

IOWA DEPARTMENT OF NATURAL RESOURCES (DNR)

REQUEST FOR PROPOSAL - INFORMAL

RFP COVER SHEET

Administrative Information:

TITLE OF RFP: Iowa Street and Park Tree Inventories and Urban Forest Management Plans 2023 **RFP Number:** 23CRDFRBEHANI-0001

Bureau: Forestry Section

DNR seeks to purchase: Services from a qualified Respondent to complete the Iowa Street and Park Tree Inventories and Urban Forest Management Plans 2023

Number of mos. or yrs. of the initial term of the contract:

1 year

Number of possible annual extensions:

Tentative Contract term start date: June 8, 2023

Tentative Contract term end date: May 31, 2024

DNR Issuing Officer: Philip Payton
515-361-0743
philip.payton@dnr.iowa.gov
502 E. 9th Street
Des Moines, IA 50319

PROCUREMENT TIMETABLE—Event or Action:

Date/Time (Central Time):

DNR Issues RFP

Date 4/3/2023

Site Visit Location and Address:

Multiple

RFP written questions, requests for clarification, and suggested changes from Respondents are due:

May 5, 2023

DNR's written response to RFP questions, requests for clarifications, and suggested changes are due: May 12, 2023

Proposals Due Date:

May 15, 2023

Proposals Due Time:

12:00 PM CST

Anticipated Date to Issue Notice of Intent to Award:

May 19, 2023

Anticipated Date to Execute Contract:

June 8, 2023

Relevant Websites:

Web-address:

Internet website where Addenda to this RFP will be posted:

<http://bidopportunities.iowa.gov/>

Internet website where contract terms and conditions are posted:

[https://das.iowa.gov/sites/default/files/procurement/pdf/050116%20terms%20services.p](https://das.iowa.gov/sites/default/files/procurement/pdf/050116%20terms%20services.pdf)
[df](https://das.iowa.gov/sites/default/files/procurement/pdf/050116%20terms%20goods.pdf)
<https://das.iowa.gov/sites/default/files/procurement/pdf/050116%20terms%20goods.pdf>
<http://iowadnr.gov/About-DNR/RFP-Bid-Lettings>

SECTION 1 INTRODUCTION

1.1 Purpose

The purpose of this Informal Request for Proposals (RFP) is to solicit proposals from Responsible Respondents to provide the goods and/or services identified on the RFP cover sheet and further described in Section 4 of this RFP. The DNR tentatively intends to award a Contract(s) beginning and ending on the dates listed on the RFP cover sheet, and the DNR, in its sole discretion, may extend the Contract(s) for up to the number of annual extensions identified on the RFP cover sheet.

“Responsible Respondent” means a Respondent that has the capability in all material respects to perform the scope of work and specifications of the Contract. In determining whether a Respondent is a Responsible

Respondent, the DNR may consider various factors including, but not limited to, the Respondent's competence and qualifications to provide the goods or services requested, the Respondent's integrity and reliability, the past performance of the Respondent and the best interest of the DNR.

"Responsive Proposal" means a Proposal that complies with the material provisions of this RFP.

1.2 Overview of the RFP Process

This RFP is designed to provide Respondents with the information necessary for the preparation of competitive Proposals. The RFP process is for the DNR's benefit and is intended to provide the DNR with competitive information to assist in the selection process. It is not intended to be comprehensive. Each Respondent is responsible for determining all factors necessary for submission of a comprehensive Proposal.

Respondents will be required to submit their Proposals in written format by hand delivery, hard copy mail, fax or e-mail to the Issuing Officer. It is the DNR's intention to evaluate Proposals from all Respondents that submit timely Responsive Proposals, and award the Contract(s) in accordance with Section 5, Evaluation and Selection.

1.3 Background Information

The DNR is seeking a qualified Respondent to:

- Inventory, or in some cases confirm and re-inventory, street and park trees in Iowa communities;
- Visually survey all trees for signs and symptoms of invasive pest and disease in each community, and return, via e-mail, data to the DNR in the file geodatabase schema provided by the DNR;
- Calculate the benefit of the trees using i-Tree STREETS or ECO and create maps of the trees with GPS data locations;
- Complete an urban forest management plan for each community inventoried; and
- Present an urban forest management plan to each community.

