreation such as hiking, birdwatching, etc. The project is located near residential areas and was purchased to be located near to people to encourage recreation and promote an active, healthy lifestyle. The region suffers from flooding in certain areas, and this project will continue to provide the ecosystem services of infiltration of stormwater and reduce stormwater runoff.

SDG 6 - Clean Water and Sanitation

Goal: Ensure availability and sustainable management of water and sanitation for all

Examples of project activities include, but are not limited to:

- ☐ Research and assess environmental injustices related to water in project area
- ☐ Locate project near high-traffic roads or to otherwise improve, mitigate, or remediate toxic landscapes near water
- ☒ Protect or plant trees to improve historically or culturally important sites related to water that have been degraded and/or neglected
- ☒ Reduce stormwater by planting or protecting trees
- ☐ Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains
- ☒ Prevent soil erosion by protecting steep slopes
- ☒ Improve infiltration rates
- ☐ Improve, mitigate, or remediate toxic landscapes and human exposure to risk
- ☐ Drought resistance, such as selecting appropriate water-efficient trees for project climate zone
- ☐ Other

This project is located within the floodplain of Silver Creek, which is culturally important to the community, but has suffered degradation under modern agricultural uses. The Silver Creek watershed has protected areas and a stream survey has been completed higher up the stream channel with some high quality species identified in the stream. The upland forest will continue to improve infiltration rates and prevent soil erosion. Protection of the forested floodplain will enhance water quality and protect the stream from channel down-cutting and degradation, resulting in cleaner water downstream.

Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. According to the Chicago Metropolitan Agency for Planning's '*Water 2050 Regional Water Supply/Demand Plan*', our regional aquifer withdrawals in both the shallow and deep bedrock aquifers exceed the re-charge rate. Protecting and improving infiltration rates is a significant ecosystem service for this region. The forest also cleans stormwater runoff as it infiltrates into the water supply aquifers.

SDG 8 - Decent Work and Economic Growth

Goal: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Examples of project activities include, but are not limited to:

- ☐ Community participation in project implementation, including such things as providing access to financial resources for ongoing community-based care
- ☐ Emphasize local hiring and support small businesses
- ☒ Promote local economic opportunities through workforce training, career pathway development, or other employment
- ☐ Other

NLI has a partnership with Rockford Promise, which provides paid summer internship opportunities for career pathway development for college students from underserved communities to experience a career in the environmental sciences. We also have paid interns through the AmeriCorps program each year. Their work will include habitat management activities at this project site. The income from the carbon credit sale will also be used to sustain our full time Stewardship staff.

SDG 10 - Reduced Inequalities

Goal: Reduce inequalities within and among countries

Examples of project activities include, but are not limited to:

- ☒ Provide connections and cohesion for social health, such as create or reinforce places that promote informal interactions, engage local residents and users in tree management, include symbolic or cultural elements, or other events
- ☐ Research, understand, and design to address understand historic and current sociocultural inequities, community health conditions, environmental injustices, or prior local greening efforts in community
- ☐ Locate project near vulnerable populations, such as children or elderly, to provide air quality improvements or buffer against extreme heat effects
- ☐ Locate project in high-density residential areas or where there is a lack of trees to improve access and promote an active lifestyle
- ☐ Locate project near schools, elderly facilities, or mental health services to promote nature-based wellness, attention restoration, or other mental well-being
- ☐ Locate project in area with conditions of project-defined high inequity to trees, such as at schools, affordable or subsidized housing, formerly redlined neighborhoods, areas with high property vacancy rates, or area with high proportion of renters
- ☐ Locate project near high-traffic roads or to otherwise improve, mitigate, or remediate toxic landscapes
- ☐ Protect or plant trees to improve historically or culturally important sites that have been degraded and/or neglected
- ☒ Community engagement in project design, including such things as engaging and respecting existing relationships and social networks, community cultural traditions, and public participation methods that are empowering and inclusive
- ☐ Community participation in project implementation, including such things as addressing and removing barriers to participation, promote ongoing community-based care and access to financial resources
- ☐ Emphasize local hiring and support small businesses
- ☐ Research and consider potential for gentrification and displacements
- ☒ Promote local economic opportunities through workforce training, career pathway development, or other employment
- ☐ Other

