

# Thompson Road Oak Woods Project Design Document

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# 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/referencemaps/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 cobenefits 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:

- 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
- 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"
- 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
- 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
- Quantify Co-Benefits (Section 11.6) The Project Operator will calculate co-benefits separately from CO<sub>2</sub>(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 aces 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:

- o 50 acres or less: all credits are issued after validation and verification
- o Greater than 50 but less than 200 acres: credits are issued in the equivalent of 50 acres per year
- o 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: Thompson Road Oak Woods
Project Number: 032
Project Type: Preservation Project (under the Tree Preservation Protocol – version 11.40, dated February 7, 2022)
Project Start Date: November 7, 2022
Project Location: Village of Bull Valley, McHenry County, Illinois

Project Operator Name: The Land Conservancy of McHenry County Project Operator Contact Information: Lisa Haderlein, Ihaderlein@conservemc.org 4622 Dean Street, PO Box 352 Woodstock, IL 60098 815-337-9502 x103

#### **Project Description:**

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

The Land Conservancy of McHenry County preserved 35-acres known as Thompson Road Oak Woods (the "Project") in Bull Valley in McHenry County, IL. Thompson Road Oak Woods is part of a larger conservation effort to preserve a 275-acre property with five miles of existing trails. This ambitious conservation effort was undertaken by The Land Conservancy of McHenry County in partnership with the Village of Bull Valley to preserve an important headwaters area of the Boone Creek watershed and to prevent future development of these important lands. The Project is surrounded by one-to-ten-acre residential home sites and subdivisions. The woods include 100+ year old bur oak (Quercus macrocarpa), white oak (Quercus alba), and shagbark hickory (Carya ovata). Over the coming years, the entire conservation area will be restored from farmland to native prairie, wetland and healthy oak woods, and the trails will be opened for public use.

Preserving this area will help enhance water quality for Boone Creek, one of Illinois' true ecological treasures. Boone Creek is considered a high-quality cold-water creek, so protecting the site means safeguarding the water quality found in the creek today. Restoring a functioning wetland system to the conservation area will allow the natural areas to better filter and manage the water that eventually flows into the creek. The property is surrounded by residential development, and within 15 minutes of the City of Woodstock, so is in an ideal location to serve the health of the community. Additionally, the City of Woodstock's population is nearly 23% Hispanic, 85%-90% of whom are of Mexican heritage. To promote inclusion, all signs and interpretive materials for the site will be in English and Spanish, and events will be planned/promoted targeting the Hispanic community.

# 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.

The project is located in the incorporated Village of Bull Valley in McHenry County, Illinois. McHenry County is within the Chicago Metropolitan Agency for Planning's service area. This project meets the following eligibility requirement:

B. The boundary of any incorporated city or town created under the law of its state;

### **Project Area Parcels**

*List of parcel(s) in the Project Area.* 

Jurisdiction / Location	Parcel Number	Description / Notes
Village of Bull Valley, McHenry County	08-35-200-012	Project area included in part of parcel – 12.1 acres
Village of Bull Valley, McHenry County	08-35-400-001	Project area included in part of parcel – 23 acres
		Total 35.1 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: 1 Thompson Road Oaks Project Area.kmz

Regional-scale map of Project Area Filename: 2 Thompson Road Oaks Regional Map

Detailed map of Project Area Filename: 3 Thompson Road Oaks 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:

The Land Conservancy of McHenry County is the landowner for the Project Area. The property was acquired March 8, 2022.

Filename: 4 Thompson Road Oaks Recorded Deed.pdf

# **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 The Land Conservancy of McHenry County.

**Preservation Commitment explanation:** The Land Conservancy of McHenry County executed a Declaration of Development Restrictions on November 7, 2022 which protects the forest in the Project Area for 40-years. As included in the Declaration of Development Restrictions, the declarants preserve the trees on the property for a period of no less than 40 years. It prohibits cutting down, destroying, or removing trees located on the Property, except as necessary to control or prevent hazard, disease or fire or to improve forest health. Recreational, non-motor-use trails have negligible or de minimis impacts on biomass and carbon stock are permissible.

### Filename: 5 Thompson Road Oaks Preservation Commitment

Date signed and date recorded: signed 11-7-2022, recorded 11-10-2022

# 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 preexisting tree/forest restrictions that may have hindered removal of the Project Trees (in the pre-Preservation Commitment condition). Provide supporting evidence.

Land use designation(s): When the property was annexed into the Village of Bull Valley in March 2022, it was and is zoned Agriculture.

Filename: 6 Thompson Road Oaks County Zoning Map, 7 Thompson Road Oaks Zoning Information

#### 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.

The Project meets criteria 4.4 A, which is over 30% of the Project Area is bordered by non-forest, developed or improved uses. The Project Area's perimeter is surrounded by 35% farm use and 51% residential estate use, totaling 86% of perimeter adjacent to a developed or improved use.

Filename: 3 Thompson Road Oaks Project Area 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.* 

The Land Conservancy of McHenry County signed the Attestation of No Double Counting of Credits and No Net Harm.

Filename(s): 8 Thompson Road Oaks Attestation 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
  - o 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.

The Land Conservancy of McHenry County has signed an Attestation of Additionality.

Filename(s): 9 Thompson Road Oaks 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)	35.1
Does carbon quantification use stratification (yes or no)	No
Accounting Stock (tCO <sub>2</sub> e)	6,829
On-site avoided biomass emissions (tCO <sub>2</sub> e)	6,146
On-site avoided soil carbon emissions (tCO <sub>2</sub> e)	3,791
Deduction for displaced biomass emissions (tCO <sub>2</sub> e)	1,125
Deduction for displaced soil emissions (tCO <sub>2</sub> e)	1,149
Credits from avoided biomass emissions (tCO <sub>2</sub> e)	5,021
Credits from avoided soil emissions (tCO <sub>2</sub> e)	2,642
Total credits from avoided biomass and soil emissions (tCO <sub>2</sub> e)	7,663
Credits attributed to the project (tCO <sub>2</sub> e), excluding future growth	7,663
Contribution to Registry Reversal Pool Account	766
Total credits to be issued to the Project Operator (tCO <sub>2</sub> e)	6,897
(excluding future growth)	

#### **GHG Assertion:**

Project Operator asserts that the Project results in GHG emissions mitigation of 6,897 tons CO<sub>2</sub>e 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 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 was inventoried that was 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. 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: 10 Thompson Road Oaks Carbon Quantification Calculator, 11 Thompson Road Oaks Plot Locations Map, 12 Thompson Road Oaks On-site inventory raw data, 13 Thompson Road Oaks 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 2,065.74. The standard error is 203.22.

Biomass tC/ac = (metric tons of carbon – standard error)/project area acres = (2,065.74 – 203.22)/35.1 = 53.06 (cell B11 on attachment 9)

Filename: 14 Thompson Road Oaks 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 three most common species are Black cherry (46.0 percent), Northern red oak (17.4 percent), and White oak (13.0 percent). DRG completed a sample inventory using randomized 1/10th- acre plots, following section 11.1.B in the CFC Tree Preservation Protocol.

Filename: 15 Thompson Road Oaks Forest Composition

#### **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 cobenefits and the total canopy cover is 90%.

Filename: 16 Thompson Road Oaks 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:

Thompson Road Oak Woods is zoned as A-1 Agriculture. Section 11.2 in CFC's Tree Preservation Protocol allows for 90% of the Accounting Stock on the Project Area is the "Avoided Biomass Emissions" on agricultural lands.

Filename: 6 Thompson Road Oaks County Zoning Map, 7 Thompson Road Oaks A1 Zoning Information

### 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.

Thompson Road Oak Woods is zoned as A-1 Agriculture and the applicable zoning and development rules do not limit impervious area. Section 11.4 in CFC's Tree Preservation Protocol allows for 90% of the Project Area in agricultural zoning (where annual crops and plowing are common practices in that region) to be eligible for conversion to impervious surface.

Filename: 6 Thompson Road Oaks County Zoning Map, 7 Thompson Road Oaks Zoning Information

### **Future Planned Project Activities**

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

The only planned future activities are restoration of the oak woods which should, over time, improve the longevity and health of the woodland and increase regeneration of oaks.

# **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)	8,545.4	\$61,183.65
Air Quality (t/yr)	0.3576	\$538.51
Cooling – Electricity (kWh/yr)	67,269	\$5,105.70
Heating – Natural Gas (kBtu/yr)	1,257,810	\$12,244.50
Grand Total (\$/yr)		\$79,072.36

Filename: 17 Thompson Road Oaks CoBenefits 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.

Three of the UN Sustainable Development Goals align with the Thompson Road Oak Woods project. These include Good Health and Well Being, Climate Action, and Life on Land.

**SDG 3, Good Health and Well Being**: The project will protect a 35.1 acre oak woodland that will continue to remove air pollution in the general area of the project. Additionally, the woodland is part of a larger property that is a new recreation area (275 acres total), that includes over 5 miles of trails that are available to the public for non-motorized recreation. The property is surrounded by residential development, and within 15 minutes of the City of Woodstock, so is in an ideal location to serve the health of the community. National studies show that access to nature has positive benefits for the physical and mental health of people of all ages. To encourage use of the site by the local Hispanic community, signs and interpretive materials will be provided in Spanish, and events will be held in conjunction with local Hispanic-led organizations. Studies also show that while Latinx people are less likely to visit natural areas than white people, simple things like holding Latinx-centered events, and translating materials into Spanish.

**SDG 13, Climate Action**: This project will protect trees to reduce or remove air pollutants and reduce stormwater runoff through effective restoration of the oak woodland habitat. Restoration will also improve soil health and enhance wildlife habitat for a diversity of species, especially birds such as pileated and red-headed woodpeckers, migratory bird species and wild turkeys. The project will also promote community capacity for social and climate resilience by engaging local residents and volunteers in land management and educational programs about the importance of old-growth woodland preservation.

**SDG 15, Life on Land**: This project will protect trees to reduce stormwater runoff, enhance wildlife habitat to improve local biodiversity and Restoration of the oak woodland will enhance water infiltration which will in turn reduce run-off and improve groundwater recharge in the area. Combined with the restoration of the surrounding, 275-acre property, woodland will have a valuable impact on stormwater and both water quality & quantity in this area. Finally, the project includes work to restore and manage the oak woodland over the coming years to enhance habitat for a diversity of species including both pileated and red-headed woodpeckers, wild turkeys and a variety of migratory bird species that need open oak woodland habitat.

Filename: 18 Thompson Road Oaks 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 Land Conservancy of McHenry County, as a Nationally Accredited Land Trust through the Land Trust Alliance, has a requirement to monitor every property it owns or holds an easement on every year. The Project Area described herein will be included in that monitoring program. The Land Conservancy of McHenry County will submit triennial monitoring reports for the project duration as specified in the protocol.

# **PROJECT OPERATOR SIGNATURE**

Signed on <u>November 11</u> in 2022, by Lisa Haderlein, Executive Director for The Land Conservancy of McHenry County.

taken

Signature

Lisa Haderlein 815-337-9502 x103 Ihaderlein@conservemc.org

# **ATTACHMENTS**

List the number and name of attachments

- 1 Thompson Road Oaks Project Area.kmz
- 2 Thompson Road Oaks Regional Map
- 3 Thompson Road Oaks Project Area Map
- 4 Thompson Road Oaks Recorded Deed
- 5 Thompson Road Oaks Preservation Commitment
- 6 Thompson Road Oaks County Zoning Map
- 7 Thompson Road Oaks Zoning Information
- 8 Thompson Road Oaks Attestation No Double Counting and No Net Harm
- 9 Thompson Road Oaks Attestation of Additionality
- 10 Thompson Road Oaks Carbon Quantification Calculator
- 11 Thompson Road Oaks Plot Locations Map
- 12 Thompson Road Oaks On-site Inventory Raw Data
- 13 Thompson Road Oaks i-Tree Eco
- 14 Thompson Road Oaks Carbon biomass
- 15 Thompson Road Oaks Forest Composition
- 16 Thompson Road Oaks i-Tree Canopy Report
- 17 Thompson Road Oaks CoBenefit Calculator
- 18 Thompson Road Oaks 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

## TRUSTEE'S DEED

This indenture made this 8th day of March, 2022 between CHICAGO TITLE LAND TRUST COMPANY, a corporation of Illinois, as Successor Trustee, under the provisions of a deed or deeds in trust, duly recorded and delivered to said company in pursuance of a trust agreement dated the 25th day of January, 1991 and known as Trust Number 4330-AH party of the first part, and

JOSEPH J. TIRIO CLERK AND RECORDER MCHENRY COUNTY, IL 2022R0008757 03/08/2022 01:55:42 PM PAGES: 5 EXEMPTION: RECORDING FEE 32.00 RHSPS HOUSING FEE 9.00 GIS FEE 24.00 STAMP FEE-STATE 2,250.00 STAMP FEE-COUNTY 1,125.00 AUTOMATION FEE 8.00

#### THE LAND CONSERVANCY OF MCHENRY COUNTY, AN 'ILLINOIS NOT-FOR-PROFIT CORPORATION party of the second part,

**Reserved for Recorder's Office** 

whose address is : P.O. Box 352 Woodstock, IL 60098

WITNESSETH, That said party of the first part, in consideration of the sum of TEN and no/100 DOLLARS (\$10.00) AND OTHER GOOD AND VALUABLE considerations in hand paid, does hereby CONVEY AND QUITCLAIM unto said party of the second part, the following described real estate, situated in MCHENRY County, Illinois, to wit:

#### SEE LEGAL DESCRIPTION ATTACHED HERETO AND INCORPORATED HEREIN

Property Address: 110 N. Fleming Road, Woodstock, IL

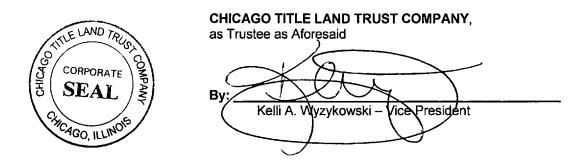
Permanent Tax Number: 08-26-300-006; 08-26-400-013; 08-34-400-016; 08-35-100-004; 08-35-100-005; 08-35-100-006 08-35-200-012; 08-35-300-001; 08-35-300-002 and 08-35-400-001

together with the tenements and appurtenances thereunto belonging.

