



City of Somerville: Standard Contract Form

CONTRACT NAME: Tree Inventory Update

This Contract, numbered 240391, is made by and between the City of Somerville, a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, with an address of 93 Highland Avenue, Somerville, Massachusetts, acting by and through its Procurement Department ("City") and the Vendor, defined as follows, ("Vendor"):

Vendor Name:	Davey Resource Group, Inc.		
Vendor Address:	295 South Water Street, Kent OH, 44240		
Vendor Contact Name, Email, & Tel./Fax #:	Josh Behounek	josh.behounek@davey.com	
	573-673-7530		
Contract Amount:	\$ 171,900.00		
Purchase Order #:	20247526		
Contract Term:	4/4/2024 through 12/31/2024		
Term:	The term of this Contract shall commence on 4/4/2024 and shall end on 12/31/2024 ("Term"). The Vendor shall complete the provision of Goods and/or the performance of Services prior to the end of the Contract term (the "Completion Date"). The term of this Contract may be extended at the sole discretion of the City, through written notice to the vendor.		
Procurement Type:	Request for Proposals under MGL c. 30B, s. 6 (RFP #24-47)		
Contracting Department:	OSPDCD- PSUF	Project Manager:	Vanessa Boukili
Scope of Work (Goods / Services):	The Vendor shall provide the Goods and/or Services, as described within the attached Appendix A (Scope of Work) , made part hereof.		
Compensation:	The City agrees to pay the Vendor a total not to exceed \$171,900.00 for Goods and/or Services rendered and accepted in accordance with the Contract Documents. Rates, units, charges, and frequencies are specified in the attached Appendix B made part hereof.		
Vendor Certifications:	<p>Under the pains and penalties of perjury, the Vendor agrees to perform this Contract and provide the Goods and/or Services in accordance with the City of Somerville's Standard Contract General Conditions, and Supplemental Conditions (if applicable), as set forth within the attached hereto, made part hereof.</p> <p><input checked="" type="checkbox"/> Supplemental Conditions apply if checked</p> <p>Vendor is in full compliance with all laws of the Commonwealth of Massachusetts relating to taxes and to contributions and payments in lieu of taxes. The Vendor certifies that it has provided the City with an accurate tax identification number (TIN). In the event that the City is notified by the IRS for an incorrect TIN provided by the Vendor, the Vendor is responsible for penalties.</p> <p>TIN: The Vendor certifies that its accurate federal tax identification number as reported to the IRS is: 82-1948528</p> <p>This Contract has been duly executed and delivered on behalf of the Vendor by its: Officer (President, Vice President, Treasurer, Secretary) General Partner, Trustee, other: _____; in full compliance with the authority granted by its organizational documents and its votes or resolutions, which authority has not been amended, modified, or rescinded as of the date hereof.</p>		

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Appendix C: Forms (Check if Applicable; If Unchecked, Not Applicable)

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| <input checked="" type="checkbox"/> Certificate of Authority | <input type="checkbox"/> Sole Source Declaration |
| <input checked="" type="checkbox"/> Evidence of Insurance | <input type="checkbox"/> Statement of Management |
| <input checked="" type="checkbox"/> Bid Package Documents | <input checked="" type="checkbox"/> Vulnerable Road Users Ordinance |
| <input checked="" type="checkbox"/> Somerville Living Wage Ordinance Form | <input type="checkbox"/> Campaign Contribution Disclosure Form |
| <input checked="" type="checkbox"/> Certificate of Good Standing | |

IN WITNESS WHEREOF, the City and the Vendor have executed this Contract as a sealed instrument.


VENDOR


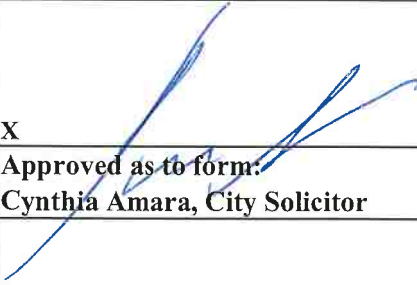
X <i>Karen Wise</i> Vendor Signature (Duly Authorized):	Date Signed: 05/01/2024
	Print Title: Vice President, Environmental Consulting
	Print Name: Karen M. Wise

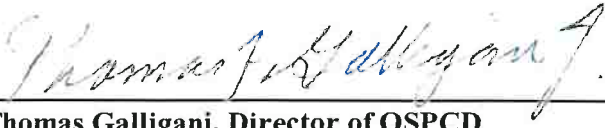
CITY

City Auditor's Encumbrance Statement

I hereby certify that the total contract amount is \$ 171,900.00 and that an unencumbered balance of \$ 85,000.00 is available for the current fiscal year of this contract. I further certify that a sum of \$ 85,000.00 is hereby encumbered against the appropriate account for the purposes of this contract and as funds become available, I will encumber additional sums as are required under this contract.

X  Edward Bean, City Auditor	X <i>Katjana Ballantyne</i> 5-17-2024 Katjana Ballantyne, Mayor Date Signed
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X  Angela M. Allen, Chief Procurement Officer	X  Approved as to form: Cynthia Amara, City Solicitor
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X  Thomas Galligani, Director of OSPCD	
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CITY OF SOMERVILLE STANDARD CONTRACT GENERAL CONDITIONS

1. Definitions

"City" shall mean the City of Somerville, Massachusetts.

"Contract" and "Contract Documents" shall include the following documents, as applicable: City's Standard Contract Form; these Standard Contract General Conditions; Supplemental Conditions (if applicable); City's Invitation for Bids, Request for Proposals, Request for Quotation, or other solicitation; the Vendor's response to the City's solicitation document including certifications but excluding any language stricken by City as unacceptable. Appendices are made an integral part of this Contract. The Contract documents are to be read collectively and complementary to one another; any requirement under one shall be as binding as if required by all. In the event of any conflict or inconsistency between the City's Standard Contract General Conditions and the Supplemental Conditions, the Supplemental Conditions shall prevail. In the event of any conflict or inconsistency between the provisions of the City's Standard Contract Form or these Standard Contract General Conditions and any other Contract Documents or appendices, the provisions of the City's Standard Contract Form and/or these Standard Contract General Conditions shall prevail. In the event of any conflict or inconsistency between the Contract Documents and any applicable state law, the applicable state law shall prevail.

"Certify" or "Certifies" shall mean that the Vendor certifies under pains and penalties of perjury to the statement referenced.

"Vendor" shall mean the individual, corporation, partnership, or other entity which is a party to this Contract.

2. Performance; Time

The Vendor shall perform in accordance with all provisions of this Contract in a manner satisfactory to the City. The Vendor's performance shall be timely and meet or exceed industry standards for the performance required. It is understood and agreed that all specified times or periods of performance are of the essence of this Contract.

3. Acceptance of Goods or Services

Performance under this Contract shall include services rendered, obligations due, costs incurred, goods and deliverables provided and accepted by the City. The City shall have a reasonable opportunity to inspect all goods and deliverables, services performed by, and work product of the Vendor, and accept or reject same.