If a previous inventory exists it will be provided to the successful Respondent. The successful Respondent must confirm on existing trees the following items from Attachment A, Data Collection Technical Information: 1-7, 11, and 12 and collect items 8-10 and 13-33. Additionally, the successful Respondent must update trees that have been removed and collect all data for new trees. Past inventories can be found using:

<https://iowadnr.maps.arcgis.com/apps/opstdashboard/index.html#/4ca02e19ef6a4a278583fb40eeb957a1>

SECTION 2 ADMINISTRATIVE INFORMATION

2.1 Issuing Officer

The Issuing Officer identified in the RFP cover sheet is the sole point of contact regarding the RFP from the date of issuance until a Notice of Intent to Award the Contract is issued.

2.2 Restriction on Communication

From the issuance date of this RFP until a Notice of Intent to Award the Contract is issued, Respondents may contact only the Issuing Officer. The Issuing Officer will respond only to written questions regarding the procurement process. Questions related to the interpretation of this RFP must be submitted as provided in Section 2.3. Oral questions related to the interpretation of this RFP will not be accepted. Respondents may be disqualified if they contact any DNR employee other than the Issuing Officer.

2.3 Questions, Requests for Clarification, and Suggested Changes

Respondents are invited to submit written questions and requests for clarifications regarding the RFP. Respondents may also submit suggestions for changes to the specifications of this RFP. The questions, requests for clarifications, or suggestions must be in writing and received by the Issuing Officer on or before the date and time listed on the RFP cover sheet. Oral questions will not be permitted. If the questions, requests for clarifications, or suggestions pertain to a specific section of the RFP, Respondent will reference the page and section number(s). The DNR will send written responses to questions, requests for clarifications, or suggestions received from Respondents on or before the date listed on the RFP cover sheet. The DNR's written responses will become an

addendum to the RFP. If the DNR decides to adopt a suggestion that modifies the RFP, the DNR will issue an addendum to the RFP.

The DNR assumes no responsibility for oral representations made by its officers or employees unless such representations are confirmed in writing and incorporated into the RFP through an addendum.

2.4 Amendment to the RFP

The DNR reserves the right to amend the RFP at any time using an addendum. The Respondent will acknowledge receipt of all addenda in its Proposal. If the DNR issues an addendum after the due date for receipt of Proposals, the DNR may, in its sole discretion, allow Respondents to amend their Proposals in response to the addendum.

2.5 Submission of Proposals

The DNR must receive the Proposal in written format by hand delivery, fax, hard copy mail, or email at the Issuing Officer's address, fax number, or email identified on the RFP cover sheet before the "Proposals Due" date and time listed on the RFP cover sheet. **This is a mandatory specification and will not be waived by the DNR. Any Proposal received after this deadline will not be considered.** Respondents who hard copy mail proposals must allow ample mail delivery time to ensure timely receipt of their proposals. It is the Respondent's responsibility to ensure that the proposal is received by the DNR Issuing Officer prior to due date and time. Postmarking by the due date will not substitute for actual receipt of the proposal.

Respondents must furnish all information necessary to enable the DNR to evaluate the Proposal. Oral information provided by the Respondent will not be considered part of the Respondent's Proposal unless it is reduced to writing.

2.6 Costs of Preparing the Proposal

The costs of preparation and delivery of the Proposal are solely the responsibility of the Respondent.

2.7 No Commitment to Contract

The DNR reserves the right to reject any or all Proposals received in response to this RFP, cancel this RFP, or advertise a new RFP at any time prior to the execution of the Contract. Issuance of this RFP in no way constitutes a commitment by the DNR to award a contract.

2.8 Nonmaterial Variances

The DNR reserves the right to determine whether a Bid substantially complies with the requirements of this RFP. Nonmaterial variances are not necessarily disqualifying. The determination of materiality is in the sole discretion of the DNR.

2.9 Public Records and Requests for Confidential Treatment

You may request confidential treatment of specific information included in your proposal submitted in response to this RFP. Requesting confidential treatment of any item of information does not necessarily mean that confidential treatment will be granted.