Our organization has a robust community volunteer program where the local community is engaged in forest health management activities and learning opportunities including tree identification workshops, forest management techniques and trainings and surface water health of streams and aquifers. This site will also have guided walks to encourage the public to participate in these volunteer and learning activities, and also to provide an easily accessible area for the enjoyment of nature. Interpretative signage is planned for installation. NLI has a partnership with Rockford Promise, which provides paid summer internship opportunities for career pathway development for college students from underserved communities to experience a career in the environmental sciences through hands on training. We also have paid interns through the AmeriCorps program each year. Their work will include habitat management activities at this project site.

SDG 11 - Sustainable Cities and Communities

Overall: Make cities inclusive, safe, resilient, and sustainable.

Examples of project activities include, but are not limited to:

- ☒ Plant or protect trees to reduce or remove air pollutants
- ☐ If planting trees, select trees for reduced pollen counts and irritant production
- ☐ Locate project near high volume roads to screen pollutants
- ☐ Locate project near vulnerable populations, such as children or elderly
- ☐ Plant or protect trees to create shade, provide UV exposure protection, reduce extreme heat negative effects, and/or reduce temperatures to relieve urban heat effects
- ☒ Locate project near people to encourage recreation, provide new parks or green space, or otherwise promote an active lifestyle
- ☒ Design project to improve wellness and mental health, such as planting trees to buffer sounds, optimize biodiversity, optimize views from buildings, or create nature experiences
- ☐ Locate project near schools, elderly facilities, or mental health services to promote nature-based wellness, attention restoration, or other mental well-being
- ☒ Provide connections and cohesion for social health, such as create or reinforce places that promote informal interactions, engage local residents and users in tree management, include symbolic or cultural elements, or other events
- ☐ Research, understand, and design to address understand historic and current sociocultural inequities, community health conditions, environmental injustices, or prior local greening efforts in community
- ☐ Locate project in area with conditions of project-defined high inequity to trees, such as at schools, affordable or subsidized housing, formerly redlined neighborhoods, areas with high property vacancy rates, or area with high proportion of renters
- ☐ Community engagement in project design, including such things as engaging and respecting existing relationships and social networks, community cultural traditions, and public participation methods that are empowering and inclusive
- ☐ Community participation in project implementation, including such things as addressing and removing barriers to participation, promote ongoing community-based care and access to financial resources
- ☐ Other

This project is a tree protection project that will reduce/remove air pollutants through preserving those Regulating ecosystem services that protecting tree provides. The project is located within the Region 1 Planning Council for the Rockford region to encourage recreational activities such as hiking, birdwatching, showshoeing to promote an active lifestyle for residents in the area. This project provides an opportunity for residents to improve their wellness and mental health through the creation of nature experiences either guided by our staff and volunteers, or self-guided. Interpretative signage is planned for installation. This protection project will also optimize biodiversity as it is located within a larger complex of protected lands.

Our organization has a robust community volunteer program where the local community is engaged in forest health management activities and learning opportunities including tree identification workshops, forest management techniques and trainings, and surface water health of streams and aquifers. This

site will also have guided walks to encourage the public to participate in these volunteer and learning activities, and also to provide an easily accessible area for the enjoyment of nature. NLI has a partnership with Rockford Promise, which provides paid summer internship opportunities for career pathway development for college students from underserved communities to experience a career in the environmental sciences through hands on training. We also have paid interns through the AmeriCorps program each year. Their work will include habitat management activities at this project site.

SDG 12 - Responsible Production and Consumption

Goal: Ensure sustainable consumption and production patterns

Examples of project activities include, but are not limited to:

- ☐ Plant or protect trees to create shade or reduce temperatures to relieve urban heat effects
- ☐ Provide cooling benefits and energy savings by shading impervious surfaces such as streets or parking lots, or planting trees on south and west sides of buildings
- ☐ Other

[Enter text describing activities you checked above]

SDG 13 - Climate Action

Goal: Take urgent action to combat climate change and its impacts.