4. Compensation

The City shall pay in full and complete compensation for goods received and accepted and services performed and accepted under this Contract in an amount not to exceed the amount stated on the face of this Contract paid in accordance with the rate indicated or in accordance with a prescribed payment schedule.

The Vendor shall periodically submit invoices to the City, for which compensation is due under this Contract and requesting payment for goods received or services rendered by the Vendor during the period covered by the invoice. The invoice must agree to the rates/payment schedule as indicated in this contract. The invoice shall include the following information: vendor name, vendor remit address, invoice date, invoice number, itemized listing of goods, services, labor, and expenses and indicating the total amount due. The City shall review the invoice and determine the value of goods or services accepted by the City in accordance with the Contract Documents. Payments due to the Vendor will be made within sixty (60) days from receipt and approval of an invoice. Final invoices from the Vendor are due no later than ninety (90) days from the Completion Date. Any invoice received past the ninety (90) day date will not be paid. If this Contract is extended, invoices related to the extension period are due no later than ninety (90) days from the Extended Completion Date.

The Vendor shall furnish such information relating to the goods or services or to documentation of labor or expenses as may be requested by the City. Acceptance by the Vendor of any payment or partial payment, without any written objection by the Vendor, shall in each instance operate as a release and discharge of the City from all claims, liabilities, or other obligations relating to the performance of this Contract.

In case of an error in extension prices quoted herein, the unit price will govern (Applicable To Goods Only).

5. Release of City on Final Payment

Acceptance by the Vendor of payment from the City for final delivery of goods or rendering of services under this Contract shall be deemed to release forever the City from all claims and liabilities, except those which the Vendor notifies the City in writing within three (3) months after such payment.

6. Risk of Loss

The Vendor shall bear the risk of loss, for any cause, for any Vendor materials used for this Contract and for all goods, deliverables, and work in process, until possession, ownership, and full legal title to the goods and deliverables are transferred to and accepted by the City.

The Vendor shall pay and be exclusively responsible for all debts for labor and material contracted for by the Vendor for the rental of any appliance or equipment hired by Vendor and/or for any expense incurred on account of services to be performed or goods delivered under this Contract.

The City shall not be liable for any personal injury or death of the Vendor, its officers, employees, or agents.

7. Indemnification

The Vendor shall indemnify, defend (with counsel acceptable to City, which acceptance shall not be unreasonably withheld), and hold harmless the City of Somerville, its officers, employees, agents and representatives from and against any and all claims, suits, liabilities, losses, damages, costs or expenses (including judgments, costs, interest, attorney's fees and expert's fees) arising from or in connection with any act or omission relating in any way to the performance of this Contract by the Vendor, its agents, officers, employees, or subcontractors.

The extent of this indemnification shall not be limited by any obligation or any term or condition of any insurance policy. The obligations set forth in this paragraph shall survive the expiration or termination of this Agreement.

8. Default; Termination; Remedies

A. Events of Default

The following shall constitute events of default under this Contract: (1) The Vendor has made any material misrepresentation to the City; or (2) a judgment or decree is entered against the Vendor approving a petition for an arrangement, liquidation, dissolution or similar relief relating to bankruptcy or insolvency; or (3) the Vendor files a voluntary petition in bankruptcy or any petition or answer seeking any arrangement, liquidation or dissolution relating to bankruptcy, insolvency or other relief for debtors; or (4) the Vendor seeks or consents or acquiesces in the appointment of any trustee or receiver, or is the subject of any other proceeding under which a court assumes custody or control over the Vendor or of any of the Vendor's property; or (5) the Vendor becomes the defendant in a levy of an attachment or execution, or a debtor in an assignment for the benefit of creditors; or (6) the Vendor is involved in a winding up or dissolution of its corporate structure; or (7) any failure by the Vendor to perform any of its obligations under this Contract, including, but not limited to, the following: (i) failure to commence performance of this Contract at the time specified in this Contract due to a reason or circumstance within the Vendor's reasonable control, (ii) failure to perform this Contract with sufficient personnel and equipment or with sufficient material to ensure the completion of this Contract within the specified time due to a reason or circumstance within the Vendor's reasonable control, (iii) failure to perform this Contract in a manner reasonably satisfactory to the City, (iv) failure to promptly re-perform within reasonable time the Services or Supplies that were properly rejected by the City as erroneous or unsatisfactory, (v) discontinuance of the Services or Supplies for reasons not beyond the Vendor's reasonable control, (vi) failure to comply with a material term of this Contract, including, but not limited to, the provision of insurance and nondiscrimination; or (8) any other acts specifically and expressly stated in this Contract as constituting a basis for termination of this Contract.

B. Termination Upon Default.

In the event of a default by the Vendor, the City, acting through its Chief Procurement Officer, may, at its option, terminate this Contract immediately by written notice of termination specifying the termination date.

Notwithstanding the above, in the event of a default by the Vendor, the City, acting through its Chief Procurement Officer, may give notice in writing of a default, which notice shall set forth the nature of the default and shall set a date, by which the Vendor shall cure the default, subject to approval of the City.

If the Vendor fails to cure the default, the City, in the alternative, may make any reasonable purchase or contract to acquire goods or services in substitution for those due from Vendor. The City may deduct the cost of any substitute contract or nonperformance together with incidental and consequential damages from the Contract price and shall withhold such damages from sums due or to become due to the Vendor. If the damages sustained by the City exceeds sums due or to become due, the Vendor shall pay the difference to the City upon demand.

Upon immediate notification to the other party, neither the City nor the Vendor shall be deemed to be in default for failure or delay in performance due to Acts of God or other causes factually beyond their control and without their fault or negligence. Subcontractor failure to perform or price increases due to market fluctuations or product availability will not be deemed factually beyond the Contractor's control. The City retains all rights and remedies at law or in equity.

If the Vendor fails to cure the default within the time as may be required by the notice, the City, acting through its Chief Procurement Officer, may, at its option terminate the Contract.

The parties agree that if City erroneously or unjustifiably terminates this Contract for cause, such termination shall be deemed a termination for convenience, which shall be effective thirty (30) days after such notice of termination for cause is provided.

C. Termination For Convenience.

Notwithstanding any language to the contrary within this Contract, the City, acting through its Chief Procurement Officer, may terminate this Contract, without cause at any time, effective upon the termination date stated in the notice of termination. In the event of termination for convenience, the Vendor shall be entitled to be paid for goods delivered and accepted and services rendered and accepted prior to notice of termination at the prices stated in the Contract, subject to offset of sums due the Vendor against sums owed by the Vendor to the City. Any goods or services delivered after notification of termination but prior to the effective termination date must be approved in writing in advance by the City in order to be eligible for payment. In no event shall the Vendor be entitled to be paid for any goods or services delivered after the effective date of termination. The Vendor shall be entitled to no other compensation of any type. In no case shall a Vendor be entitled to lost profits.

D. Obligations Upon Termination.

Upon termination of this Contract with or without cause, the Vendor shall immediately, unless otherwise directed by the City: 1. cease performance upon the stated termination date; 2. surrender to the City the Vendor's work product, which is deliverable under the Contract, whatever its state of completion; and 3. return all tools, equipment, finished or unfinished documents, data, studies, reports, correspondence, drawings, plans, models, or any other items whatsoever prepared by the Vendor pursuant to this Contract, which shall become property of the City, or belonging to or supplied by the City.