You must provide a copy of your proposal where you have deleted the information for which confidential treatment is requested. The confidential status of the deleted information is not established until DNR has made a determination that it is appropriate to allow confidential treatment for the specific document containing that item of information.

In order to request confidential treatment, you must comply with the provisions of 561 Iowa Administrative Code Chapter 2, which may be found at the following location:

<https://www.legis.iowa.gov/law/administrativeRules/agencies>. 561 Iowa Administrative Code Section 2.5(7) provides that all claims for confidential treatment made to the Iowa Department of Natural Resources must be substantiated in writing with the following information:

- 1) A statement of all measures the business has taken to protect the confidentiality of the information, and a

statement of intent to continue to take such measures;

- 2) Practices and policies of other businesses, if known, regarding confidentiality of similar information;
- 3) A statement that the information is not, and has not been, reasonably attainable without the consent of the business by other persons other than government bodies by use of legitimate means;
- 4) A statement demonstrating that disclosure of the information is likely to cause substantial harm to the business's competitive position; and
- 5) A reference to any other determinations of confidential status of the information or similar information.

2.10 Release of Claims

By submitting a Proposal, the Respondent agrees that it will not bring any claim or cause of action against the DNR based on any misunderstanding concerning the information provided in the RFP or concerning the DNR's failure, negligent or otherwise, to provide the Respondent with pertinent information in this RFP.

2.11 Evaluation of Proposals Submitted

Proposals that are timely submitted and are not rejected will be reviewed and evaluated in accordance with Section 5 of the RFP. The DNR will not necessarily award a Contract resulting from this RFP to the Respondent offering the lowest cost. Instead, the DNR will award the Contract(s) to the Responsible Respondent(s) whose Responsive Proposal the DNR believes will provide the best value to the DNR.

2.12 Award Notice and Acceptance Period

Notice of Intent to Award the Contract(s) will be sent to all Respondents submitting a timely Proposal and may be posted to the website shown on the RFP cover sheet. Negotiation and execution of the Contract(s) will be completed no later than thirty (30) days from the date of the Notice of Intent to Award or such other time as designated by DNR. If the successful Respondent fails to negotiate and deliver an executed Contract by that date, the DNR, in its sole discretion, may cancel the award and award the Contract to the remaining Respondent the DNR believes will provide the best value to the DNR.

2.13 No Contract Rights until Execution

Respondent will not acquire any legal or equitable rights regarding the Contract unless and until the Contract has been fully executed by the successful Respondent and the DNR.

SECTION 3 FORM AND CONTENT OF PROPOSALS

3.1 Instructions

These instructions prescribe the required format and content of the Proposal. They are designed to facilitate a uniform review process. The Proposal will be typewritten and divided into two parts: (1) the Technical Proposal and (2) the Cost Proposal.

3.1.1 If a Respondent proposes more than one solution to the RFP specifications, each will be labeled and submitted in a separate Proposal and each will be evaluated separately.

3.2 Technical Proposal

The following Respondent information will be included in the Technical Proposals. Items listed in Section 3.2 will be considered in the evaluation and scoring of the Technical Proposals:

3.2.1 Executive Summary

The Respondent will prepare an executive summary and overview of the goods and/or services it is offering, including all of the following information:

3.2.1.1 An overview of the Respondent's business and nature of business.

3.2.1.2 Statements that demonstrate that the Respondent has read, understands and agrees with the Terms and Conditions of the RFP including the Contract provisions in Section 6.

- 3.2.1.3** An overview of the Respondent’s plans for complying with the Specifications and Scope of Work of this RFP.
- 3.2.1.1** Documentation for DNR verification that the Service Provider meets the “minimum qualifications/equipment specifications” listed in the Informal RFP
- 3.2.1.4** Name, address and telephone number of the Respondent’s Representative to contact regarding all contractual and technical matters concerning the Proposal.
- 3.2.1.5** Name, contact information and qualifications of any subcontractors who will be involved with this project that the Respondent proposes to use and the nature of the goods and/or services the subcontractor would perform.