TO HAVE AND TO HOLD the same unto said party of the second part, and to the proper use, benefit and behoove forever of said party of the second part.

This deed is executed pursuant to and in the exercise of the power and authority granted to and vested in said trustee by the terms of said deed or deeds in trust delivered to said trustee in pursuance of the trust agreement above mentioned. This deed is made subject to the lien of every trust deed or mortgage (if any there be) of record in said county given to secure the payment of money, and remaining unreleased at the date of the delivery hereof.

IN WITNESS WHEREOF, said party of the first part has caused its corporate seal to be hereto affixed, and has caused its name to be signed to these presents by its Vice President, the day and year first above written.



#### State of Illinois County of Cook

SS.

I, the undersigned, a Notary Public in and for the County and State aforesaid, do hereby certify that the above named Vice President of CHICAGO TITLE LAND TRUST COMPANY, personally known to me to be the same person whose name is subscribed to the foregoing instrument as such Vice President appeared before me this day in person and acknowledged that he/she signed and delivered the said instrument as his/her own free and voluntary act and as the free and voluntary act of the Company; and the said Vice President then and there caused the corporate seal of said Company to be affixed to said instrument as his/her own free and voluntary act and as the free and voluntary act of the Company.

Given under my hand and Notarial Seal this 8th day of March, 2022.



NOTARY PUBLIC

This instrument was prepared by: CHICAGO TITLE LAND TRUST COMPANY 10 S. LaSalle Street Suite 2750 Chicago, IL 60603

AFTER RECORDING, PLEASE MAIL TO:

SEND SUBSEQUENT TAX BILLS TO:

THE LAND CONSERVANCY OF MCHENRY COUNTY PO BOX 352 WOODSTOCK, IL 60098

THE LAND CONSERVANCY OF MCHENRY COUNTY PO BOX 352 WOODSTOCK, IL 60098

### PROPERTY DESCRIPTION

THE LAND REFERRED TO IN THIS POLICY IS DESCRIBED AS FOLLOWS:

PARCEL 1: THE SOUTH 26 2/3 ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 35, TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN; ALSO THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 35, (EXCEPTING A STRIP OF LAND 20 FEET WIDE, FOR A LANE OFF THE SOUTH SIDE OF SAID WEST HALF OF THE SOUTHWEST QUARTER, AS CONVEYED BY FRANK J. FLOOD AND WIFE, TO STEWARD G. GIVEN, BY WARRANTY DEED DATED JANUARY 26, 1914 AND RECORDED IN THE RECORDER'S OFFICE OF MCHENRY COUNTY, ILLINOIS, IN BOOK 142 OF DEEDS, PAGE 8, IN TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN; ALSO

ALL THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 26, LYING SOUTH OF CENTER LINE OF PUBLIC HIGHWAY; ALSO, THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 35, ALSO THE NORTH 23/40THS OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 35; ALSO, THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 35; ALSO, THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 35, ALL IN TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN; ALSO,

ALL THAT PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 26, LYING SOUTH OF THE CENTER LINE OF PUBLIC HIGHWAY, IN TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN; ALSO,

THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 35, TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, (EXCEPT ALL THAT PART OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 26 AND THAT PART OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 35, ALL IN TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 35; THENCE SOUTHERLY, ALONG THE EAST LINE OF THE WEST HALF OF THE NORTHEAST QUARTER OF SAID SECTION 35, A DISTANCE OF 817.97 FEET; THENCE WESTERLY, PARALLEL WITH THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 35, A DISTANCE OF 612.99 FEET, THENCE NORTHERLY ALONG A LINE WHICH FORMS AN ANGLE OF 89 DEGREES, 24 MINUTES, AND 20 SECONDS TO THE RIGHT WITH THE PROLONGATION OF THE LAST DESCRIBED COURSE, A DISTANCE OF 366.75 FEET, THENCE NORTHWESTERLY, ALONG A LINE WHICH FORMS AN ANGLE OF 53 DEGREES, 38 MINUTES, AND 16 SECONDS TO THE LEFT WITH THE PROLONGATION OF THE LAST DESCRIBED COURSE, A DISTANCE OF 115.0 FEET; THENCE NORTHERLY ALONG A LINE WHICH FORMS AN ANGLE OF 53 DEGREES, 57 MINUTES, AND 56 SECONDS TO THE RIGHT, WITH THE PROLONGATION OF THE LAST DESCRIBED COURSE, A DISTANCE OF 520.21 FEET TO THE CENTER LINE OF THOMPSON ROAD; THENCE NORTHEASTERLY, ALONG THE CENTER LINE OF THOMPSON ROAD, WHICH FORMS AN ANGLE OF 87 DEGREES, 20 MINUTES, AND 48 SECONDS TO THE RIGHT WITH THE PROLONGATION OF THE LAST DESCRIBED COURSE, A DISTANCE OF 714.61 FEET TO THE EAST LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 26, TOWNSHIP AND RANGE AFORESAID, THENCE SOUTHERLY ALONG THE EAST LINE OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 26, A DISTANCE OF 172.66 FEET TO THE SOUTHEAST CORNER THEREOF AND THE PLACE OF BEGINNING) IN MCHENRY COUNTY, ILLINOIS.

(FR5000623.PFD/FR5000623/19)

PARCEL 2: THAT PART OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF SAID SECTION 34 THAT IS 20 FEET NORTH OF THE SECTION CORNER; THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID SECTION, FOR A DISTANCE OF 549 FEET TO AN INTERSECTION WITH THE CENTER LINE OF THE PUBLIC HIGHWAY, KNOWN AS FLEMING ROAD; THENCE NORTHWESTERLY ALONG THE CENTER LINE OF SAID ROAD AND BEING ON A LINE FORMING AN ANGLE OF 68 DEGREES, 26 MINUTES TO THE RIGHT, WITH A PROLONGATION OF THE LAND DESCRIBED LINE, FOR A DISTANCE OF 412.37 FEET TO A POINT; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID SECTION 34, FOR A DISTANCE OF 701.59 FEET TO AN INTERSECTION WITH THE EAST LINE OF SAID SECTION 34; THENCE SOUTH ALONG SAID EAST LINE, FOR A DISTANCE OF 383.5 FEET TO THE PLACE OF BEGINNING; ALSO,

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE EAST LINE OF SAID SECTION 34 THAT IS 403.5 FEET NORTH OF THE SECTION CORNER; THENCE 25 FEET NORTH; THENCE WEST PARALLEL WITH THE SOUTH LINE OF SAID SECTION TO AN INTERSECTION WITH THE CENTER LINE OF THE PUBLIC HIGHWAY KNOWN AS FLEMING ROAD; THENCE SOUTHEASTERLY ALONG THE CENTER LINE OF SAID ROAD TO ITS INTERSECTION A LINE DRAWN 15 FEET SOUTH OF AND PARALLEL WITH THE LAST DESCRIBED LINE; THENCE EAST 701.59 FEET TO THE PLACE OF BEGINNING, IN MCHENRY COUNTY, ILLINOIS.

(FR5000623.PFD/FR5000623/19)

Vallati

MeHenry Conny Administration Building 667 Ware Road, Room 109 Woodstock, II - 60098

Mag:

MeHenry County Government Center 2200 N. Seminary Avenue Woodstock, IL 60098

STATE OF ILLINOIS )ss

MCHENRY COUNTY RECORDER

Joseph J. Tirio

<u>Main Phone</u>, 815,334,4140

www.mchenryrecorder.org



Fax. 815.334.0276

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#### PLAT ACT AFFIDAVIT OF METES AND BOUNDS

COUNTY OF MCHENRY)  $+\frac{1}{1}$ , being duly sworn on oath, states that affiant resides at  $\underline{(S W)}$ . Montol,  $\underline{(M)}$ ,  $\underline{(M)}$ , \underline{(M)},  $\underline{(M)}$ ,  $\underline{(M)$ 

- A. [X That the attached deed is not in violation of 765 ILCS 205/1 (a), in that the sale or exchange is of an entire tract of land not being a part of a larger tract of land; or
- B. [] That the attached deed is not in violation of 765 ILCS 205/1 (b) for one of the following reasons: (please circle the appropriate number below)
  - 1. The division or subdivision of land into parcels or tracts of 5.0 acres or more in size which does not involve any new streets or easements of access;
  - 2. The division of lots or blocks of less than one (1) acre in any recorded subdivision which does not involve any new streets or easements of access;
  - 3. The sale or exchange of parcels of land between owners of adjoining and contiguous land;
  - 4. The conveyance of parcels of land or interests therein for use as a right of way for railroads or other public utility facilities and other pipe lines which does not involve any new streets or easements of access;
  - 5. The conveyance of land owned by a railroad or other public utility which does not involve any new streets or easements of access;
  - 6. The conveyance of land for highway or other public purposes or grants or conveyances relating to the dedication of land for public use or instruments relating to the vacation of land impressed with a public use:
  - 7. Conveyances made to correct descriptions in prior conveyances;
  - 8. The sale or exchange of parcels or tracts of land following the division into no more than two (2) parts of a particular parcel or tract of land existing on July 17, 1959 and not involving any new streets or easements of access;
  - 9. The sale of a single lot of less than 5.0 acres from a larger tract when a survey is made by an Illinois Registered Land Surveyor; provided, that this exemption shall not apply to the sale of any subsequent lots from the same larger tract of land, as determined by the dimensions and configuration of the larger tract on October 1, 1973, and provided also that this exemption does not invalidate any local requirements applicable to the subdivision of land;
  - 10. The preparation of a plat for wind energy devices under Section 10-620 of the Property Tax Code.

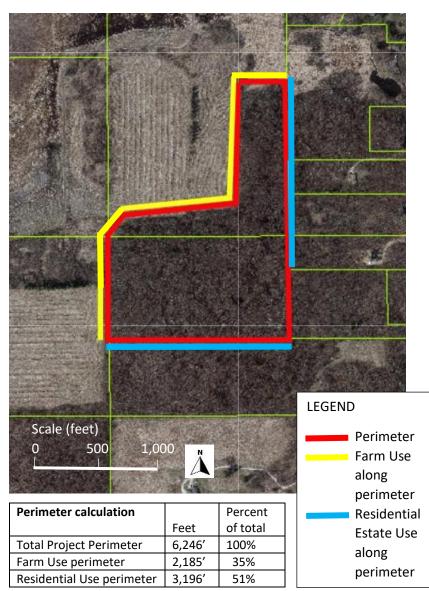
AFFIANT further states that \_\_\_he makes this affidavit for the purpose of inducing the County Recorder of McHenry County. Illinois to accept the attached deed for recording.