E. Rights and Remedies.

The City shall have the right to: a) disallow all or any part of the Vendor's invoices not in material compliance with this Contract; b) temporarily withhold payment pending correction by the Vendor of any deficiency; c) sue for specific performance or money damages or both, including reasonable attorneys' fees and costs incurred in enforcing any Vendor obligations hereunder; d) pursue remedies under any bond provided; and e) pursue such other local, state and federal actions and remedies as may be available to the City.

Any termination shall not effect or terminate any of the rights or remedies of the City as against the Vendor then existing, or which may accrue because of any default. No remedy referred to in this subsection is intended to be exclusive, but shall be cumulative, and in addition to any other remedy referred to above or otherwise available to the City or Vendor at law or in equity. The Vendor shall not gain nor assert any right, title or interest in any product produced by the Vendor under this Contract.

9. Insurance

The Vendor shall comply with all insurance requirements set out in the Contract Documents. The Vendor shall deliver to the City new certificates of insurance at least ten (10) calendar days prior to expiration of the prior insurance and shall furnish the City with the name, business address and telephone number of the insurance agent. Vendor certifies compliance with applicable state and federal employment laws or regulations including but not limited to G.L. c. 152 (Workers' Compensation), as applicable, and Vendor shall provide City with acceptable evidence of compliance with the insurance requirements of this chapter.

10. Governing Law; Forum

This Contract shall be governed by the laws of the Commonwealth of Massachusetts. Any action arising out of this Contract shall be brought and maintained in a state or federal court in Massachusetts which shall have exclusive jurisdiction thereof.

11. Complete Agreement

This Contract supersedes all prior agreements and understandings between the parties and may not be changed unless mutually agreed upon in writing by both parties.

12. Amendment

No amendment to this Contract shall be effective unless it is signed by the authorized representatives of all parties and complies with all requirements of the law. All alterations or additions, material or otherwise, to the terms and conditions of this Contract must be in writing and signed by the City, as set forth in the below section, and the Vendor.

13. Conditions of Enforceability Against the City

This Contract is only binding upon, and enforceable against, the City if: (1) the Contract is signed by the Mayor; (2) endorsed with approval by the City Auditor as to appropriation or availability of funds; (3) endorsed with approval by the City Solicitor as to form; and (4) funding is appropriated for this Contract or otherwise made available to the City.

This Contract and payments hereunder are subject to the availability of an appropriation therefor. Any oral or written representations, commitments, or assurances made by any City representatives are not binding. Vendors should verify funding and contract execution prior to beginning performance.

When the amount of the City Auditor's certification of available funds is less than the face amount of the Contract, the City shall not be liable for any claims or requests for payment by Vendor which would cause total claims or payments under this Contract to exceed the amount so certified.

The City's Standard Contract Form and Standard Contract General Conditions shall supersede any conflicting verbal or written agreements or forms relating to the performance of this Contract, including contract forms, purchase orders, or invoices of the Vendor.

The City shall have no legal obligation to compensate a Vendor for performance that is outside the scope of this Contract. The City shall make no payment prior to the execution of a Contract.

14. Taxes

Purchases incurred by the City are exempt from Federal Excise Taxes and Massachusetts Sales Tax, and prices must exclude any such taxes. Tax Exemption Certificates will be furnished upon request. The City of Somerville's Massachusetts Tax Exempt Number is: **MO46 001 414**.

15. Independent Contractor

The Vendor is an independent contractor and is not an employee, agent or representative of the City. The City shall not be obligated under any contract, subcontract, or commitment made by the Vendor.

16. Assignment; Sub-Contract

The Vendor shall not assign, delegate, subcontract, or transfer this Contract or any interest herein, without the prior written consent of the City.

17. Discrimination

The Vendor agrees to comply with all applicable laws prohibiting discrimination in employment. The Vendor agrees that it shall be a material breach of this Contract for the Vendor to engage in any practice which shall violate any provision of G.L. c. 151B, relative to discrimination in hiring, discharge, compensation or terms, conditions or privileges of employment because of race, color, religious creed, national origin, sex, sexual orientation, age, or ancestry.

18. Waiver

All duties and obligations contained in this Contract can only be waived by written agreement. Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any way limit the legal or equitable remedies available to said party.

19. Severability

In the event that any provision of this Contract shall be held to be illegal, unenforceable or void, such provision shall be severed from this Contract and the entire Contract shall not fail on account thereof, but otherwise remain in full force and effect and shall be enforced to the fullest extent permitted by law.

20. Notice

The parties shall give notice in writing by one of the following methods: (i) hand-delivery; (ii) facsimile; (iii) certified mail, return receipt requested; or (iv) overnight delivery service, to the Vendor at the contact information specified on the face of this Contract; to the City addressed to: Purchasing Director, Somerville City Hall, 93 Highland Avenue, Somerville, MA 02143, Fax # 617-625-1344 with a copy to: City Solicitor, City Hall, 93 Highland Avenue, Somerville, MA 02143. Notice shall be effective on the earlier of (i) the day of actual receipt, or (ii) one day after tender of delivery.

21. Captions

The captions of the sections in this Contract are for convenience and reference only and in no way define, limit or affect the scope or substance of any section of this Contract.

22. Non-Collusion

This Contract was made without collusion or fraud with any other person and was in all respects bona fide and fair. As used in this paragraph, the word, "person," shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity. The Vendor certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

23. Tax and Contributions Compliance

The Vendor certifies, under pains and penalties of perjury, in accordance with MGL c. 62C, s. 49A, that the Vendor is in full compliance with all laws of the Commonwealth of Massachusetts relating to taxes, is in good standing with respect to all returns due and taxes payable to the Commonwealth, reporting of employees and contractors, and withholding and remitting of child support and to contributions and payments in lieu of taxes. In the event that the City is notified by the IRS that the TIN provided by the vendor and the vendor name as recognized by the IRS do not match their records, the vendor is responsible for all penalties.

24. Municipal Taxes, Charges and Liens

The Vendor certifies that it has paid all accounts receivable owed to the City of Somerville, including but not limited to real estate, personal property or excise tax, parking fines, water/sewer charges, license/permit fees, fines and/or any other municipal lien charges due to the City of Somerville. Pursuant to MGL c. 60, s. 93, the Vendor agrees that the Collector/Treasurer of the City may withhold from amounts owing and payable to the Vendor under this Contract any sums owed to any department or agency of the City which remain wholly or partially unpaid. This shall include but not be limited to unpaid taxes and assessments, police details, and any other fees and charges until such sums owed have been fully paid, and the Collector/Treasurer may apply any amount owing and payable to the Vendor to satisfy any monies owed to the City.

25. Compliance with Applicable Laws

The Vendor shall comply with all applicable federal and state laws, and city ordinances and regulations, which in any manner affect performance of this Contract. The Vendor shall defend, indemnify, and hold harmless the City, its officers, agents and employees against any claim or liability arising from or based on the violations of such ordinances, regulations or laws, caused by the negligent actions of the Vendor, its agents, employees or subcontractors.