3.2.2 Experience

The Respondent must provide the following information regarding its experience:

- 3.2.1.2** Résumé, including experience conducting urban tree inventories and or urban forest management plans.
- 3.2.1.3**
- 3.2.1.4** A Forestry or related Natural Resource degree, or 2) 5 years’ experience in forestry, or 3) be an International Society of Arboriculture Certified Arborist. This qualification must be provided in the bid cover letter or resume. If providing International Society of Arboriculture Certification please provide the certification number.

3.3 Cost Proposal

The Respondent will provide its Cost Proposal with the proposal for the proposed goods and services using Attachment #5 – Cost Proposal.

SECTION 4 DESCRIPTION OF WORK AND SCOPE OF WORK

Overview

The successful Respondent will provide the services to the DNR in accordance with the requirements as provided in this Scope of Work.

4.1 Scope of Work. The DNR requests that qualified Respondents submit proposals for street and park tree inventories for the following Iowa communities:

Table 1. Survey Communities

Community	County	Population	Last Plan
DeWitt	Clinton	5,215	2017
Garner	Hancock	1,266	2016
Garwin	Tama	481	2016
Humboldt	Humboldt	4,792	2017
Jewell	Hamilton	1,216	2014
Kingsley	Plymouth	1,396	2013
Livermore	Humboldt	381	2017
Manson	Calhoun	1,709	2016
Nashua	Chickasaw	1,551	2016
Osage	Mitchell	3,627	2016

Pierson	Woodbury	337	2017
Prairie City	Jasper	1,700	2014
St. Charles	Madison	640	2014
Stanhope	Hamilton	364	2016
Wall Lake	Sac	755	2017

Statement of Work. Contractor will perform the following Tasks by the Task Milestone Dates identified in the following table:

Deliverables	Task Milestone Date
Task 1: Inventory of Street and Park Trees Description: Contractor must inventory street and park trees in each community identified in Table 1. The inventory must be performed using GPS equipment or other GIS-compatible data collection hardware. Data collection must be done in accordance with the data collection technical information available as Attachment A.	November 1, 2023
Task 2: Visually Survey All Trees Description: Contractor must visually survey all trees in each community for signs and symptoms of invasive pest and disease.	November 1, 2023
Task 3: Confirmation of Data Accuracy Description: Contractor must confirm the accuracy of the collected data and cross check collected points in software to confirm they are within reasonable distance (2-5 meters) to each tree when compared against the state's aerial imagery. One of the imagery services listed below must be used for comparison unless the Contractor has access to newer reference material, approved by DNR. <ul style="list-style-type: none"> • https://ortho.gis.iastate.edu/arcgis/rest/services/ortho The Contractor must correct any errors before submission to the DNR.	December 1, 2023
Task 4: i-Tree STREETS Description: Contractor must calculate the benefits of the inventoried street and park trees using the most current version of i-Tree STREETS. Contractor must create maps of the trees, with GPS data locations, for each urban forest management plan.	May 1, 2024
Task 5: Urban Forest Management Plans Description: Using the urban forest management plan template, the inventory data analysis, and a file geodatabase that includes the fields for the necessary data collection provided by the DNR, the Contractor must create an urban forest management plan for each community inventoried that includes the maps of the inventoried trees by GPS data location. The Contractor must submit all plans to the DNR Project Manager for approval prior to finalization.	May 1, 2024

Note: Respondents are given notice that this is a DNR project requiring **ALL** Tasks to be completed. The DNR will enter into a Contract under the terms that no payment for deliverables will be provided until all Tasks have been invoiced and approved by the DNR.

4.2 Respondent Requirements, Minimum Qualifications/Equipment Specifications: In order for proposals to be considered for evaluation, the following minimum qualifications are required: Respondent have

- 4.2.1** A Forestry or related Natural Resource degree, or
- 4.2.2** 5 years' experience in forestry, or
- 4.2.3** Be an International Society of Arboriculture Certified Arborist.

These qualifications must be provided in the bid cover letter or resume. If providing International Society of Arboriculture Certification, please provide the certification number.