SUBSCRIBED AND SWORN TO BEFORE ME

200201000		
This 🖌	day of U/Q.S., 2022	
(pa)	2 D () 2100	E-UIA
Signature of N	Notary Pŭblic / //	Signature of Affiant Norton 11 STY ANTWEN LIC
07/2017	OFFICIAL SEAL DIANNE C PHILIPPE NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES JUN. 21, 2023	partice of was 10 Investors, a great

Project Area Map

Thompson Road Oak Woods Project Area Map



Regional Area Map

## Thompson Road Oak Woods Regional Map Village of Bull Valley, Illinois



**Preservation Commitment** 

MAIL TO:

60098

JOSEPH J. TIRIO CLERK AND RECORDER MCHENRY COUNTY, IL 2022R0038126 11/10/2022 09:22:55 AM PAGES: 6 **RECORDING FEE** 31.00 · GIS FEE 24.00

З

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AUTOMATION FEE 8.00

## COVER SHEET

Attached by

Joseph J. Tirio

McHenry County Recorder

for the purpose of affixing Recording information

prepared by Lisa fladerlein rancy f Co YO BOX-

THIS DECLARATION OF DEVELOPMENT RESTRICTIONS ("DECLARATION") is made this <u>2</u> day of <u>Monufer</u>, 2022, by The Land Conservancy of McHenry County, (an Illinois not-for-profit corporation) having an address at P.O. Box 352, Woodstock, Illinois 60098 ("Declarant") for the purpose of clarifying the development restrictions on a portion of the property at 9900 Thompson Road, Woodstock in McHenry County, Illinois.

#### RECITALS

A. Declarant is the owner of certain property in McHenry County, State of Illinois, known as the Thompson Road Oaks, and more particularly described in EXHIBIT A attached hereto and incorporated by reference. Subject shall be referred to as the "Property" hereafter.

B. Declarant purchased the property from NBD Trust Company of Illinois on March 8, 2022.

C. Declarant is a publicly supported, tax-exempt, non-profit organization, qualified under Section 501(c)(3) and 170 (h) of the Internal Revenue Code of 1986, as amended, and the regulations issued thereunder (the "Code") whose primary purpose is the preservation, protection, or enhancement of land in its natural, scenic, forested, and/or open space condition.

D. Declarant recognizes the value of the Property's mature woodland as a climate asset. The trees on the Property store CO2, reduce stormwater runoff, improve air quality, 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 a 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 with The Morton Arboretum – Chicago Region Trees Initiative, whereby 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.

F. Declarant intends for 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. <u>Removal of Trees</u>. 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. Recreational, non-motor-use trails have negligible or de minimis impacts on biomass and carbon stock and are permissible.

#### GENERAL PROVISIONS

2. <u>Run with the land</u>. 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. <u>Term and modification</u>. 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 <del>carbon protocol under which</del> carbon credits may be issued for the carbon preserved in the trees on the Property.

4. <u>Governing law and venue</u>. 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 McHenry County, Illinois.

5. <u>Severability</u>. In case any one or more of the provisions contained in this Declaration shall for any reason be held 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.

J

Dated this TH Day of November 2022

The Land Conservancy of McHenry County, McHenry County, Illinois

By: David Name:

Hall

Title: President, The Land Conservancy of McHenry County Board of Directors

mul hace Attest:

Name: Stephen Title: Secretary, The Land Conservancy of McHenry County Board of Directors

Wenzel

ACKNOWLEDGMENT

STATE OF ILLINOIS )

)

COUNTY OF MCHENRY)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that <u>DAVID J HALL</u>, personally known to me to be the <u>President</u> of THE LAND CONSERVANCY OF MCHENRY COUNTY, a not for profit a corporation of the State of Illinois, and personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that as such <u>President</u> he signed and delivered the said instrument and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority given by the Board of Directors of said corporation, as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and official seal this <u>1</u> day of <u>With</u> 2012

OFFICIAL SEAL **DEBORAH ANDERSON** NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES:06/01/23

rah ande

Notary Public

My commission expires:

6/1/23

STATE OF ILLINOIS

)

)

COUNTY OF MCHENRY)

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that <u>STEPHEN WENZEL</u>, personally known to me to be the <u>Secretary</u> of THE LAND CONSERVANCY OF MCHENRY COUNTY, a not for profit a corporation of the State of Illinois, and personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that as such <u>Secretary</u> he signed and delivered the said instrument and caused the corporate seal of said corporation to be affixed thereto, pursuant to authority given by the Board of Directors of said corporation, as their free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and official seal this 7th day of Nounder2022

Deborch ander

**Notary Public** 



My commission expires:

6/1/23

#### EXHIBIT A

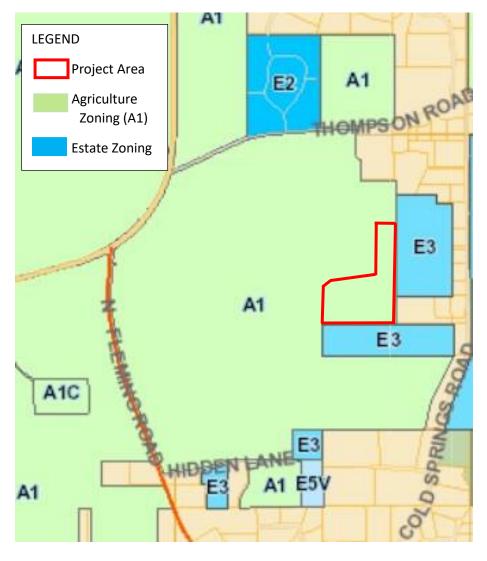
### THE LAND REFERRED TO IN THIS DECLARATION IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN; THENCE NORTH ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 35, 125 FEET; THENCE NORTHEASTERLY 920 FEET TO A POINT 200 FEET NORTH OF THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 35; THENCE NORTH 900 FEET ON A LINE PARALLEL TO THE EAST LINE OF SAID NORTHEAST QUARTER; THENCE EAST 391 FEET +/- TO THE EAST LINE OF SAID NORTHEAST QUARTER; THENCE SOUTH 1123 FEET +/- TO THE SOUTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE WEST ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER; THENCE WEST ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER OF SECTION 35, 1320 FEET TO THE PLACE OF BEGINNING; ALSO,

THE NORTH 23/40<sup>TH</sup> OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 45 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN IN MCHENRY COUNTY, ILLINOIS.

Zoning Maps

## Thompson Road Oak Woods Zoning Map



## Thompson Road Farm Oaks – Area Agricultural Use



The Thompson Road Farm Oaks property is located in an area that is dominated by agricultural land uses and 3-5 acre estate home properties.

Zoning Description(s)

### 5.2-6 Municipal Lands District. 2016-17-15

- (a) **Purposes**. The Municipal Lands District is intended to provide specifically delineated areas of public use for land owned by the Village of Bull Valley.
- (b) **Standards for Classifying Property**. Property shall not be classified in the Municipal Lands District unless it meets the following standards:
  - (i) <u>Minimum Lot Size</u>. The minimum lot area in the district is 10,000 square feet and the minimum lot width in the district is 50 feet.
  - (ii) <u>Front, Side and Rear Yard Setbacks</u>. The minimum front, side and rear yard setbacks where this district abuts any other zoning district are as follows: the front and side yard setbacks shall be 25 feet from the street or property line; the minimum rear yard setback shall be 30 feet from the property lines.
  - (iii) <u>Height</u>. The maximum height for principal buildings shall be 38 feet.
  - (iv) <u>Maximum Lot Coverage</u>. The maximum coverage per lot in the district is 40 percent.
  - (v) <u>Minimum Open Space</u>. The minimum open space in the district is 30 percent.
  - (vi) Existing structures on municipal land as of the date of this ordinance are exempt from the above restrictions.
- 5.2-7 Select, Limited Retail District. 2021-21-12. The Select, Limited Retail District is established for certain specific retail uses in chosen key locations for the Village, such as Illinois Route 120, as depicted and provided in the map in Appendix A of this Section and incorporated herein by this reference. No parcel is eligible for rezoning to the Select, Limited Retail District unless it is designated as being within the area depicted in Appendix A.

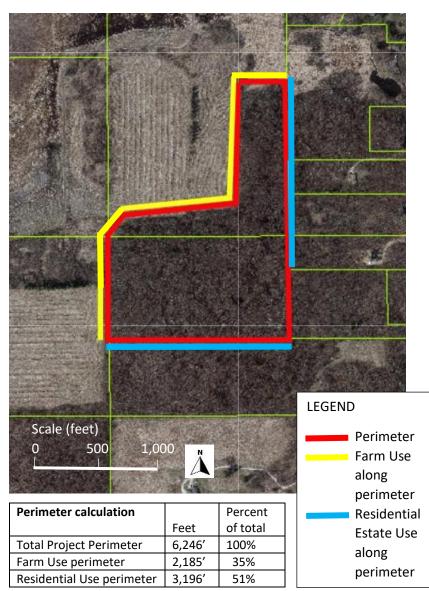
### 5.3 Uses Permitted in Zoning Districts.

- 5.3-1 **"Ag" Agricultural Districts**. All buildings or land within an "Ag" Agricultural District shall only be used for the following purposes: *amended 21-22-13, 1997-98-17* 
  - (a) Single family residence;
  - (b) Accessory buildings on lots of five acres or more that have been improved with a single family dwelling, including one accessory living quarter, and customary farm outbuildings and structures, but specifically excluding trailers, mobile homes and outdoor recreational vehicles;
  - (c) Vehicle parking as required in Section 9;

- (d) Farming of field and garden crops and incidental wholesale and retail sales of produce grown thereon, dairy farm, excluding processing of dairy products generated on the premises;
- (e) Stock animal farm, including cattle, horses, goats, sheep, poultry and fur bearing animals excluding pigs;
- (f) Orchards, nurseries, greenhouses and mushroom barns; including wholesale sales and incidental retail sales of produce grown thereon.
- (g) Open recreational land uses, similar, but not limited to, country clubs, golf courses, archery ranges, hunting preserves, private zoos and fishing areas, provided and on condition that, if the use is intended for persons other than owners, occupants and members of the immediate family and their guests to whom a fee or other consideration for such use would not be charged, such use may only be allowed if:
  - (i) The use is located on at least 80 acres;
  - (ii) The use of the facility and land is limited to owners, occupants, members and guests, and not to the general public.
  - (iii) The total structures shall not exceed 40,000 square feet in area;
  - (iv) All structures shall be located no closer than 500 feet from any boundary line of the land;
  - (v) The minimum width of the lot shall be no less than 330 feet, plus one foot for every two feet of lot depth in excess of 660 feet;
  - (vi) Any area in a hunting preserve that is 500 feet or less from any boundary line of the lot shall be excluded from the discharge of firearms and no firearm discharge shall fall on adjacent lands; and any area in an archery range that is 500 feet or less from any boundary line of the lot shall be excluded to the discharge of arrows and no arrow, when discharged, shall fall on adjacent lands;
- (h) Special uses, subject to the provisions of Section 6.
- (i) Signs, subject to the sign ordinance.
- (j) Uses customarily incidental to any of the above uses, including permitted home occupations as described in Section 8 of this Ordinance and the raising of horses and dogs or other small animals for recreation of, or use as pets by, members of the family living on the land.
- 5.3-2 **"E" Estate District**. (E-5 and E-10) All buildings and land in the "E" Estate District shall only be used for the following purposes: *amended* 21-22-13
  - (a) One single family dwelling and one accessory living quarter subject to the provisions of Section 11(A) of this ordinance, but specifically excluding trailers, mobile homes, outdoor recreational vehicles or any other structure or equipment that does not meet the requirements of the Building Code for a single family dwelling;

Threat of Loss Demonstration

Thompson Road Oak Woods Project Area Map



Attestation of No Double Counting and No Net Harm



### **Thompson Road Farm** Attestation of No Double Counting of Credits & No Net Harm

I am the Executive Director of The Land Conservancy of McHenry County and make this attestation regarding the no double counting of credits and no net harm from this tree preservation project, Thompson Road Farm.

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

The Land Conservancy of McHenry County has not and will not seek credits for CO<sub>2</sub> for the project trees or for this project from any other organization or registry issuing credits for CO<sub>2</sub> storage.

3. No Double Counting by Seeking Credits for the Same Trees or Same CO<sub>2</sub> Storage The Land Conservancy of McHenry County has not and will not apply for a project including the same trees as this project nor will it seek credits for CO<sub>2</sub> 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 4 in 2022, by Lisa Haderlein, for The Land Conservancy of McHenry County.

Signature

815-337-9502 x103 Phone

Ihaderlein@conservemc.org	
Email	

Attestation of Additionality



## Thompson Road Oak Woods Attestation of Additionality

I am the Executive Director of the Land Conservancy of McHenry County and make this attestation regarding additionality from this tree preservation project, Thompson Road Oak Woods.

- 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
- The Land Conservancy of McHenry County 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
  - The Land Conservancy of McHenry County signed a Project Implementation Agreement with City Forest Credits for 40 years.

Signed on <u>Nov 4</u> in 2022, by Lisa Haderlein for The Land Conservancy of McHenry County.

Signature

<u>Lisa Haderlein</u> Printed Name

815-337-9502 x103	
Phone	

<u>Ihaderlein@conservemc.org</u> Email Carbon Quantification Tool

## City Forest Credits - Preservation Protocol Carbon Quantification Calculator

**Project Operator** The Land Conservancy of McHenry County

Copyright © 2018-2022 by City Forest Credits and Urban Forest Carbon Registry. All rights reserved. DO NOT DISTRIBUTE.