26. Conflict of Interest

The Vendor certifies that no official or employee of the City has a financial interest in this Contract or in the expected profits to arise therefrom, unless there has been compliance with the provisions of G. L. c. 43, § 27 (Interest in Public Contracts by Public Employees), and G. L. c. 268A (Conflict of Interest). The Vendor certifies that it has reviewed the Massachusetts Conflict of Interest Law, MGL c. 268A and at any time during the term of this Contract, the Vendor is required to affirmatively disclose in writing to the City the details of any potential conflicts of interest of which the Vendor has knowledge or learns of during the Contract term.

27. Licenses and Permits

The Vendor certifies that it is qualified to perform the Contract and shall obtain and possess at its sole expense, all necessary licenses, permits, or other authorizations required by the City, the Commonwealth of Massachusetts or any other governmental agency, for any activity under this Contract. The Vendor shall submit copies of such licenses and/or permits to the City upon request. If a business, the Vendor certifies that it is a duly organized and validly existing entity, licensed to do business in Massachusetts, in good standing in the Commonwealth of Massachusetts, with full power and authority to consummate the Contract, and listed under the Commonwealth of Massachusetts Secretary of State's website as required by law.

28. Recordkeeping, Audit, and Inspection of Records All records, work papers, reports, questionnaires, work product, regardless of its medium, prepared or collected by the Vendor in the course of completing the work to be performed under this Contract shall at all times be the exclusive property of the City. In the event of termination or upon expiration of the Contract, the Contractor shall promptly deliver to the City all documents, work papers, calculations, data, drawings, plans, and other tangible work product or materials pertaining to the services performed under this Contract, in both a physical format and electronic format. The electronic format shall be either Comma Separated Values (CSV) files along with the mapping information for each field, or Microsoft SQL (2005/2008) database with all associated Database Schemas, or such other electronic format(s) acceptable to the city. At no additional cost to the City, the Contractor shall store and preserve such records while in their possession in accordance with the requirements of the Massachusetts Public Records Law, the Commonwealth of Massachusetts record retention schedule and City of Somerville record retention schedule. The City shall have the right to at reasonable times and upon reasonable notice to examine and copy, at its reasonable expense, the books, records, and other compilations of data of the Vendor which relates to the provision of services under this Contract. Such access shall include on-site audits, review, and copying of said records.

29. Debarment or Suspension

The Vendor certifies that it has not been and currently is not debarred or suspended by any federal, state, or municipal governmental agency under G. L. c. 29, § 29F or other applicable law, nor will it contract with a debarred or suspended subcontractor on any public contract.

30. Warranties (Applicable to Goods Only)

The Vendor warrants that (1) the goods sold are merchantable, (2) that they are fit for the purpose for which they are being purchased, (3) that they are absent any latent defects and (4) that they are in conformity with any sample which may have been presented to the City. The Vendor guarantees that upon inspection, any defective or inferior goods shall be replaced without additional cost to the City. The Vendor will assume any additional cost accrued by the City due to the defective or inferior goods. The Vendor guarantees all goods for a period of no less than one (1) year, unless a greater period of time is specified in the Contract Documents.



SUPPLEMENTAL CONDITIONS (FOR CONTRACT NO. _____)

The parties agree that the Standard Contract General Conditions are hereby revised as follows:

1. SECTION 4 "Compensation"

Add the following to the end of the first paragraph:

except for claims previously made by Vendor in writing and agreed to by the City in writing.

2. SECTION 5 "release of final Payment"

Delete the paragraph and substitute with the following:

Acceptance by the Vendor of payment from the City for final delivery of goods or rendering of services under this Contract shall be deemed to release forever the City from all claims and liabilities, except those previously made by Vendor in writing and those which the Vendor notifies the City in writing within three (3) months after such payment.

3. Section 6 "risk of loss"

Add the following to the end of the first paragraph

, except to the extent caused by the negligence of the City

Delete last paragraph and replace with the following:

The City shall be liable, to the extent allowed by law, that it causes any personal injury or death of the Vendor, its officers, employees, or agents

4. Section 7 "Indemnification"

Delete section and replace with the following:

The Vendor shall indemnify, defend (with counsel acceptable to City, which acceptance shall not be unreasonably withheld), and hold harmless the City of Somerville, its officers, employees, agents and representatives from and against any and all third party claims, suits, liabilities, losses, damages, costs or expenses (including judgments, costs, interest, reasonable attorney's fees and reasonable expert's fees) to the proportionate extent caused by any negligent act or willful omission during the performance of this Contract by the Vendor, its agents, officers, employees, or subcontractors. Notwithstanding anything to the contrary in this Agreement, Vendor's indemnity, defense, and hold harmless obligations will not extend to any claim or liability that is alleged to be caused by the negligence or willful misconduct of the indemnified party or other third party not controlled by Vendor; rather, such indemnification claims will be administered based upon a determination of the degree of comparative fault of each party. Vendor retains the right to select counsel reasonably acceptable to the indemnified party, and the indemnified party will provide reasonable cooperation and not unreasonably withhold consent to settle any claims for

which Vendor is providing defense or indemnification.

All of Vendor's indemnification defense, and hold harmless obligations shall survive the expiration or termination of this Agreement for a period of one (1) year.

NOTWITHSTANDING ANYTHING TO THE CONTRARY, IN NO EVENT WILL VENDOR BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, PUNITIVE, OR ENHANCED DAMAGES IN CONNECTION WITH THIS CONTRACT OR THE SERVICES, AND IN NO EVENT WILL VENDOR'S AGGREGATE LIABILITY ARISING OUT OF OR RELATED TO THIS CONTRACT OR THE SERVICES EXCEED THE AMOUNT OF THE APPLICABLE INSURANCE LIMITS SET FORTH IN THIS CONTRACT.

5. Section 8B "termination upon default"

Delete third & fourth paragraphs and replace with the following:

If the Vendor fails to cure the default, the City, in the alternative, may make any reasonable purchase or contract to acquire goods or services in substitution for those due from Vendor. The City may deduct the cost of any substitute contract or nonperformance from the Contract price and shall withhold such damages from sums due or to become due to the Vendor. If the damages sustained by the City exceeds sums due or to become due, the Vendor shall pay the difference to the City upon demand. If the damages sustained by the City are less than the sums due, the City shall pay the difference to the Vendor.

Upon immediate notification to the other party, neither the City nor the Vendor shall be deemed to be in default for failure or delay in performance (except for payment obligations) due to Acts of God or other causes factually beyond their control and without their fault or negligence. Subcontractor failure to perform or price increases due to market fluctuations or product availability will not be deemed factually beyond the Contractor's control. The City retains all rights and remedies at law or in equity. If the Vendor fails to cure the default within the time as may be required by the notice, the City, acting through its Chief Procurement Officer, may, at its option terminate the Contract.