SECTION 5 EVALUATION AND SELECTION

5.1 Introduction

This section describes the evaluation process that will be used to determine which Proposal(s) provides the greatest benefit to the DNR. DNR will not necessarily award the Contract to the Respondent offering the lowest cost to the DNR. Instead, the DNR will award to the Respondent whose Responsive Proposal the DNR believes will provide the best value to the DNR.

5.2 Evaluation Committee

The DNR will conduct a comprehensive, fair, and impartial evaluation of Proposals received in response to this RFP. The DNR will use an Evaluation Committee to review and evaluate the Technical Proposals. The DNR Evaluation Committee will make its technical recommendation using the following technical criteria, which are listed in no particular order:

- a. Total cost of the Inventory;
- b. Brief Company Overview including your capacity to complete the Statement of Work;
- c. Work Plan including time frame, if not already specified by DNR, for completing the Statement of Work;
- d. Past performance of work that is identical or similar to the Statement of Work identified; Experience conducting street inventories and writing urban forestry management plans;
- e. Experience and references that demonstrate, to the satisfaction of DNR, the expertise and ability of the Respondent to provide the Statement of Work described in the Informal RFP;
- f. The capacity of the Respondent to complete responsibilities described in the Statement of Work;
- g. Mechanism for creation and delivery of GIS file geodatabase.

SECTION 6 CONTRACT TERMS AND CONDITIONS

6.1 Contract Terms and Conditions

By submitting a response, each Respondent acknowledges its acceptance of the Terms and Conditions of the contract template “DNR Standard Contract Conditions” and “General Conditions” found at <http://www.iowadnr.gov/About-DNR/RFP-Bid-Lettings>.

If a Respondent takes exception to a contract provision, then the Respondent must state the specific exception and the reason for the exception, and must attach to its “Respondent Cost Proposal” the specific contract language it proposes to include as an alternative to the provision. Contract provision exceptions that materially change the terms or the requirements of this informal bidding process may be deemed non-responsive by the DNR, as determined in its sole discretion, resulting in possible disqualification of the Respondent’s quote. With regard to the “DNR Standard Contract Conditions,” DNR and the successful Respondent may agree to modifications to the terms of the “DNR Standard Contract Conditions” as necessary to negotiate the terms of a contract. A Respondent’s failure to state an exception to any contract provision and propose alternative language may be deemed by the DNR to constitute the Respondent’s acceptance thereof. The DNR reserves the right to refuse to enter into a contract with the successful Respondent for any reason, even after delivery of the Intent to Award a Contract.

6.2 Contract Length

The term of the Contract will tentatively begin and end on the dates indicated on the RFP cover sheet.

The DNR will have the sole option to amend the contract resulting from this Informal RFP for subsequent periods, adding up to no more than six years total from the beginning date of the original contract, by executing a signed amendment prior to the expiration of the original contract.

6.3 Insurance

The Contract will require the successful Respondent to maintain insurance coverage(s) in accordance with the insurance provisions of the General Terms and Conditions and of the type and in the minimum amounts set forth below, unless otherwise required by the DNR.

TYPE OF INSURANCE	LIMIT	AMOUNT
General Liability (including contractual liability) written on an occurrence basis	General Aggregate Products	\$2 million
	Comp/Op Aggregate	\$1 Million
	Personal injury	\$1 Million
Automobile Liability (including contractual liability) written on an occurrence basis	Each Occurrence	\$1 Million
	Combined single limit	\$1 Million
Property Damage	Each Occurrence	\$1 Million
	Aggregate	\$1 Million
Workers Compensation and Employer Liability	As Required by Iowa law	As required by Iowa law

The Contractor is required to submit a Certificate of Insurance, which indicates coverage and notice provisions as required. The Insurer will state in the certificate that no cancellation of the insurance may be made without at least thirty (30) days written notice to the DNR. Acceptance of the insurance certificates by the DNR will not act to relieve the Contractor of any obligation under this Contract. It will be the responsibility of Contractor to keep the respective insurance policies and coverages current and in force during the life of this Contract. Contractor will be responsible for all premiums, deductibles, and for any inadequacy, absence or limitation of coverage. The Contractor will have no claim or other recourse against the DNR for any costs or loss attributable to any of the foregoing, all of which will be borne solely by the Contractor. Notwithstanding any other provision of this Contract, Contractor will be fully responsible and liable for meeting and fulfilling all of its obligations under this section of the Contract.