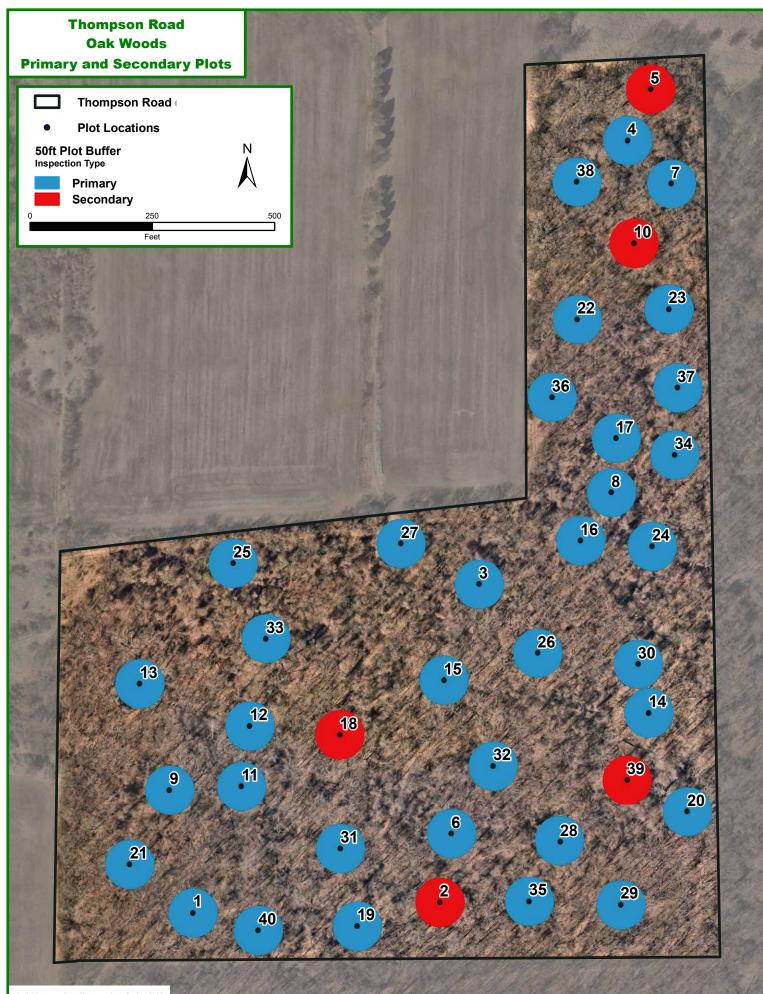
Project Name	Thompson Road Oak Woods		
Project Location	McHenry County		
Date	10/14/2022		
Carbon Quantifi	cation Summary	Protocol Section Supplemental information/notes	
35.	1 Total Project Area Acres	include project area for all parcels enrolled in carbon project	
53.0	<mark>6</mark> Biomass tC/ac	11.1.B A complete inventory was performed on all trees within the project area that had a diameter at breast height of 5 incl	hes
194.5	5 Biomass tCO2e/ac	11.1.B	
6,829	Accounting Stock, tCO2e	11.1.B	
909	<mark>%</mark> Fraction at risk of tree removal	11.2 Based on zoning - see 11.2 in preservation protocol	
6,146	Avoided Biomass Emissions, tCO2e	11.2	
90%	Avoided impervious surface, percent	11.4 Based on zoning - see 11.4 in preservation protocol	
32	Avoided impervious surface, acres	11.4	
3,791	Avoided Soil Carbon Emissions, tCO2e	11.4	
18.39	% Displacement	11.5 Fraction of avoided development that cannot be served by development or re-development of existing non-treed pro	pert
1,125	Displaced Biomass Emissions, tCO2e		
1,149	Displaced Soil Emissions	Assumes that redevelopment causes increase in impervious surface on redeveloped parcels	
5,021	Credits from Avoided Biomass Emissions, tCO2e		
2,642	2 Credits from Avoided Soil Emissions, tCO2e		
7,663	3 Total Credits attributed to the project, tCO2e		
766	8 Registry Reversal Pool Account (10%), tCO2e		
6,897	7 Total credits issued to the project, tCO2e		
196	5 Total credits issued to the project, tCO2e/acre		

Year	Credits Issued This Year		Credits Issued
	1	6,897	6,897
	2	-	6,897
	3	-	6,897
	4	-	6,897
	5	-	6,897

es or more, corresponding to method 11.1.B, include i-Tree eco results

perties within the urban area

Tree Inventory



ID	Stratum	Date	Crew	Size (ac)	Stake	% Tree	% Measured	Complete?
1	Wooded	8/31/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
2	Wooded			0.1	FALSE	Not Entered	100	FALSE
3	Wooded	8/31/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
4	Wooded	8/31/2022	NP	0.1	FALSE	20% - 25%	100	TRUE
5	Wooded			0.1	FALSE	Not Entered	100	FALSE
6	Wooded	8/31/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
7	Wooded	8/31/2022	NP	0.1	FALSE	35% - 40%	100	TRUE
8	Wooded	8/31/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
9	Wooded	8/31/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
10	Wooded			0.1	FALSE	Not Entered	100	FALSE
11	Wooded	9/1/2022	NP	0.1	FALSE	80% - 85%	100	TRUE
12	Wooded	9/1/2022	NP	0.1	FALSE	65% - 70%	100	TRUE
13	Wooded	9/1/2022	NP	0.1	FALSE	75% - 80%	100	TRUE
14	Wooded	9/1/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
15	Wooded	9/1/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
16	Wooded	9/1/2022	NP	0.1	FALSE	25% - 30%	100	TRUE
17	Wooded	9/1/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
18	Wooded			0.1	FALSE	Not Entered	100	FALSE
19	Wooded	9/1/2022	NP	0.1	FALSE	50% - 55%	100	TRUE
20	Wooded	9/1/2022	NP	0.1	FALSE	75% - 80%	100	TRUE
21	Wooded	9/1/2022	NP	0.1	FALSE	75% - 80%	100	TRUE
22	Wooded	9/1/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
23	Wooded	9/14/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
24	Wooded	9/14/2022	NP	0.1	FALSE	70% - 75%	100	TRUE
25	Wooded	9/14/2022	NP	0.1	FALSE	75% - 80%	100	TRUE
26	Wooded	9/14/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
27	Wooded	9/14/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
28	Wooded	9/14/2022	NP	0.1	FALSE	90% - 95%	100	TRUE
29	Wooded	9/14/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
30	Wooded	9/14/2022	NP	0.1	FALSE	40% - 45%	100	TRUE
31	Wooded	9/14/2022	NP	0.1	FALSE	85% - 90%	100	TRUE
32	Wooded	9/14/2022	NP	0.1	FALSE	95% - 99%	100	TRUE
33	Wooded			0.1	FALSE	Not Entered	100	FALSE
34	Wooded			0.1	FALSE	Not Entered	100	FALSE
35	Wooded			0.1	FALSE	Not Entered	100	FALSE
36	Wooded			0.1	FALSE	Not Entered	100	FALSE
37	Wooded			0.1	FALSE	Not Entered	100	FALSE
38	Wooded			0.1	FALSE	Not Entered	100	FALSE
39	Wooded			0.1	FALSE	Not Entered	100	FALSE
40	Wooded			0.1	FALSE	Not Entered	100	FALSE

Plot	Land Use	% of Plot
1	Forest	100
2		
3	Forest	100
4	Forest	100
5		
6	Forest	100
7	Forest	100
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		
19	Forest	100
20	Forest	100
21	Forest	100
22	Forest	100
23	Forest	100
24	Forest	100
25	Forest	100
26	Forest	100
27	Forest	100
28	Forest	100
29	Forest	100
30	Forest	100
31	Forest	100
32	Forest	100
33		
34		
35		
36		
37		
38		
39		
40		

Plot	ID	Survey Date	Species	Land Use	DBH 1 (in)	DBH 1: Height (ft)	DBH 1: Measured?	Crown: Condition
1	1	8/31/2022	Black cherry (Prunus serotina)	Forest	5.9	4.5	TRUE	90% - 95%
1	2	8/31/2022	Black cherry (Prunus serotina)	Forest	5.2	4.5	TRUE	0%
1	3	8/31/2022	White oak (Quercus alba)	Forest	30.5	4.5	TRUE	90% - 95%
1	4	8/31/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE	90% - 95%
1	5	8/31/2022	Black cherry (Prunus serotina)	Forest	7.5	4.5	TRUE	90% - 95%
1	6	8/31/2022	White oak (Quercus alba)	Forest	25.5	4.5	TRUE	90% - 95%
1	7	8/31/2022	Black cherry (Prunus serotina)	Forest	5.5	4.5	TRUE	95% - 99%
1	8	8/31/2022	Black cherry (Prunus serotina)	Forest	8.3	4.5	TRUE	75% - 80%
1	9	8/31/2022	Black cherry (Prunus serotina)	Forest	6.1	4.5	TRUE	90% - 95%
1	10	8/31/2022	White oak (Quercus alba)	Forest	23	4.5	TRUE	0%
1	11	8/31/2022	White oak (Quercus alba)	Forest	25.3	4.5	TRUE	90% - 95%
1	12	8/31/2022	Black cherry (Prunus serotina)	Forest	6.3	4.5	TRUE	85% - 90%
3	1	8/31/2022	Pin oak (Quercus palustris)	Forest	16	4.5	TRUE	75% - 80%
3	2	8/31/2022	Black cherry (Prunus serotina)	Forest	10	4.5	TRUE	25% - 30%
3	3	8/31/2022	Northern red oak (Quercus rubra)		6.8	4.5	TRUE	0%
			. ,	Forest				
3	4	8/31/2022	Black cherry (Prunus serotina)	Forest	5.3	4.5	TRUE	0%
3	5	8/31/2022	Pin oak (Quercus palustris)	Forest	13.7	4.5	TRUE	70% - 75%
3	6	8/31/2022	Northern red oak (Quercus rubra)	Forest	9.5	4.5	TRUE	75% - 80%
3	7	8/31/2022	Pin oak (Quercus palustris)	Forest	8.7	4.5	TRUE	75% - 80%
3	8	8/31/2022	Pin oak (Quercus palustris)	Forest	13.9	4.5	TRUE	60% - 65%
3	9	8/31/2022	Black cherry (Prunus serotina)	Forest	5	4.5	TRUE	50% - 55%
3	10	8/31/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE	65% - 70%
3	11	8/31/2022	Eastern white pine (Pinus strobus)	Forest	11.1	4.5	TRUE	0%
3	12	8/31/2022	Northern red oak (Quercus rubra)	Forest	6.1	4.5	TRUE	0%
3	13	8/31/2022	Northern red oak (Quercus rubra)	Forest	9.6	4.5	TRUE	0%
3	14	8/31/2022	Black cherry (Prunus serotina)	Forest	13.5	4.5	TRUE	55% - 60%
3	15	8/31/2022	Black cherry (Prunus serotina)	Forest	9.9	4.5	TRUE	45% - 50%
3	16	8/31/2022	Northern red oak (Quercus rubra)	Forest	18.1	4.5	TRUE	85% - 90%
4	1	8/31/2022	Bur oak (Quercus macrocarpa)	Forest	16.4	4.5	TRUE	85% - 90%
6	1	8/31/2022	White oak (Quercus alba)	Forest	21	4.5	TRUE	80% - 85%
6	2	8/31/2022	Black cherry (Prunus serotina)	Forest	9	4.5	TRUE	0%
6	3	8/31/2022	American elm (Ulmus americana)	Forest	8.8	4.5	TRUE	0%
6	4	8/31/2022	Black cherry (Prunus serotina)	Forest	15.2	4.5	TRUE	80% - 85%
6	5	8/31/2022	Black cherry (Prunus serotina)		12.6	4.5	TRUE	75% - 80%
				Forest				
6	6	8/31/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE	85% - 90%
6	7	8/31/2022	White oak (Quercus alba)	Forest	13.8	4.5	TRUE	0%
6	8	8/31/2022	White oak (Quercus alba)	Forest	19.2	4.5	TRUE	35% - 40%
6	9	8/31/2022	Black cherry (Prunus serotina)	Forest	7.3	4.5	TRUE	70% - 75%
6	10	8/31/2022	Black cherry (Prunus serotina)	Forest	8.2	4.5	TRUE	80% - 85%
6	11	8/31/2022	White oak (Quercus alba)	Forest	24.2	4.5	TRUE	80% - 85%
6	12	8/31/2022	White oak (Quercus alba)	Forest	24.8	4.5	TRUE	75% - 80%
6	13	8/31/2022	White oak (Quercus alba)	Forest	21.1	4.5	TRUE	75% - 80%
7	1	8/31/2022	Black cherry (Prunus serotina)	Forest	12.5	4.5	TRUE	0%
7	2	8/31/2022	Bur oak (Quercus macrocarpa)	Forest	11	4.5	TRUE	85% - 90%
7	3	8/31/2022	Black cherry (Prunus serotina)	Forest	11.4	4.5	TRUE	70% - 75%
7	4	8/31/2022	Bur oak (Quercus macrocarpa)	Forest	12.5	4.5	TRUE	85% - 90%
7	5	8/31/2022	Black cherry (Prunus serotina)	Forest	14.9	4.5	TRUE	30% - 35%
7	6	8/31/2022	Black cherry (Prunus serotina)	Forest	8.3	4.5	TRUE	60% - 65%
7	7	8/31/2022	Black cherry (Prunus serotina)	Forest	10.3	4.5	TRUE	0%
7	8	8/31/2022	Northern red oak (Quercus rubra)	Forest	5.3	4.5	TRUE	0%
7	9	8/31/2022	Northern red oak (Quercus rubra)	Forest	12.7	4.5	TRUE	0%
7	10	8/31/2022	Northern red oak (Quercus rubra)	Forest	15.2	4.5	TRUE	0%
7			Northern red oak (Quercus rubra)					0%
7	11 12	8/31/2022 8/31/2022		Forest	12 16 7	4.5 4.5		0%
	12		Northern red oak (Quercus rubra)	Forest	16.7		TRUE	
7	13	8/31/2022	Black cherry (Prunus serotina)	Forest	14.4	4.5	TRUE	75% - 80%
8	1	8/31/2022	Northern red oak (Quercus rubra)	Forest	14.4	4.5	TRUE	0%
8	2	8/31/2022	Black cherry (Prunus serotina)	Forest	9.1	4.5	TRUE	65% - 70%
8	3	8/31/2022	Black cherry (Prunus serotina)	Forest	5.8	4.5	TRUE	0%
8	4	8/31/2022	Black cherry (Prunus serotina)	Forest	7.4	4.5	TRUE	0%
8	5	8/31/2022	Red mulberry (Morus rubra)	Forest	11	4.5	TRUE	80% - 85%
8	6	8/31/2022	Northern red oak (Quercus rubra)	Forest	19.8	4.5	TRUE	80% - 85%
8	7	8/31/2022	Black cherry (Prunus serotina)	Forest	8.9	4.5	TRUE	70% - 75%
8	8	8/31/2022	Black cherry (Prunus serotina)	Forest	7.3	4.5	TRUE	75% - 80%
8	9	8/31/2022	Black cherry (Prunus serotina)	Forest	7.5	4.5	TRUE	80% - 85%
8	10	8/31/2022	Black cherry (Prunus serotina)	Forest	9.7	4.5	TRUE	70% - 75%
8	11	8/31/2022	Black cherry (Prunus serotina)	Forest	7	4.5	TRUE	0%
8	12	8/31/2022	Black cherry (Prunus serotina)	Forest	5.2	4.5	TRUE	0%
U U		-, -, -, -, -, -, -, -, -, -, -, -, -, -			5.2			0,0