6. Section 8C "termination for convenience"

Delete paragraph and replace with the following:

Notwithstanding any language to the contrary within this Contract, the City, acting through its Chief Procurement Officer, may terminate this Contract, without cause at any time, effective upon the termination date stated in the notice of termination. In the event of termination for convenience, the Vendor shall be entitled to be paid for goods delivered and services performed prior to notice of termination at the prices stated in the Contract, subject to offset of sums due the Vendor against sums owed by the Vendor to the City. Any goods or services delivered after notification of termination but prior to the effective termination date must be approved in writing in advance by the City in order to be eligible for payment. In no event shall the Vendor be entitled to be paid for any goods or services delivered after the effective date of termination. The Vendor shall be entitled to no other compensation of any type. In no case shall a Vendor be entitled to lost profits.

7. Section 8D. "obligations upon termination"

Add the following to the end of the paragraph:

. Notwithstanding anything to the contrary, Vendor is and will remain the exclusive owner of all of Vendor's proprietary software and intellectual property owned by or licensed to Vendor prior to the effective date of this Contract, or created or developed outside the scope of this Contract, including all additions, enhancements, and derivatives thereto.

8. Section 25. "Compliance with Applicable Laws"

Delete the paragraph and replace with the following:

The Vendor shall comply with all applicable federal and state laws, and city ordinances and regulations, which in any manner affect performance of this Contract. The Vendor shall in accordance and consistent with Section 7, defend, indemnify, and hold harmless the City, its officers, agents and employees against any claim or liability arising from or based on the violations of such ordinances, regulations or laws, caused by the negligent actions of the Vendor, its agents, employees or subcontractors.

9. Section 30. "Warranties"

Delete the paragraph and replace with the following:

The Vendor warrants that the goods sold are absent any latent defects and that they are in conformity with any sample which may have been presented to the City. The Vendor guarantees that upon inspection, any defective or inferior goods shall be replaced without additional cost to the City. The Vendor will assume any additional cost accrued by the City due to the defective or inferior goods. The Vendor guarantees all goods for a period of one (1) year.

***** END OF SUPPLEMENTAL CONDITIONS *****

Appendix A
Scope of Work

SOLICITATION FOR:
RFP #24-47 Tree Inventory Update



CITY OF SOMERVILLE, MASSACHUSETTS

RELEASE DATE: 2/21/2024
QUESTIONS DUE: 2/29/2024 by 12PM EST
DUE DATE AND TIME: 3/13/2024 by 2:30 PM EST

Anticipated Contract Award	3/18/2024
Est. Contract Commencement Date	4/1/2024
Est. Contract Completion Date	12/31/2024

DELIVER TO:
City of Somerville
Procurement & Contracting Services

Attn: Thupten Chukhatsang
Senior Procurement Manager
tchukhatsang@somervillema.gov

93 Highland Avenue
Somerville, MA 02143

SECTION 2.0 RULE FOR AWARD / SPECIFICATIONS/SCOPE OF SERVICES

RULE FOR AWARD

The contract shall be awarded to the responsible and responsive proposer submitting the most advantageous proposal response, taking into consideration all evaluation criteria as well as price. The contract will be awarded within ninety (90) days after the proposal opening. The time for award may be extended for up to 45 additional days by mutual agreement between the City and the most highly advantageous and responsible offeror.

BACKGROUND

The City of Somerville is a small, dense city of 80,000 people in only four square miles, located adjacent to Boston and Cambridge. Somerville values urban forestry as a way to promote a healthy city, an important means to engage residents in preserving their community's natural elements, to stimulate development that can increase job opportunities and tax revenue, and to enhance low- and moderate-income areas to promote environmental justice.

Public policy and operational duties related to urban forestry are jointly managed by three certified arborists, including two Urban Forestry and Landscape Planners in the Public Space and Urban Forestry (PSUF) Division of the Mayor's Office of Strategic Planning & Community Development, and the Tree Warden in Department of Public Works (DPW).

The City of Somerville, with consultant Davey Resource Group (DRG), conducted a comprehensive inventory of all public trees in the city between June 2017 and January 2019 (this inventory will hereafter be referred to as the 2018 inventory). A total of 15,275 sites were assessed during the inventory, including all living trees, stumps, and vacant planting sites. This 2018 inventory is available through DRG's proprietary TreeKeeper 8 software program (<https://somervillema.treekeepersoftware.com/>), for which the City has an annual subscription. TreeKeeper is a GIS-based platform that includes geolocated tree points for each individual City tree, as well as information on tree size, condition, risk rating, maintenance needs, and work records, as well as various details about site condition. A detailed description of the data collected and methodology can be found in Appendix C of the City's Urban Forest Management Plan (<https://s3.amazonaws.com/ifa.somervillema.gov/documents/somerville-urban-forest-management-plan.pdf>).

The City's urban forestry staff currently uses the TreeKeeper program to maintain forestry records and manage work orders for tree maintenance and planting. However, as our tree canopy is constantly changing and staff resources are limited, much of the information currently stored in TreeKeeper is no longer accurate and is in need of updates. Additionally, many of the new trees planted since the 2018 inventory have not been added to the inventory. With recent technological advances, the City is also looking to upgrade the tree inventory to incorporate a digital 3D model of each public tree in order to better identify maintenance needs and infrastructure conflicts.

PROJECT OVERVIEW

The City of Somerville is seeking proposals from qualified vendors to update the City's existing tree inventory and integrate a 3D modeling component for each tree within the inventory. The purpose of this project is to enhance the accuracy, comprehensiveness, and visualization capabilities of the city's tree management system.

PROJECT OBJECTIVES

The primary objectives of this project include:

1. Updating the existing tree inventory database with accurate and current information.
2. Creating a detailed 3D model of each tree in the inventory.
3. Enhancing the city's capacity for visualizing and managing its urban tree canopy.

SCOPE OF WORK

The City's current tree inventory contains 14,347 trees and stumps, including 9,691 trees and stumps along the public right of way (i.e., street trees). Most of these trees and stumps are City-owned, but fractions are state-owned (2,147 trees and stumps), or privately-owned (663 trees and stumps). As the inventory has not been consistently maintained since it was completed in early 2019, it is now largely out of date. For the most part, the almost 2,500 trees that have been planted in the city since 2019 are not yet in the inventory.

The City will hire a consultant to update the existing tree inventory database to reflect current conditions on the ground. Somerville is looking to upgrade the inventory into a technologically advanced smart tree inventory that creates a digital 3D model of each tree in its entirety, in addition to updating the data in the current database.