Examples of project activities include, but are not limited to:

- ☒ Plant or protect trees to reduce or remove air pollutants
- ☐ Plant or protect trees to create shade or reduce temperatures to relieve urban heat effects
- ☒ Promote community capacity for social and climate resilience by engaging local residents or users in tree management, or other events to connect people to the project
- ☒ Reflect cultural traditions and inclusive engagement for climate resilience
- ☒ Design project to improve soil health
- ☐ Provide cooling benefits and energy savings by shading impervious surfaces such as streets or parking lots, or planting trees on south and west sides of buildings
- ☒ Plant or protect trees to reduce stormwater runoff
- ☐ Select water-efficient trees for climate zone and drought resistance
- ☒ Create and/or enhance wildlife habitat
- ☐ Other

This project is a tree protection project that will reduce/remove air pollutants through preserving those Regulating ecosystem services that protecting tree provides. The project is located within the Region 1 Planning Council for the Rockford region to encourage recreational activities such as hiking, birdwatching, showshoeing to promote an active lifestyle for residents in the area. This project provides an opportunity for residents to improve their wellness and mental health through the creation of nature experiences either guided by our staff and volunteers, or self-guided. Interpretative signage is planned for installation. This protection project will also optimize biodiversity as it is located within a larger complex of protected lands.

Our organization has a robust community volunteer program where the local community is engaged in forest health management activities and learning opportunities including tree identification workshops, forest management techniques and trainings, and surface water health of streams and aquifers. This site will also have guided walks to encourage the public to participate in these volunteer and learning activities, and also to provide an easily accessible area for the enjoyment of nature, their well-being and providing a significant aesthetic value.

NLI has a partnership with Rockford Promise, which provides paid summer internship opportunities for career pathway development for college students from underserved communities to experience a career in the environmental sciences through hands on training. We also have paid interns through the AmeriCorps program each year. Their work will include habitat management activities at this project site.

This project is located within the floodplain of Silver Creek, which is culturally important to the community, but has suffered degradation under modern agricultural uses. The Silver Creek watershed has protected areas and a stream survey has been completed higher up the stream channel with some high quality species identified in the stream. The upland forest will continue to improve infiltration rates and prevent soil erosion. Protection of the forested floodplain will enhance water quality and protect the stream from channel down-cutting and degradation, resulting in cleaner water downstream.

Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. According to the Chicago Metropolitan Agency for Planning's '*Water 2050 Regional Water Supply/Demand Plan*', our regional aquifer withdrawals in both the shallow and deep bedrock aquifers exceed the re-charge rate. Protecting and improving infiltration rates is a significant ecosystem service for this region.

This project supports enhanced wildlife habitat including supporting pollinators and bird populations as well as enhanced soil health through soil formation, nutrient and water cycling and photosynthesis. This protection project provides climate regulating services as it is a sink for greenhouse gasses including CO₂ and evapotranspiration. This project will prevent deforestation within an agricultural zoning area.

SDG 14 - Life Below Water

Goal: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Examples of project activities located in areas with marine ecosystems include, but are not limited to:

- ☐ Locate project near high-traffic roads or to otherwise improve, mitigate, or remediate toxic landscapes near water
- ☒ Plant or protect trees in project areas to reduce stormwater runoff
- ☐ Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains
- ☐ Prevent soil erosion into by protecting steep slopes
- ☒ Improve infiltration rates
- ☐ Improve, mitigate, or remediate toxic landscapes and human exposure to risk
- ☐ Drought resistance, such as selecting appropriate water-efficient trees for project climate zone
- ☒ Enhance wildlife habitat, such as riparian habitat for fish, birds, and other animals
- ☐ Other

[Enter text describing activities you checked above]

SDG 15 - Life on Land

Goal: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Examples of project activities include, but are not limited to the following with increased functionality of green infrastructure:

- ☒ Plant or protect trees to reduce stormwater runoff
- ☐ Select water-efficient trees for climate zone and drought resistance
- ☒ Create and/or enhance wildlife habitat to improve local biodiversity
- ☐ Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains
- ☒ Prevent soil erosion by protect steep slopes
- ☒ Improve infiltration rates
- ☐ Other

This project will protect trees, reducing stormwater runoff and improving aquifer infiltration. Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. According to the Chicago Metropolitan Agency for Planning's *'Water 2050 Regional Water Supply/Demand Plan'*, our regional aquifer withdrawals in both the shallow and deep bedrock aquifers exceed the re-charge rate. Protecting and improving infiltration rates is a significant ecosystem service for this region.

This project supports enhanced wildlife habitat including supporting pollinators and bird populations as well as enhanced soil health through soil formation, nutrient and water cycling and photosynthesis. The trees in the project will provide enhanced biodiversity for habitat and food for wildlife, including supporting pollinators as it lies within a larger complex of protected areas in the region.

The project is moderately sloped from the upland forest to the floodplain forest along the creek, and protecting the soils from erosion is a function of a healthy forest floor that manages and removes invasive species to allow for a robust cover of ephemeral and other native groundcover holding the soils in place. Removal of invasive species that shade out a healthy native groundcover will also improve the soil infiltration rates for recharging our groundwater aquifers and reducing stormwater runoff.

SDG 17 - Partnerships for the Goals

Overall: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Examples of project activities include, but are not limited to:

- ☒ Promote community connections and capacity for social resilience by engaging local residents or users in tree management, or other events to connect people to the project
- ☐ Community engagement in project design, including such things as engaging and respecting existing relationships and social networks, community cultural traditions, and public participation methods that are empowering and inclusive
- ☐ Community participation in project implementation, including such things as addressing and removing barriers to participation, promote ongoing community-based care and access to financial resources
- ☐ Other

Our organization has a robust community volunteer program where the local community is engaged in forest health management activities and learning opportunities including tree identification workshops, forest management techniques and trainings, and surface water health of streams and aquifers. This site will also have guided walks to encourage the public to participate in these volunteer and learning activities, and also to provide an easily accessible area for the enjoyment of nature, their well-being and providing a significant aesthetic value.

Summary of Project Social Impacts



This project will protect trees, reducing stormwater runoff and improving aquifer infiltration. Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply. According to the Chicago Metropolitan Agency for Planning's '*Water 2050 Regional Water Supply/Demand Plan*', our regional aquifer withdrawals in both the shallow and deep bedrock aquifers exceed the re-charge rate. Protecting and improving infiltration rates is a significant ecosystem service for this region.

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This project is located within the floodplain of Silver Creek, which is culturally important to the community, but has suffered degradation under modern agricultural uses. The upland forest will continue to improve infiltration rates and prevent soil erosion, enhance water quality and protect the stream from channel down-cutting and degradation, resulting in cleaner water downstream. Improving infiltration rates is important to our community as our region taps into groundwater aquifers for our water supply.

This project supports enhanced wildlife habitat including supporting pollinators and bird populations as well as enhanced soil health through soil formation, nutrient and water cycling and photosynthesis. This protection project provides climate regulating services as it is a sink for greenhouse gasses including CO₂ and evapotranspiration. This project will prevent deforestation within an agricultural zoning area.



This project is located within the floodplain of Silver Creek, which is culturally important to the community, but has suffered degradation under modern agricultural uses. The Silver Creek watershed has protected areas and a stream survey has been completed higher up the stream channel with some high quality species identified in the stream. The upland forest will continue to improve infiltration rates and prevent soil erosion. Protection of the forested floodplain will enhance water quality and protect the stream from channel down-cutting and bank degradation, resulting in cleaner water downstream.

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3 GOOD HEALTH
AND WELL-BEING

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



8 DECENT WORK AND
ECONOMIC GROWTH

14 LIFE
BELOW WATER



10 REDUCED
INEQUALITIES



11 SUSTAINABLE CITIES
AND COMMUNITIES

17 PARTNERSHIPS
FOR THE GOALS