9	1	8/31/2022	Northern red oak (Quercus rubra)	Forest	9.6	4.5	TRUE	90% - 95%
9	2	8/31/2022	Black cherry (Prunus serotina)	Forest	8.5	4.5	TRUE	85% - 90%
9	3	8/31/2022	Northern red oak (Quercus rubra)	Forest	8.5	4.5	TRUE	90% - 95%
9	4	8/31/2022	Northern red oak (Quercus rubra)	Forest	6.4	4.5	TRUE	90% - 95%
9	5	8/31/2022	Northern red oak (Quercus rubra)	Forest	9.5	4.5	TRUE	95% - 99%
9	6	8/31/2022	Black cherry (Prunus serotina)	Forest	9.3	4.5	TRUE	90% - 95%
9	7	8/31/2022	Red mulberry (Morus rubra)	Forest	12.2	4.5	TRUE	80% - 85%
9	8	8/31/2022	Black cherry (Prunus serotina)	Forest	10.8	4.5	TRUE	0%
9	9	8/31/2022	Northern red oak (Quercus rubra)	Forest	11.1	4.5	TRUE	90% - 95%
9	10	8/31/2022	Northern red oak (Quercus rubra)	Forest	10.2	4.5	TRUE	90% - 95%
9	11	8/31/2022	Northern red oak (Quercus rubra)	Forest	15.4	4.5	TRUE	85% - 90%
9	12	8/31/2022	Northern red oak (Quercus rubra)	Forest	14.9	4.5	TRUE	80% - 85%
9	13	8/31/2022	Northern red oak (Quercus rubra)	Forest	6.8	4.5	TRUE	85% - 90%
9	14	8/31/2022	Northern red oak (Quercus rubra)	Forest	9.6	4.5	TRUE	0%
9	15	8/31/2022	Black cherry (Prunus serotina)	Forest	8.6	4.5	TRUE	85% - 90%
9	16	8/31/2022	Red mulberry (Morus rubra)	Forest	5	4.5	TRUE	70% - 75%
9	17	8/31/2022	Black cherry (Prunus serotina)	Forest	10.5	4.5	TRUE	20% - 25%
9	18	8/31/2022	Red mulberry (Morus rubra)	Forest	17	4.5	TRUE	70% - 75%
9	19	8/31/2022	Black cherry (Prunus serotina)	Forest	6.4	4.5	TRUE	5% - 10%
11	1	9/1/2022	White oak (Quercus alba)	Forest	15.8	4.5	TRUE	0%
11	2	9/1/2022	Black cherry (Prunus serotina)	Forest	18.7	4.5	TRUE	40% - 45%
11	3	9/1/2022	Boxelder (Acer negundo)	Forest	5.2	4.5	TRUE	55% - 60%
11	4	9/1/2022	Black cherry (Prunus serotina)	Forest	15.2	4.5	TRUE	65% - 70%
11	5	9/1/2022	Black cherry (Prunus serotina)	Forest	13.9	4.5	TRUE	70% - 75%
11	6	9/1/2022	White oak (Quercus alba)	Forest	16.1	4.5	TRUE	0%
11	7	9/1/2022	Black cherry (Prunus serotina)	Forest	11	4.5	TRUE	70% - 75%
11	8	9/1/2022	Black cherry (Prunus serotina)	Forest	9.2	4.5	TRUE	30% - 35%
11	9	9/1/2022	White oak (Quercus alba)	Forest	23.3	4.5	TRUE	70% - 75%
11	10	9/1/2022	Black cherry (Prunus serotina)	Forest	11.9	4.5	TRUE	40% - 45%
11	11	9/1/2022	Red mulberry (Morus rubra)	Forest	9.5	4.5	TRUE	90% - 95%
11	12	9/1/2022	White oak (Quercus alba)	Forest	17.6	4.5	TRUE	0%
11	13	9/1/2022	Black cherry (Prunus serotina)	Forest	15.3	4.5	TRUE	15% - 20%
11	14	9/1/2022	Boxelder (Acer negundo)	Forest	7.7	4.5	TRUE	70% - 75%
12	1	9/1/2022	Black cherry (Prunus serotina)	Forest	8.8	4.5	TRUE	0%
12	2	9/1/2022	White oak (Quercus alba)	Forest	19.3	4.5	TRUE	0%
12	3	9/1/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE	0%
12	4	9/1/2022	Black cherry (Prunus serotina)	Forest	11.6	4.5	TRUE	25% - 30%
12	5	9/1/2022	Boxelder (Acer negundo)	Forest	6.3	4.5	TRUE	70% - 75%
12	6	9/1/2022	Black cherry (Prunus serotina)	Forest	8.9	4.5	TRUE	75% - 80%
12	7	9/1/2022	Black cherry (Prunus serotina)	Forest	15.2	4.5	TRUE	0%
12	8	9/1/2022	White oak (Quercus alba)	Forest	19.1	4.5	TRUE	85% - 90%
12	9	9/1/2022	Black cherry (Prunus serotina)	Forest	11.8	4.5	TRUE	60% - 65%
13	1	9/1/2022	Black cherry (Prunus serotina)	Forest	12	4.5	TRUE	80% - 85%
13	2	9/1/2022	Boxelder (Acer negundo)	Forest	12	4.5	TRUE	0%
13	3	9/1/2022	Black cherry (Prunus serotina)	Forest	7.4	4.5	TRUE	30% - 35%
13	4	9/1/2022	Black cherry (Prunus serotina)	Forest	10.2	4.5	TRUE	50% - 55%
13	5	9/1/2022	Pin oak (Quercus palustris)	Forest	35.3	4.5	TRUE	65% - 70%
13	6	9/1/2022	Black cherry (Prunus serotina)	Forest	10.1	4.5	TRUE	75% - 80%
13	7	9/1/2022	Black cherry (Prunus serotina)	Forest	8.4	4.5	TRUE	0%
13	8	9/1/2022	Black cherry (Prunus serotina)	Forest	10.2	4.5	TRUE	60% - 65%
13	9	9/1/2022	Black cherry (Prunus serotina)	Forest	13.3	4.5	TRUE	70% - 75%
13	10	9/1/2022	Boxelder (Acer negundo)	Forest	6.1	4.5	TRUE	75% - 80%
13	11	9/1/2022	Black cherry (Prunus serotina)	Forest	7.4	4.5	TRUE	0%
13	12	9/1/2022	Black cherry (Prunus serotina)	Forest	9.1	4.5	TRUE	0%
13	13	9/1/2022	Black cherry (Prunus serotina)	Forest	10.2	4.5	TRUE	0%
13	14	9/1/2022	Pin oak (Quercus palustris)	Forest	34.4	4.5	TRUE	75% - 80%
14	1	9/1/2022	Black cherry (Prunus serotina)	Forest	13.5	4.5	TRUE	80% - 85%
14	2	9/1/2022	White oak (Quercus alba)	Forest	28.5	4.5	TRUE	80% - 85%
14	3	9/1/2022	Red mulberry (Morus rubra)	Forest	7.2	4.5	TRUE	60% - 65%
14	4	9/1/2022	White oak (Quercus alba)	Forest	32.5	4.5	TRUE	85% - 90%
14	5	9/1/2022	Boxelder (Acer negundo)	Forest	9.1	4.5	TRUE	60% - 65%
14	6	9/1/2022	Boxelder (Acer negundo)	Forest	6.2	4.5	TRUE	55% - 60%
14	7	9/1/2022	Northern red oak (Quercus rubra)	Forest	6.3	4.5	TRUE	70% - 75%
14	8	9/1/2022	Black cherry (Prunus serotina)	Forest	12.7	4.5	TRUE	0%
14	9	9/1/2022	Boxelder (Acer negundo)	Forest	7.6	4.5	TRUE	45% - 50%
14	10	9/1/2022	Black cherry (Prunus serotina)	Forest	17.6	4.5	TRUE	60% - 65%
14	11	9/1/2022	Black cherry (Prunus serotina)	Forest	8.9	4.5	TRUE	60% - 65%
15	1	9/1/2022	Black cherry (Prunus serotina)	Forest	12.5	4.5	TRUE	15% - 20%