This project will involve the following:

Data Collection and Inventory Update:

- 1.1 Conduct a comprehensive field survey to collect up-to-date information on tree species, size, health, and location. Survey shall include all trees on public property (i.e., on city-owned and state-owned land). We expect there are currently approximately 14,000 publicly-owned trees in the City.
- 1.2 Utilize GPS and advanced mapping technologies to accurately record the spatial data of each tree.
- 1.3 Verify and update existing data in the City of Somerville tree inventory database, and add in new data records for any trees that are not currently in the database.
 - Fields to be verified and updated or added as needed for all public trees:
 - Site ID (#)
 - Mapping coordinate
 - Location (physical address)
 - Tree genus and species
 - Tree diameter at breast height, measured to the nearest tenth (10th) of an inch
 - Multi-stem (Yes/No)
 - Presence of overhead utilities (not present, present and not conflicting, present and conflicting)
 - Visible root flare (Yes/No)
 - Future inspection necessary (Yes/No)

- Additional fields to be updated or added for City-owned street trees ONLY:
 - Condition of tree canopy (dead, poor, fair, or good)
 - Condition of tree wood (dead, poor, fair, or good)
 - Primary maintenance need (i.e., tree removal, tree clean, young tree train, stump removal, plant tree)
 - Growing space type and size (length and width to nearest foot)
 - Presence of girdling roots (Yes/No)
 - Other observations
 - Risk Rating (level 2 qualitative risk assessment using the ISA TRAQ method, including likelihood of failure, likelihood of impacting target, likelihood of failure and impact, consequence, and risk rating)

3D Modeling:

- 1.4 Employ LiDAR (Light Detection and Ranging) or other suitable technologies to capture detailed 3D information for each tree.
- 1.5 Develop 3D models that represent the entire structure of each tree, including branches, trunk, and foliage.
- 1.6 Include high resolution panoramic images of each tree.
- 1.7 Ensure compatibility with common 3D modeling software and Geographic Information System (GIS) platforms.

Integration with Existing Systems:

- 1.8 Ensure seamless integration with the City of Somerville's existing tree inventory database.
- 1.9 Develop an interface for users to access and interact with the 3D models and high-resolution images within the tree inventory database.

Quality Assurance and Accuracy:

- 1.10 Implement rigorous quality control measures to ensure the accuracy and reliability of the updated tree inventory and 3D models.
- 1.11 Conduct validation checks to verify the consistency of spatial data and model representations.

Documentation and Training:

- 1.12 Provide comprehensive documentation on the updated tree inventory and 3D modeling process.
- 1.13 Conduct training sessions for city staff responsible for managing and utilizing the new system.

DELIVERABLES

To complete the public tree inventory update, the vendor shall deliver the following:

- Updated and verified tree inventory database.
- High-resolution 3D models for each tree.
- Integration with the existing tree inventory system (TreeKeeper 8).
- Documentation and training materials.

ANTICIPATED SCHEDULE:

Work can begin on the Contract Award Date and must be completed on or before December 31st, 2024.

PROJECT BUDGET: \$75,000

PROPOSAL SUBMISSION REQUIREMENTS

1. WORKPLAN/PROJECT APPROACH

Applicants are required to provide a detailed work plan as part of their application, which lists all tasks determined to be necessary to accomplish the scope of work described above. The work plan must define resources needed and must include a timeline schedule depicting the sequence and duration of tasks and showing how the work will be organized and executed. The work plan must identify information the Applicant will need from the Urban Forestry staff and other City staff in order to complete the project. The work plan should also include proposed steps, if any, to expedite completion of the project.

2. LIST OF QUALIFICATIONS

The City of Somerville is seeking vendor(s) with demonstrated experience in urban forestry, tree inventories, and 3D modeling. Specific experience requirements include:

- Vendor must have demonstrated experience in urban forestry and arboriculture, including tree inventory management, tree health assessment, and urban tree canopy analysis.
- Vendor must have experience conducting tree inventories, including data collection, species identification, and spatial mapping using GIS (Geographic Information System) technologies. Prior experience working with TreeKeeper 8 tree inventory software preferred.
- All workers collecting tree inventory data in the field must have an arborist certification (Massachusetts Certified Arborist and/or International Society of Arboriculture (ISA) certification).
- All arborists collecting data on Tree Risk must have a valid ISA TRAQ certification.
- Vendor must have expertise in 3D modeling techniques, particularly as applied to tree structures and urban environments. Experience with LiDAR (Light Detection and Ranging) or photogrammetry for capturing 3D data is beneficial.
- Vendor must have the capability to integrate 3D tree models with GIS platforms for spatial analysis and visualization. Experience in geospatial data analysis and spatial data formats is advantageous.
- Vendor must be proficient in processing LiDAR data to extract tree-related information, such as tree height, crown dimensions, and canopy density. Knowledge of LiDAR data formats and processing software is essential.
- Vendor must have ability to develop custom software solutions or plugins to facilitate 3D modeling and integration with existing tree inventory management systems. Experience with programming languages and 3D modeling software is beneficial.
- Vendor must be proficient in project management methodologies and be able to plan, execute, and monitor the tree inventory update and 3D modeling project effectively. Experience in coordinating

field surveys, data collection efforts, and stakeholder engagement.

- Vendor must commit to ensuring data accuracy and quality throughout the inventory update and 3D modeling process. Vendor must have experience in implementing quality control measures, validation checks, and accuracy assessments.
- Vendor must be capable of producing comprehensive documentation on the inventory update and 3D modeling process, including technical specifications, methodology, and user guides. Vendor should have experience in conducting training sessions for end-users and stakeholders.

Scheduling

A service schedule will be established between the Contractor and the City of Somerville. Contractor will arrive on scheduled performance dates with all required equipment and materials needed to perform tasks for that day. Schedules will be subject to change contingent on weather or other delays that are beyond the control of the city at no charge to the City.

Work hours

The Contractor will schedule work between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday unless authorized by the City to do otherwise.

Workmanship

All work done by the contractor will be performed in a professional and conscientious manner. All equipment and work performed will be in full compliance with the most current revision of the current American National Standards Institute. The Contractor must maintain professionalism when working and interacting with the public. The Contractor will not leave any debris, garbage or tools behind at work sites. Clean up of large debris can be arranged with DPW with notice.

Pedestrian/ Vehicular Safety

The Contractor will practice vehicular safety at all times when driving and prioritize pedestrian and vehicular safety while completing work. Police detail and proper signage can be provided by the City with proper notice. Damage to private property should be avoided at all times. If any private property is damaged, the contractor will be fully responsible to fix it to the satisfaction of the private property owner.

Maintenance of Traffic

Police details shall be requested at least 48 hours in advance of work that may restrict traffic flow or be a danger to pedestrians.

COMPARATIVE EVALUATION CRITERIA

The Comparative Evaluation Criteria set forth in this section of the RFP shall be used to evaluate responsible and responsive proposals.