ATTACHMENT #5 - COST PROPOSAL**Payment Terms**

Per Iowa Code § 8A.514 the DNR of Iowa is allowed sixty (60) days to pay an invoice submitted by a vendor.

What discount will you give for payment in 15 days? _____

What discount will you give for payment in 30 days? _____

Cost Proposal

Respondent's Cost Proposal will include an all-inclusive, itemized, total cost in U.S. Dollars (including all travel, expenses, etc. in prices). All pricing to be FOB Destination, freight cost and all expenses included; and based on Net 60 Days Payment Terms. The following template is required. Please use additional pages to provide any additional narrative support for the costing information.

Task	Unit Cost	Time Frame	Total Costs
Task 1: Inventory of Street and Park Trees	Quantity: 15 \$ / inventory	By November 1, 2023	\$
Task 2: Visually Survey All Trees	Quantity: 15 \$ / survey	By November 1, 2023	\$
Task 3: Confirmation of Data Accuracy	Quantity: 15 \$ / dataset	By December 1, 2023	\$
Task 4: i-Tree	Quantity: 15 \$ / dataset	By May 1, 2024	\$
Task 5: Urban Forest Management Plans	Quantity: 15 \$ / plan	By May 1, 2024	\$
Task 6: Present Plan to Each Community	Quantity: 15 \$ / presentation	By May 1, 2024	\$
			\$

Respondent has read and understands that this RFP requires all Tasks to be completed and payment for deliverables will not be provided until the last Task has been invoiced and approved by the DNR.

Respondent has read and agrees to this section: ☐ Yes ☐ No

Signature: _____

Date: _____

Printed Name and Title: _____

Name of Contractor Organization: _____

Address: _____

Phone: _____ E-mail: _____

Attachment A

Data Collection Technical Information

Tree inventory GPS hardware must be capable of collecting tree locations within 2-5 meter horizontal accuracy. A Tree Inventory Data Collection software must be capable of creating geographic data that can be incorporated into an existing tree inventory in Geographic Information System (GIS) format. The DNR will provide an ESRI file geodatabase schema to the successful Respondent that includes the fields for the necessary data collection. The information for each tree must include:

1. **Tree ID Number** - Must be left blank.

2. **Zone** – An alphanumeric code or name that represents the management area or zone. If no zones or areas are associated with inventoried trees, 1 is entered for each record.
3. **Street Segment** - a numeric code to identify the street segment within a city where the tree is located. For full inventories, 0 (zero) is entered for each record.
4. **City Managed** - a numeric code to distinguish trees owned by the city (1) and those privately managed (2). If private trees were not included, 1 should be entered for each record.
5. **Species Code** – an alphanumeric code consisting of the first two letters of the genus name and the first two letters of the species name followed by two optional letters or numbers to distinguish two species with the same four-letter code.
6. **Land Use** - 1 = Single-family residential, 2 = Multi-family residential (duplex, apartments, condos), 3 = Industrial/large commercial, 4 = Park/vacant/other (agricultural, riparian areas, greenbelts, park, etc.), 5 = Small commercial (minimart, retail boutiques, etc.)
7. **Location Site** – a numeric code to describe the kind of site where the tree is growing. The default values are as follows: 1 = Front yard (If there is no sidewalk), 2 = Planting strip (between the street and sidewalk), 3 = Cutout (tree root growth restricted on all four sides by hardscape within dripline), 4 = Median (in the center of the street), 5 = Other maintained locations, 6 = Other un-maintained locations, 7 = Backyard (If there is not sidewalk)
8. **DBH** – diameter at 4.5 ft in the following size ranges- 1 = 0–3 inches, 2 = 3–6 inches, 3 = 6–12 inches, 4 = 12–18 inches, 5 = 18–24 inches, 6 = 24–30 inches, 7 = 30–36 inches, 8 = 36–42 inches, 9 = 42 plus inches
9. **Recommended Maintenance** - 1 = None – tree does not need immediate or routine maintenance, 2 = Young tree (routine) – tree is less than 18 ft. tall and in need of maintenance; health or longevity of tree is not compromised by deferring maintenance for up to five years, Young tree (immediate) – tree is less than 18 ft. tall and in need of maintenance; deferring maintenance beyond one to three years would compromise health or longevity of tree, Mature tree (routine) – tree is more than 18 ft. tall and in need of maintenance; health or longevity of tree is not compromised by deferring maintenance for up to five years, Mature tree (immediate) – tree is more than 18 ft. tall and in need of maintenance; deferring maintenance beyond one to three years would compromise health or longevity of tree, or Critical concern (public safety) – tree should be inspected without delay.
10. **Priority Task** - 1 = None – tree does not need maintenance, 2 = Stake/train – staking or training needed to encourage a straight trunk, strong scaffold branching, or eliminate multiple leaders, crossing branches, and girdling ties. Includes removing or replacing stakes and ties to prevent damage to tree bole, 3 = Clean – crown needs cleaning to remove dead, diseased, damaged, poorly attached, or crossing branches to increase health or longevity of tree, 4 = Raise – crown should be raised by removing lower branches from the tree trunk to eliminate obstructions or clearance issues, 5 = Reduce – crown should be reduced/thinned by pruning to