15	2	9/1/2022	White oak (Quercus alba)	Forest	23.2	4.5	TRUE	75% - 80%
15	3	9/1/2022	White oak (Quercus alba)	Forest	28.5	4.5	TRUE	80% - 85%
15	4	9/1/2022	White oak (Quercus alba)	Forest	25	4.5	TRUE	80% - 85%
15	5	9/1/2022	Black cherry (Prunus serotina)	Forest	6.1	4.5	TRUE	75% - 80%
15	6	9/1/2022	White oak (Quercus alba)	Forest	18.8	4.5	TRUE	75% - 80%
15	7	9/1/2022	White oak (Quercus alba)	Forest	26.8	4.5	TRUE	80% - 85%
15	8	9/1/2022	White oak (Quercus alba)	Forest	19.3	4.5	TRUE	65% - 70%
15	9	9/1/2022	White oak (Quercus alba)	Forest	29.7	4.5	TRUE	80% - 85%
16	1	9/1/2022	Black cherry (Prunus serotina)	Forest	19.5	4.5	TRUE	55% - 60%
16	2	9/1/2022	Red mulberry (Morus rubra)	Forest	10.4	4.5	TRUE	75% - 80%
17	1	9/1/2022	Northern red oak (Quercus rubra)	Forest	11.4	4.5	TRUE	10% - 15%
17	2	9/1/2022	Black cherry (Prunus serotina)	Forest	8.6	4.5	TRUE	30% - 35%
17	3	9/1/2022	Black cherry (Prunus serotina)	Forest	6.5	4.5	TRUE	30% - 35%
17	4	9/1/2022	Northern red oak (Quercus rubra)	Forest	13	4.5	TRUE	0%
17	5	9/1/2022	Black cherry (Prunus serotina)	Forest	7.3	4.5	TRUE	70% - 75%
17	6	9/1/2022	Pin oak (Quercus palustris)	Forest	12	4.5	TRUE	20% - 25%
			,					
17	7	9/1/2022	Pin oak (Quercus palustris)	Forest	16.6	4.5	TRUE	70% - 75%
17	8	9/1/2022	Northern red oak (Quercus rubra)	Forest	29.8	4.5	TRUE	75% - 80%
17	9	9/1/2022	Bur oak (Quercus macrocarpa)	Forest	7.3	4.5	TRUE	80% - 85%
17	10	9/1/2022	Black cherry (Prunus serotina)	Forest	7	4.5	TRUE	0%
17	11	9/1/2022	Black cherry (Prunus serotina)	Forest	5.8	4.5	TRUE	60% - 65%
17	12	9/1/2022	Pin oak (Quercus palustris)	Forest	21.9	4.5	TRUE	75% - 80%
17	13	9/1/2022	,		16.4	4.5	TRUE	75% - 80%
			Pin oak (Quercus palustris)	Forest				
17	14	9/1/2022	Black cherry (Prunus serotina)	Forest	9.7	4.5	TRUE	0%
17	15	9/1/2022	Pin oak (Quercus palustris)	Forest	16.8	4.5	TRUE	65% - 70%
19	1	9/1/2022	Black cherry (Prunus serotina)	Forest	11.4	4.5	TRUE	60% - 65%
19	2	9/1/2022	Pin oak (Quercus palustris)	Forest	30.1	4.5	TRUE	40% - 45%
19	3	9/1/2022	Black cherry (Prunus serotina)	Forest	8.3	4.5	TRUE	30% - 35%
19	4	9/1/2022	Black cherry (Prunus serotina)	Forest	9.6	4.5	TRUE	80% - 85%
19	5	9/1/2022	Black cherry (Prunus serotina)	Forest	11.4	4.5	TRUE	50% - 55%
19	6	9/1/2022	Black cherry (Prunus serotina)	Forest	11.1	4.5	TRUE	0%
19	7	9/1/2022	White oak (Quercus alba)	Forest	12.5	4.5	TRUE	65% - 70%
19	8	9/1/2022	Black cherry (Prunus serotina)	Forest	14.3	4.5	TRUE	75% - 80%
19	9	9/1/2022	White oak (Quercus alba)	Forest	21.9	4.5	TRUE	80% - 85%
19	10	9/1/2022	Boxelder (Acer negundo)	Forest	7.8	4.5	TRUE	70% - 75%
19	11	9/1/2022	Northern hackberry (Celtis occidentalis)	Forest	8.6	4.5	TRUE	95% - 99%
20	1	9/1/2022	White oak (Quercus alba)	Forest	18.4	4.5	TRUE	0%
20	2	9/1/2022	Black cherry (Prunus serotina)	Forest	10.3	4.5	TRUE	15% - 20%
20	3	9/1/2022	White oak (Quercus alba)	Forest	21.5	4.5	TRUE	75% - 80%
20	4	9/1/2022	Bur oak (Quercus macrocarpa)	Forest	29.2	4.5	TRUE	80% - 85%
20	5	9/1/2022	Northern red oak (Quercus rubra)	Forest	15.2	4.5	TRUE	75% - 80%
20	6	9/1/2022	White oak (Quercus alba)	Forest	26.7	4.5	TRUE	75% - 80%
20	7	9/1/2022	Black cherry (Prunus serotina)	Forest	8.8	4.5	TRUE	55% - 60%
20	8	9/1/2022	White oak (Quercus alba)	Forest	16.1	4.5	TRUE	80% - 85%
21	1	9/1/2022	Northern red oak (Quercus rubra)	Forest	15	4.5	TRUE	0%
21	2	9/1/2022	Northern red oak (Quercus rubra)	Forest	8.5	4.5	TRUE	0%
21	3	9/1/2022	Northern red oak (Quercus rubra)	Forest	8.1	4.5	TRUE	0%
21	4	9/1/2022	White oak (Quercus alba)	Forest	9.7	4.5	TRUE	95% - 99%
21	5	9/1/2022	White oak (Quercus alba)	Forest	8.2	4.5	TRUE	85% - 90%
21	6	9/1/2022	Northern red oak (Quercus rubra)	Forest	8	4.5	TRUE	0%
21	7	9/1/2022	apple spp (Malus)	Forest	5.4	4.5	TRUE	0%
21	8	9/1/2022	Northern red oak (Quercus rubra)	Forest	20.7	4.5	TRUE	80% - 85%
21	9	9/1/2022	Black cherry (Prunus serotina)	Forest	7.8	4.5	TRUE	75% - 80%
21	10	9/1/2022	Bur oak (Quercus macrocarpa)	Forest	33.6	4.5	TRUE	75% - 80%
21	11	9/1/2022	Black cherry (Prunus serotina)	Forest	6.5	4.5	TRUE	0%
21	12	9/1/2022	White oak (Quercus alba)	Forest	20.4	4.5	TRUE	0%
21								70% - 75%
	13	9/1/2022	Black cherry (Prunus serotina)	Forest	5.4	4.5	TRUE	
21	14	9/1/2022	Black cherry (Prunus serotina)	Forest	10	4.5	TRUE	70% - 75%
21	15	9/1/2022	Black cherry (Prunus serotina)	Forest	5.5	4.5	TRUE	0%
21	16	9/1/2022	Black cherry (Prunus serotina)	Forest	14.6	4.5	TRUE	50% - 55%
21	17	9/1/2022	Pin oak (Quercus palustris)	Forest	9.7	4.5	TRUE	75% - 80%
21	18	9/1/2022	White oak (Quercus alba)	Forest	7.1	4.5	TRUE	85% - 90%
22	1	9/1/2022	Northern red oak (Quercus rubra)	Forest	15.7	4.5	TRUE	85% - 90%
		9/1/2022	Northern red oak (Quercus rubra)		10.5	4.5	TRUE	
		J/ 1/ 2022		Forest		4.5 4.5		85% - 90% 80% - 85%
22	2	0/4/2022				// 5	INTE	
22	3	9/1/2022	Northern red oak (Quercus rubra)	Forest	16.5		TRUE	
22 22	3 4	9/1/2022	Northern red oak (Quercus rubra)	Forest	9.5	4.5	TRUE	80% - 85%
22	3							
22 22	3 4	9/1/2022	Northern red oak (Quercus rubra)	Forest	9.5	4.5	TRUE	80% - 85%

22	7	9/1/2022	Northern red oak (Quercus rubra)	Forest	7.6	4.5	TRUE	70% - 75%
22	8	9/1/2022	Northern red oak (Quercus rubra)	Forest	9.2	4.5	TRUE	80% - 85%
22	9	9/1/2022	Northern red oak (Quercus rubra)	Forest	14.4	4.5	TRUE	80% - 85%
22	10	9/1/2022	Northern red oak (Quercus rubra)	Forest	13.2	4.5	TRUE	80% - 85%
22	11	9/1/2022	Black cherry (Prunus serotina)	Forest	5.3	4.5	TRUE	75% - 80%
22	12	9/1/2022	Northern red oak (Quercus rubra)	Forest	14.4	4.5	TRUE	80% - 85%
22	13	9/1/2022	Northern red oak (Quercus rubra)	Forest	9.7	4.5	TRUE	70% - 75%
22	14	9/1/2022	Northern red oak (Quercus rubra)	Forest	10.4	4.5	TRUE	75% - 80%
22	15	9/1/2022	Black cherry (Prunus serotina)	Forest	5.8	4.5	TRUE	75% - 80%
22	16	9/1/2022	Black cherry (Prunus serotina)	Forest	5.5	4.5	TRUE	80% - 85%
22	17	9/1/2022	Black cherry (Prunus serotina)	Forest	7.5	4.5	TRUE	75% - 80%
22	18	9/1/2022	White oak (Quercus alba)	Forest	38.7	4.5	TRUE	80% - 85%
22	19	9/1/2022	Black cherry (Prunus serotina)	Forest	6	4.5	TRUE	65% - 70%
22	20	9/1/2022	Black cherry (Prunus serotina)	Forest	9.6	4.5	TRUE	70% - 75%
22	21	9/1/2022	Black cherry (Prunus serotina)	Forest	9.7	4.5	TRUE	55% - 60%
22	22	9/1/2022	Black cherry (Prunus serotina)	Forest	6.6	4.5	TRUE	0%
23	1	9/14/2022	Northern red oak (Quercus rubra)	Forest	16.2	4.5	TRUE	80% - 85%
23	2	9/14/2022	Black cherry (Prunus serotina)	Forest	9.7	4.5	TRUE	65% - 70%
23	3	9/14/2022	Black cherry (Prunus serotina)	Forest	13.4	4.5	TRUE	80% - 85%
23	4	9/14/2022	Pin oak (Quercus palustris)	Forest	18.7	4.5	TRUE	80% - 85%
23	5	9/14/2022	Bur oak (Quercus macrocarpa)	Forest	7.9	4.5	TRUE	80% - 85%
23	6	9/14/2022	Northern red oak (Quercus rubra)	Forest	8.7	4.5	TRUE	80% - 85%
23	7	9/14/2022	Northern red oak (Quercus rubra)	Forest	13.9	4.5	TRUE	85% - 90%
23	8	9/14/2022	Black cherry (Prunus serotina)	Forest	13.1	4.5	TRUE	55% - 60%
23	9	9/14/2022	Black cherry (Prunus serotina)	Forest	8.1	4.5	TRUE	55% - 60%
23	10	9/14/2022	Black walnut (Juglans nigra)	Forest	9.6	4.5	TRUE	90% - 95%
23	10	9/14/2022	Black cherry (Prunus serotina)	Forest	12.9	4.5	TRUE	30% - 35%
23	12	9/14/2022	Black cherry (Prunus serotina)	Forest	8.7	4.5	TRUE	40% - 45%
23	13	9/14/2022	Black cherry (Prunus serotina)	Forest	9.3	4.5	TRUE	55% - 60%
23	13	9/14/2022	Black cherry (Prunus serotina)	Forest	6.9	4.5	TRUE	40% - 45%
23	15	9/14/2022	Black cherry (Prunus serotina)	Forest	6.7	4.5	TRUE	0%
23	15	9/14/2022	Pin oak (Quercus palustris)	Forest	19.5	4.5	TRUE	85% - 90%
24	10	9/14/2022	White oak (Quercus alba)	Forest	28.9	4.5	TRUE	70% - 75%
24	2	9/14/2022	Black cherry (Prunus serotina)	Forest	5.2	4.5	TRUE	70% - 75%
24	3	9/14/2022	Black cherry (Prunus serotina)	Forest	10.8	4.5	TRUE	80% - 85%
24	4	9/14/2022	Red mulberry (Morus rubra)	Forest	6.9	4.5	TRUE	80% - 85%
24	5	9/14/2022	Black cherry (Prunus serotina)	Forest	10.3	4.5	TRUE	55% - 60%
24	6	9/14/2022	Black cherry (Prunus serotina)	Forest	7.7	4.5	TRUE	0%
24	7	9/14/2022	Black cherry (Prunus serotina)	Forest	9.9	4.5	TRUE	15% - 20%
24	8	9/14/2022	Black cherry (Prunus serotina)	Forest	6.6	4.5	TRUE	15% - 20%
24	9	9/14/2022	White oak (Quercus alba)	Forest	32.4	4.5	TRUE	0%
24	10	9/14/2022	Red mulberry (Morus rubra)	Forest	8.9	4.5	TRUE	65% - 70%
24	11	9/14/2022	Black cherry (Prunus serotina)	Forest	8.1	4.5	TRUE	70% - 75%
24	12	9/14/2022	Black cherry (Prunus serotina)	Forest	11.4	4.5	TRUE	65% - 70%
24	13	9/14/2022	Black cherry (Prunus serotina)	Forest	10.9	4.5	TRUE	55% - 60%
25	1	9/14/2022	Red mulberry (Morus rubra)	Forest	7.7	4.5	TRUE	70% - 75%
25	2	9/14/2022	Jack pine (Pinus banksiana)	Forest	12.3	4.5	TRUE	0%
25	3	9/14/2022	Jack pine (Pinus banksiana)	Forest	9.1	4.5	TRUE	0%
25	4	9/14/2022	Jack pine (Pinus banksiana)	Forest	13.7	4.5	TRUE	75% - 80%
25	5	9/14/2022	Black cherry (Prunus serotina)	Forest	7	4.5	TRUE	65% - 70%
25	6	9/14/2022	Jack pine (Pinus banksiana)	Forest	12.8	4.5	TRUE	0%
25	7	9/14/2022	Black cherry (Prunus serotina)	Forest	7.8	4.5	TRUE	65% - 70%
25	8	9/14/2022	Pin oak (Quercus palustris)	Forest	9.5	4.5	TRUE	75% - 80%
25	9	9/14/2022	Red mulberry (Morus rubra)	Forest	14.8	4.5	TRUE	60% - 65%
25	10	9/14/2022	Red mulberry (Morus rubra)	Forest	10.8	4.5	TRUE	85% - 90%
25	11	9/14/2022	Black cherry (Prunus serotina)	Forest	7.1	4.5	TRUE	20% - 25%
25	12	9/14/2022	Northern red oak (Quercus rubra)	Forest	5	4.5	TRUE	80% - 85%
25	13	9/14/2022	Jack pine (Pinus banksiana)	Forest	14.1	4.5	TRUE	0%
25	14	9/14/2022	Black cherry (Prunus serotina)	Forest	11.5	4.5	TRUE	80% - 85%
25	15	9/14/2022	Jack pine (Pinus banksiana)	Forest	13.2	4.5	TRUE	60% - 65%
26	1	9/14/2022	White mulberry (Morus alba)	Forest	6.3	4.5	TRUE	45% - 50%
26	2	9/14/2022	Black cherry (Prunus serotina)	Forest	6.5	4.5	TRUE	70% - 75%
26	3	9/14/2022	Black cherry (Prunus serotina)	Forest	10.2	4.5	TRUE	0%
26	4	9/14/2022	Black cherry (Prunus serotina)	Forest	11.6	4.5	TRUE	75% - 80%
26	5	9/14/2022	Black cherry (Prunus serotina)	Forest	10.9	4.5	TRUE	30% - 35%
26	6	9/14/2022	Northern red oak (Quercus rubra)	Forest	12	2.5	TRUE	55% - 60%
26	7	9/14/2022	Northern red oak (Quercus rubra)	Forest	13	4.5	TRUE	70% - 75%
26	8	9/14/2022	American elm (Ulmus americana)	Forest	5.3	4.5	TRUE	85% - 90%