All proposals will be reviewed by an evaluation committee composed of employees of the City. Final selection will be based upon the evaluators' analysis of the information and materials required under the RFP and provided by the proposing vendors in their submissions. The City reserves the right to involve an outside consultant in the selection process. Proposals that meet the minimum quality requirements will be reviewed for

A PROPOSAL PREPARED FOR

The City of Somerville

Smart Tree Inventory Services Technical Proposal

Mar 12, 2024

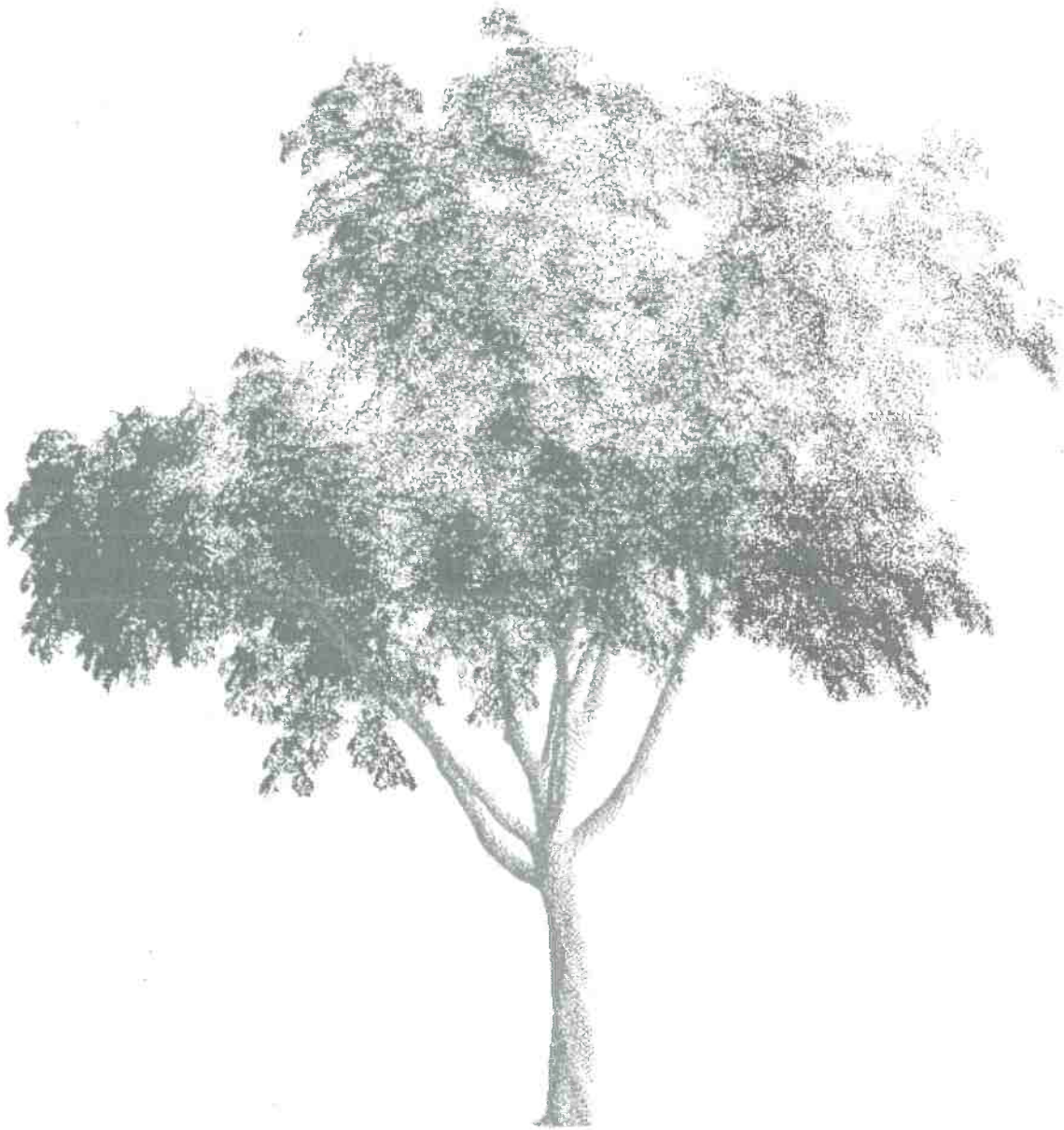


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March 8, 2024

Thupten Chukhatsang
Senior Procurement Manager
The City of Somerville
93 Highland Avenue
Somerville, MA 02143
RE: Response to RFP #24-47 Tree Inventory Update

Dear Thupten Chukhatsang,

Davey Resource Group, Inc. (DRG), in cooperation with our exclusive partner, greehill, is delighted to present a proposal to the City of Somerville for a Smart Tree Inventory. Our proposal introduces advanced technology that combines ground-based LiDAR and artificial intelligence (AI) to revolutionize the collection of urban forest tree inventory data. This cutting-edge approach surpasses traditional methods in terms of both accuracy and efficiency. It provides precise tree attributes, including location to the nearest foot. Moreover, our technology gathers attributes that were previously difficult to accurately collect, such as tree height, canopy spread, and leaf area index. Additionally, we include five high-resolution photographs and a "digital twin" of each tree captured at the time of the scan. Using our Smart Tree Inventory, the City of Somerville can make well-informed decisions to improve the long-term health and sustainability of the city's urban forest. DRG guarantees the pricing provided in this proposal for 90 days from the date of the submission deadline.

Trees are part of everyday life. The urban forest creates a sense of place and supplies real benefits to those who live in an area surrounded by trees. Trees along streets, in parks, around playgrounds, and in backyards provide shade and beauty and enhance the quality of life by bringing natural elements and wildlife habitats into urban settings. Trees also moderate temperatures, reduce air pollution and energy use, improve water quality, and promote human health and well-being. Davey Resource Group, Inc. "DRG" understands the benefits trees bring, and we also realize the challenges that come with managing public trees. Through the years, our company has developed numerous tree care and maintenance protocols, standards, and best practices - including developing software for organizing and managing tree inventories. Fundamentally, our tree knowledge is rooted in direct science and research, differentiating us from our competitors and ensuring our clients receive the best advice to manage and maintain trees.

The team we proposed to manage your project has the knowledge, experience, and availability to meet your goals and help you with the next steps for your project. They understand how to help you meet your specific program needs and project budget. We believe that our expertise in urban forestry management and our commitment to sustainability make us an ideal partner for The City of Somerville in this important endeavor. Thank you for considering DRG, and we look forward to talking with you about the next steps.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh Behounek".

Josh Behounek
Business Development Manager
Davey Resource Group, Inc.
3 Industrial Drive, Suite A
Shrewsbury, MA 01545
573-673-7530
josh.behounek@davey.com

Section One: Project Understanding

Introduction

Founded in 1880, Davey is the oldest tree care company in North America. As the tree care and environmental industries have grown and evolved, so too has Davey, with the environmental consulting branch of the company, Davey Resource Group (“DRG”), founded in 1992 and now boasting over 3,000 full-time employees. DRG provides a wide range of environmental consulting services to clients throughout the world. As the industry leader in urban forestry, we understand that trees have immense value to communities, and we know that trees sometimes fail and can cause damage. For Somerville, a densely populated city with nearly 80,000 inhabitants in just over four square miles, managing the urban forest to maximize benefits and minimize risk is especially important. Our experience in collecting data on millions of trees and having done more inventories than any other company in the world provides you the reassurance that your investment will not go to waste and that we understand your goals. We aim to bring our experience to assist you with maximizing the value that trees provide and minimize the risks of damage, injury, or disruption trees may cause. Tools like a tree inventory help identify opportunities, focus attention, and secure resources to tackle community priorities.