reduce tree height, spread, overcrowding, wind resistance, or an increase of light penetration, 6 = Remove – tree is dangerous, dead or dying, and no amount of maintenance will increase longevity or safety, 7 = Treat pest/disease – insects, pathogens, or parasites are present and detrimental to tree longevity; treatment should be given to maintain longevity.

11. **Sidewalk Damage** - 1 = None – sidewalk heaved less than ¾ inch, requiring no remediation, 2 = Low – sidewalk heaved ¾ to 1½ inches, 3 = Medium – sidewalk heaved 1½ to 3 inches, 4 = High – sidewalk heaved more than 3 inches.
12. **Wire Conflict** – 1 = No lines – no utility lines within vicinity of tree crown, 2 = Present and not conflicting – utility lines occur within vicinity of tree crown, but crown does not presently intersect wires, 3 = Present and conflicting – utility lines occur and intersect with tree crown.
13. **Condition of Wood** – 1 = Dead or Dying - extreme problems, 2 = Poor - major problems, 3 = Fair - minor problems, 4 = Good - no apparent problems
14. **Condition of Leaves** – condition leaves = Dead or dying - extreme problems, 2 = Poor - major problems, ½ of foliage at time of inventory, Fair - minor problems, 1/3 of foliage at time of inventory, Good - no apparent problems.
15. **Canopy Dieback on Ash** – 1 = Yes 2 = No
16. **Epicormic shoots on Ash** – 1 = Yes 2 = No
17. **Bark Split on Ash** – 1 = Yes 2 = No
18. **D Exit Holes on Ash** – 1 = Yes 2 = No
19. **Woodpecker activity on Ash** – 1 = Yes 2 = No
20. **Date**
21. **X (in UTM NAD83 Zone 15 Meters projection)**
22. **Y (in UTM NAD83 Zone 15 Meters projection)**
23. **No Leave at time of collection** - 1 = Yes 2 = No
24. **Pin Exit Holes on Walnut** - 1 = Yes 2 = No
25. **Wilting Leaves on Walnut** - 1 = Yes 2 = No
26. **Yellow Leaves on Walnut** - 1 = Yes 2 = No
27. **Brown Leaves attached on Walnut** - 1 = Yes 2 = No
28. **Recent Dead Branches on Walnut** - 1 = Yes 2 = No
29. **Canopy Dieback on Walnut** – 1 = Yes 2 = No
30. **Bark Canker on Walnut** – 1 = Yes 2 = No
31. **Dime Sized Exit Holes**– 1 = Yes 2 = No
32. **Oak Wilt** – 1 = Yes 2 = No
33. **Bur Oak Blight** – 1 = Yes 2 = No

Please note – the OBJECTID field is auto-populated - do not change anything in this field. Town, GlobalID and Shape fields must be left blank.