26	9	9/14/2022	Black cherry (Prunus serotina)	Forest	11.1	4.5	TRUE	75% - 80%
26	10	9/14/2022	Pin oak (Quercus palustris)	Forest	10.1	4.5	TRUE	80% - 85%
26	11	9/14/2022	Northern red oak (Quercus rubra)	Forest	17.4	4.5	TRUE	85% - 90%
26	12	9/14/2022	Northern red oak (Quercus rubra)	Forest	9.3	4.5	TRUE	50% - 55%
26	13	9/14/2022	Northern red oak (Quercus rubra)	Forest	10.5	4.5	TRUE	65% - 70%
26	14	9/14/2022	Northern red oak (Quercus rubra)	Forest	5.3	4.5	TRUE	10% - 15%
27	1	9/14/2022	Honeylocust (Gleditsia triacanthos)	Forest	10.5	4.5	TRUE	85% - 90%
27	2	9/14/2022	Honeylocust (Gleditsia triacanthos)	Forest	12.9	4.5	TRUE	90% - 95%
27	3	9/14/2022	White mulberry (Morus alba)	Forest	12.1	4.5	TRUE	80% - 85%
27	4	9/14/2022	Honeylocust (Gleditsia triacanthos)	Forest	16.7	4.5	TRUE	90% - 95%
27	5	9/14/2022	Black cherry (Prunus serotina)	Forest	7.7	4.5	TRUE	0%
27	6	9/14/2022	Pin oak (Quercus palustris)	Forest	9.3	4.5	TRUE	80% - 85%
27	7	9/14/2022	Black cherry (Prunus serotina)		9.2	4.5	TRUE	75% - 80%
				Forest				
27	8	9/14/2022	Black cherry (Prunus serotina)	Forest	11.7	4.5	TRUE	65% - 70%
27	9	9/14/2022	Jack pine (Pinus banksiana)	Forest	13.7	4.5	TRUE	75% - 80%
27	10	9/14/2022	Black cherry (Prunus serotina)	Forest	12.6	4.5	TRUE	75% - 80%
27	11	9/14/2022	Jack pine (Pinus banksiana)	Forest	10.3	4.5	TRUE	0%
27	12	9/14/2022	Jack pine (Pinus banksiana)	Forest	10.5	4.5	TRUE	0%
27	13	9/14/2022	Black cherry (Prunus serotina)	Forest	11	4.5	TRUE	75% - 80%
27	14	9/14/2022	Jack pine (Pinus banksiana)	Forest	13.2	4.5	TRUE	50% - 55%
27	15	9/14/2022	Black cherry (Prunus serotina)	Forest	5.9	4.5	TRUE	0%
27	16	9/14/2022	Red mulberry (Morus rubra)	Forest	5.9	4.5	TRUE	60% - 65%
27	17	9/14/2022	Red mulberry (Morus rubra)	Forest	8.3	4.5	TRUE	70% - 75%
27	18	9/14/2022	Black cherry (Prunus serotina)	Forest	14.5	4.5	TRUE	70% - 75%
28	1	9/14/2022	Northern red oak (Quercus rubra)	Forest	22.6	4.5	TRUE	85% - 90%
28	2	9/14/2022	Northern red oak (Quercus rubra)	Forest	17.4	4.5	TRUE	75% - 80%
28	3	9/14/2022	Northern red oak (Quercus rubra)	Forest	8.7	4.5	TRUE	60% - 65%
28	4	9/14/2022	Northern red oak (Quercus rubra)	Forest	18.6	4.5	TRUE	85% - 90%
28	5	9/14/2022	Black cherry (Prunus serotina)	Forest	9.9	4.5	TRUE	0%
28	6	9/14/2022	Pin oak (Quercus palustris)	Forest	11.1	4.5	TRUE	75% - 80%
28	7	9/14/2022	Red mulberry (Morus rubra)	Forest	6.4	4.5	TRUE	55% - 60%
28	8	9/14/2022	Red mulberry (Morus rubra)	Forest	9.1	4.5	TRUE	25% - 30%
28	9	9/14/2022	Black cherry (Prunus serotina)	Forest	13.3	4.5	TRUE	0%
28	10	9/14/2022	Northern red oak (Quercus rubra)	Forest	7.6	4.5	TRUE	55% - 60%
28	10	9/14/2022			14.7	4.5	TRUE	5% - 10%
			Black cherry (Prunus serotina)	Forest				
28	12	9/14/2022	Red mulberry (Morus rubra)	Forest	8.3	4.5	TRUE	15% - 20%
29	1	9/14/2022	Bur oak (Quercus macrocarpa)	Forest	26.8	4.5	TRUE	0%
29	2	9/14/2022	Red mulberry (Morus rubra)	Forest	5.8	4.5	TRUE	50% - 55%
29	3	9/14/2022	Northern red oak (Quercus rubra)	Forest	13.1	4.5	TRUE	80% - 85%
29	4	9/14/2022	Black cherry (Prunus serotina)	Forest	7.3	4.5	TRUE	70% - 75%
29	5	9/14/2022	Black cherry (Prunus serotina)	Forest	5.7	4.5	TRUE	10% - 15%
29	6	9/14/2022	Black cherry (Prunus serotina)	Forest	14.4	4.5	TRUE	0%
29	7	9/14/2022	Black cherry (Prunus serotina)	Forest	6.7	4.5	TRUE	0%
29	8	9/14/2022	White oak (Quercus alba)	Forest	22.1	4.5	TRUE	80% - 85%
29	9	9/14/2022	White oak (Quercus alba)	Forest	23	4.5	TRUE	80% - 85%
29	10	9/14/2022	Black cherry (Prunus serotina)	Forest	6.2	4.5	TRUE	85% - 90%
29	11	9/14/2022	Black cherry (Prunus serotina)	Forest	17.8	4.5	TRUE	75% - 80%
29	12	9/14/2022	White oak (Quercus alba)	Forest	23.5	4.5	TRUE	85% - 90%
29	13	9/14/2022	Black cherry (Prunus serotina)	Forest	5.4	4.5	TRUE	70% - 75%
29	14	9/14/2022	Pin oak (Quercus palustris)	Forest	25.3	4.5	TRUE	80% - 85%
29	15	9/14/2022	Black cherry (Prunus serotina)	Forest	5.4	4.5	TRUE	75% - 80%
29	16	9/14/2022	Black cherry (Prunus serotina)	Forest	5.9	4.5	TRUE	0%
30	1	9/14/2022	Black cherry (Prunus serotina)	Forest	10.3	4.5	TRUE	60% - 65%
30	2	9/14/2022	American basswood (Tilia americana)	Forest	43.7	3	TRUE	85% - 90%
31	1	9/14/2022	White oak (Quercus alba)	Forest	25.2	4.5	TRUE	80% - 85%
			Boxelder (Acer negundo)					
31	2	9/14/2022		Forest	5.6	4.5	TRUE	80% - 85%
31	3	9/14/2022	Black cherry (Prunus serotina)	Forest	10.1	4.5	TRUE	75% - 80%
31	4	9/14/2022	White oak (Quercus alba)	Forest	22.7	4.5	TRUE	80% - 85%
31	5	9/14/2022	American elm (Ulmus americana)	Forest	5.4	4.5	TRUE	70% - 75%
31	6	9/14/2022	Black cherry (Prunus serotina)	Forest	11.3	4.5	TRUE	0%
31	7	9/14/2022	Black cherry (Prunus serotina)	Forest	9	4.5	TRUE	60% - 65%
31	8	9/14/2022	Black cherry (Prunus serotina)	Forest	8.8	4.5	TRUE	0%
31	9	9/14/2022	Black cherry (Prunus serotina)	Forest	16.5	4.5	TRUE	15% - 20%
31	10	9/14/2022	Red mulberry (Morus rubra)	Forest	10.6	4.5	TRUE	70% - 75%
31	11	9/14/2022	Black cherry (Prunus serotina)	Forest	34.1	4.5	TRUE	25% - 30%
31	12	9/14/2022	Boxelder (Acer negundo)	Forest	5.2	4.5	TRUE	60% - 65%
31	13	9/14/2022	Boxelder (Acer negundo)	Forest	13	4.5	TRUE	70% - 75%
31	14	9/14/2022	Black cherry (Prunus serotina)	Forest	9.4	4.5	TRUE	60% - 65%
			· · · · · ·					

31	15	9/14/2022	Black cherry (Prunus serotina)	Forest	8	4.5	TRUE	0%
31	16	9/14/2022	Black cherry (Prunus serotina)	Forest	9.5	4.5	TRUE	40% - 45%
31	17	9/14/2022	American elm (Ulmus americana)	Forest	10.1	4.5	TRUE	80% - 85%
32	1	9/14/2022	Black cherry (Prunus serotina)	Forest	12.1	4.5	TRUE	80% - 85%
32	2	9/14/2022	Black cherry (Prunus serotina)	Forest	15.5	4.5	TRUE	55% - 60%
32	3	9/14/2022	Black cherry (Prunus serotina)	Forest	7.4	4.5	TRUE	35% - 40%
32	4	9/14/2022	Black cherry (Prunus serotina)	Forest	5.5	4.5	TRUE	15% - 20%
32	5	9/14/2022	Red mulberry (Morus rubra)	Forest	5.8	4.5	TRUE	55% - 60%
32	6	9/14/2022	Black cherry (Prunus serotina)	Forest	11.8	4.5	TRUE	70% - 75%
32	7	9/14/2022	Northern red oak (Quercus rubra)	Forest	32.8	4.5	TRUE	70% - 75%
32	8	9/14/2022	White oak (Quercus alba)	Forest	23.6	4.5	TRUE	80% - 85%
32	9	9/14/2022	Black cherry (Prunus serotina)	Forest	6.8	4.5	TRUE	80% - 85%
32	10	9/14/2022	Black cherry (Prunus serotina)	Forest	7	4.5	TRUE	75% - 80%
32	11	9/14/2022	Black cherry (Prunus serotina)	Forest	6.2	4.5	TRUE	35% - 40%
32	12	9/14/2022	White oak (Quercus alba)	Forest	22.2	4.5	FALSE	85% - 90%
32	13	9/14/2022	Black cherry (Prunus serotina)	Forest	8.5	4.5	TRUE	55% - 60%
32	14	9/14/2022	Black cherry (Prunus serotina)	Forest	6.5	4.5	TRUE	75% - 80%
32	15	9/14/2022	Black cherry (Prunus serotina)	Forest	5.4	4.5	TRUE	75% - 80%
32	16	9/14/2022	White oak (Quercus alba)	Forest	17.5	4.5	TRUE	85% - 90%
32	17	9/14/2022	Northern red oak (Quercus rubra)	Forest	36.9	4.5	TRUE	80% - 85%
32	18	9/14/2022	White oak (Quercus alba)	Forest	26.8	4.5	TRUE	80% - 85%
32	19	9/14/2022	Red mulberry (Morus rubra)	Forest	7.1	4.5	TRUE	80% - 85%

### **Carbon Biomass**

Location: Bull Valley, McHenry, Illinois, United States of America Project: ThompsonRoad, Series: ThompsonRoad, Year: 2022 Generated: 9/14/2022

Species	Tree	s	Carbon Storag	
	Number	SE	(metric ton)	SE
Boxelder	150	±59	15.56	±6.34
Northern hackberry	13	±12	0.37	±0.36
Honeylocust	38	±36	9.99	±9.58
Black walnut	13	±12	1.13	±1.08
apple spp	13	±12	0.52	±0.50
White mulberry	25	±17	2.57	±2.07
Red mulberry	263	±66	25.92	±8.70
Jack pine	125	±85	19.39	±13.34
Eastern white pine	13	±12	1.24	±1.19
Black cherry	2,081	±186	474.51	±68.16
White oak	589	±132	827.27	±193.31
Bur oak	100	±34	102.19	±48.22
Pin oak	251	±79	188.60	±72.37
Northern red oak	790	±210	351.09	±101.78
American basswood	13	±12	41.81	±40.11
American elm	50	±29	3.60	±2.24
Total	4,525	<b>±326</b>	2,065.74	±203.22

i-Tree

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 2,065.74. The standard error is 203.22

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

(2,065.74 - 203.22)/35.1 = 53.06 (cell B11 on attachment 9)

Tree Characteristics Chart(s)

### I. Tree Characteristics of the Urban Forest

The urban forest of ThompsonRoad has an estimated 4,526 trees with a tree cover of 90.0 percent. The three most common species are Black cherry (46.0 percent), Northern red oak (17.4 percent), and White oak (13.0 percent).

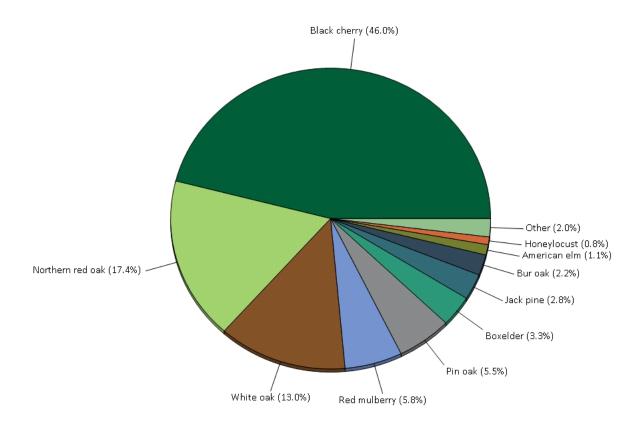


Figure 1. Tree species composition in ThompsonRoad

The overall tree density in Thompson Road is 319 trees/hectare.

iTree Canopy Report

# i-Tree Canopy

600038

## Cover Assessment and Tree Benefits Report

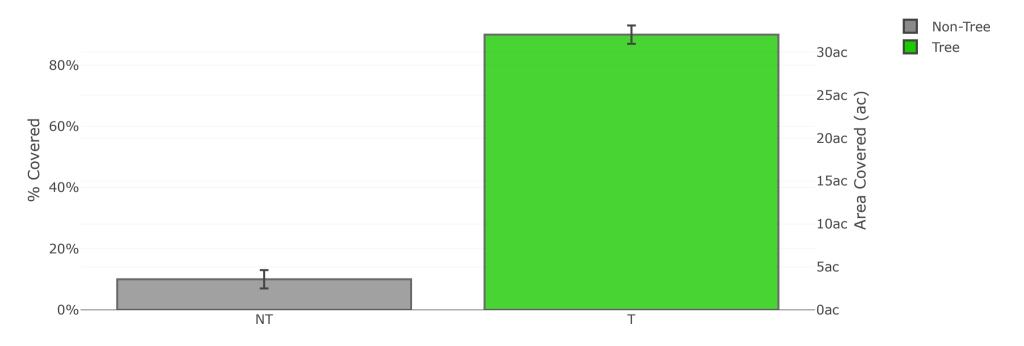
Estimated using random sampling statistics on 9/2/2022





Imagery  $\textcircled{\sc c}2022$  , Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO





Cover Class

Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
NT	Non-Tree	All other surfaces	10	$10.00 \pm 3.00$	3.56 ± 1.07
Т	Tree	Tree, non-shrub	90	90.00 ± 3.00	32.05 ± 1.07
Total			100	100.00	35.61

## Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO <sub>2</sub> Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	40.46	±1.35	148.35	±4.95	\$6,901	±230
Stored in trees (Note: this benefit is not an annual rate)	1,098.70	±36.62	4,028.55	±134.28	\$187,383	±6,246

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 1.262 T of Carbon, or 4.629 T of CO<sub>2</sub>, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO<sub>2</sub>, per ac and rounded. Value (USD) is based on \$170.55/T of Carbon, or \$46.51/T of CO<sub>2</sub> 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
СО	Carbon Monoxide removed annually	28.70	±0.96	\$6	±0
NO2	Nitrogen Dioxide removed annually	440.96	±14.70	\$24	±1
O3	Ozone removed annually	1,225.31	±40.84	\$281	±9
SO2	Sulfur Dioxide removed annually	49.31	±1.64	\$1	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	57.93	±1.93	\$568	±19
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	341.47	±11.38	\$494	±16
Total		2,143.66	±71.46	\$1,375	±46

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 0.895 @ \$0.21 | NO2 13.759 @ \$0.06 | O3 38.232 @ \$0.23 | SO2 1.538 @ \$0.02 | PM2.5 1.807 @ \$9.81 | PM10\* 10.654 @ \$1.45 (English units: lb = pounds, ac = acres)

## Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	135.36	±4.51	\$1,210	±40
E	Evaporation	1,739.55	±57.98	N/A	N/A
1	Interception	1,739.55	±57.98	N/A	N/A
Т	Transpiration	3,836.41	±127.88	N/A	N/A
PE	Potential Evaporation	17,480.45	±582.68	N/A	N/A
PET	Potential Evapotranspiration	11,855.56	±395.19	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 Kgal/ac/yr @ \$/Kgal/yr and rounded:

AVRO 4.223 @ \$8.94 | E 54.277 @ N/A | I 54.277 @ N/A | T 119.702 @ N/A | PE 545.419 @ N/A | PET 369.913 @ N/A (English units: Kgal = thousands of 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

					Total
	Deciduous Tree	Coniferous Tree	Total Tree		Project
	Cover	Cover	Cover	Non-Tree	Area
Percent (%)	90%	0%	90%	10%	100%
Area (sq miles)	0.049	0.000	0.049	0.005	0.05
Area (m2)	127,839	0	127,839	14,204	142,044
Area (acres)	31.59	0.00	31.59	3.51	35.10

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

Ecosystem Services	Resource Units Totals	Total \$
Rain Interception (m3/yr)	8,545.4	\$61,183.65
Air Quality (t/yr)		
03	0.1631	\$247.04
NOx	0.0272	\$41.23
PM10	0.0834	\$107.48
Net VOCs	0.0839	\$142.76
Air Quality Total	0.3576	\$538.51
Energy (kWh/yr & kBtu/yr)		
Cooling - Elec.	67,269	\$5,105.70
Heating - Nat. Gas	1,257,810	\$12,244.50
Energy Total (\$/yr)		\$17,350.20
Grand Total (\$/yr)		\$79,072.36

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

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:

- $\boxtimes$  Plant or protect trees to reduce or remove air pollutants
- $\Box$  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
- $\Box$  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
- $\square$  Reduce stormwater runoff or improve infiltration rates
- □ Design project to reduce human exposure to specific pollutants or toxins
- □ Other

The project will protect a 35.1 acre oak woodland that will continue to remove air pollution in the general area of the project. Additionally, the woodland is part of a larger property that is a new recreation area (275 acres total), that includes over 5 miles of trails that are available to the public for non-motorized recreation. The property is surrounded by residential development, and within 15 minutes of the City of Woodstock, so is in an ideal location to serve the community. Finally, the project includes work to restore and manage the oak woodland over the coming years to enhance habitat for a diversity of species including both pileated and red-headed woodpeckers, wild turkeys and a variety of migratory bird species that need open oak woodland habitat.

### 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:

- $\Box$  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
- $\Box$  Prevent soil erosion by protect steep slopes
- $\boxtimes$  Improve infiltration rates
- □ Improve, mitigate, or remediate toxic landscapes and human exposure to risk
- $\Box$  Drought resistance, such as selecting appropriate water-efficient trees for project climate zone
- $\Box$  Other

Restoration of the oak woodland will enhance water infiltration which will in turn reduce run-off and improve groundwater recharge in the area. Combined with the restoration of the surrounding, 275-acre property, woodland will have a valuable impact on stormwater and both water quality & quantity in this area.

### **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
- $\Box$  Other

TLC will work with local contractors to restore the site, and will use restoration work as an opportunity to train summer interns in skills needed for a career in conservation and land restoration.

### **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
- $\square$  Research and consider potential for gentrification and displacements
- Promote local economic opportunities through workforce training, career pathway development, or other employment
- □ Other

Signs will be provided in English and Spanish to reflect the 20% Latino/a population in McHenry County, and to make the site welcoming to all members of the community.

Community listening sessions will be held throughout development of the project to determine the uses and restrictions that are desired both by neighbors and the community at large, so that we can maximize benefits and minimize conflicts.

### **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

Community listening sessions will be held throughout development of the project to determine the uses and restrictions that are desired both by neighbors and the community at large, so that we can maximize benefits and minimize conflicts. Additionally, the woodland is part of a larger property that is a new recreation area (275 acres total), that includes over 5 miles of trails that are available to the public for non-motorized recreation. The property is surrounded by residential development, and within 15 minutes of the City of Woodstock, so is in an ideal location to serve the community.

## **SDG 12 - Responsible Production and Consumption**

Goal: Ensure sustainable consumption and production patterns

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

- $\Box$  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

 $\Box$  Other

### **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
- $\Box$  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
- $\boxtimes$  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
- oxtimes Plant or protect trees to reduce stormwater runoff
- □ Select water-efficient trees for climate zone and drought resistance
- $\boxtimes$  Create and/or enhance wildlife habitat
- Other

This project will protect trees to reduce or remove air pollutants and reduce stormwater runoff through effective restoration of the oak woodland habitat. Restoration will also improve soil health and enhance wildlife habitat for a diversity of species, especially birds such as pileated and redheaded woodpeckers, migratory bird species and wild turkeys.

The project will also promote community capacity for social and climate resilience by engaging local residents and volunteers in land management and educational programs about the importance of old-growth woodland preservation.

## 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

 $\Box$  Plant or protect trees in project areas to reduce stormwater runoff

 $\Box$  Plant forested buffers adjacent to streams, rivers, wetlands, or floodplains

 $\Box$  Prevent soil erosion into by protecting steep slopes

 $\Box$  Improve infiltration rates

 $\Box$  Improve, mitigate, or remediate toxic landscapes and human exposure to risk

- □ Drought resistance, such as selecting appropriate water-efficient trees for project climate zone
- $\Box$  Enhance wildlife habitat, such as riparian habitat for fish, birds, and other animals

 $\Box$  Other

### 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:

 $\boxtimes\,$  Plant or protect trees to reduce stormwater runoff

 $\hfill\square$  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

 $\Box$  Prevent soil erosion by protect steep slopes

 $\boxtimes$  Improve infiltration rates

 $\Box$  Other

This project will protect trees to reduce stormwater runoff, enhance wildlife habitat to improve local biodiversity and Restoration of the oak woodland will enhance water infiltration which will in turn reduce run-off and improve groundwater recharge in the area. Combined with the restoration of the surrounding, 275-acre property, woodland will have a valuable impact on stormwater and both water quality & quantity in this area.

### 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
- $\Box$  Other

The woodland is part of a larger property that is a new recreation area (275 acres total), that includes over 5 miles of trails that are available to the public for non-motorized recreation. Signs will be in English and Spanish to serve the 20%+ Latino population in McHenry County. The project will also promote community capacity for social and climate resilience by engaging local residents and volunteers in land management and educational programs about the importance of old-growth woodland preservation. Listening sessions will be held throughout project development to engage a wide diversity of residents and stakeholders in the project's design.

## **Summary of Project Social Impacts**



The project will protect a 35 acre oak woodland that will continue to remove air pollution in the general area of the project. Additionally, the woodland is part of a larger property that is a new recreation area (275 acres total), that includes over 5 miles of trails that are available to the public for non-motorized recreation. The property is surrounded by residential development, and within 15 minutes of the City of Woodstock, so is in an ideal location to serve the community.



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the coming years to enhance habitat for a diversity of species including both pileated and red-headed woodpeckers, wild turkeys and a variety of migratory bird species that need open oak woodland habitat.