We understand that your goal is to improve the urban forest's health and structure by understanding this vital tree resource better. You can't manage if you don't know what you have. DRG's tree inventory will be a LiDAR-based inventory of the public trees, specifically in defined areas, including rights-of-way “ROW”s, mowed and manicured areas of public parks, and other properties. It will include information about species diversity, age distribution, ecosystem benefits, and the overall condition of each tree. This project will provide a much-needed insight into the tree population and allows for a proactive approach to prioritizing tree work.

Applying our proprietary **Quality, Teamwork, and Communication (QTC)** methodology, we ensure the **quality** of our project by leveraging the latest GIS technology, the most recent arboriculture industry standards, and best practices to collect tree inventory data. We customize our field data collection application to your specifications, ensuring our qualified arborists collect all data attributes at each tree and effectively minimize data entry errors. To ensure accuracy, our arborists employ extensive quality control processes to identify errors and improve our approach, and before delivering data, our senior urban foresters run additional data checks and quality control processes.

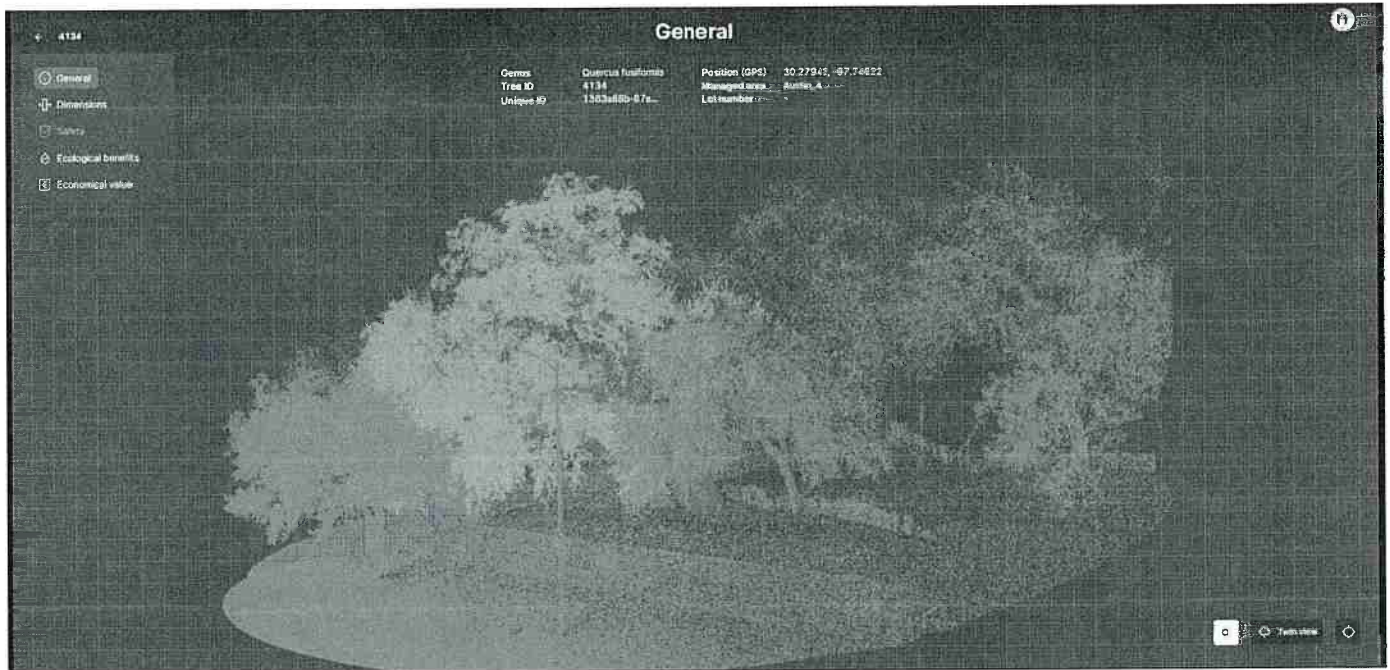
This project will be led by our local **team**, with support from our headquarters in Kent, Ohio, allowing us to draw from resources across the United States, meet tight deadlines, share expertise, and scale as needed. Our professional staff includes many former city foresters, tree nonprofit program leaders, and tree workers who know how to assess trees and understand the difficulties in managing trees on the ground and in forestry operations.

During the inventory, DRG will **communicate** in real-time by providing access to the data from our web-based TreeKeeper® software. We will create custom reports for you that will provide important visualization and insights into the findings. This allows you to track progress and make immediate management decisions.

Overall, this project will provide you with comprehensive data about the trees and illuminate a path forward to address the needs of the urban forest. DRG is excited about the opportunity to be part of your proactive tree management project.

About Our Partner, Greehill

Greehill was founded in 2017 as a research and development project of its two founders. As cities around the world looked for better ways to manage their trees, greehill developed a solution that envisions a faster and more accurate inventory process through digitization. Truly the way of the future, the greehill team won their first project in Singapore two years after their founding. True to the Davey Resource Group culture, we began to explore how this technology would support our clients - both current and into the future. This led to greehill and DRG forming a strategic partnership to introduce this new technology within the United States. The technology has been well received and fits the needs and the resources of communities throughout the states. With over 80 full-time employees and experience working in 11 countries, greehill is fully committed to the North American market and industry.



A “digital twin” of an inventoried tree is viewed in the context of the surrounding point cloud collected by vehicle-mounted LiDAR unit. This technology allowed a full digital recreation of the street ROW that can be viewed in 3D.

Project Approach - QTC

Our team is excited to present our proprietary approach that integrates quality, teamwork, and communication (QTC), ensuring unparalleled service and results for your project. Our process is designed to meet our client's unique needs and standards.



Uncompromising Quality

Our commitment to quality is at the core of everything we do. We utilize state-of-the-art tools and methodologies to ensure the highest standards are met. Our quality assurance process involves rigorous testing and validation at every stage, ensuring that the final product not only meets but exceeds your expectations.



Teamwork at Its Best

We believe that the key to successful project delivery is rooted in effective teamwork. Our team comprises industry experts who bring diverse skills and perspectives to the table. We foster a collaborative environment where every team member's contribution is valued, leading to innovative solutions and creative problem-solving.



Seamless Communication

Clear and consistent communication is vital for the success of any project. We have established a structured communication protocol that keeps all stakeholders informed and engaged throughout the project lifecycle. Regular updates, transparent reporting, and open channels for feedback ensure that we are always aligned with your goals and expectations.

Customized Approach

Understanding that each project has unique challenges and requirements, we customize our approach to best fit your needs. Our flexible methodology allows us to adapt to changing circumstances and requirements, ensuring that we deliver optimal results every time.

With DRG, you are choosing a partner committed to excellence. Our proprietary process, emphasizing quality, teamwork, and communication, is designed to deliver superior results that align with your mission and objectives. We are eager to bring our expertise to your project and look forward to a successful collaboration.



Section Two: Scope of Work

The following key tasks constitute the proposed project:

1. **Inventory:** DRG will conduct a Smart Tree, LiDAR-based inventory of trees and stumps on public property. The project area will be defined using GIS data layers such as a parcel, street ROW, and parks boundary layers. DRG anticipates collecting around 15,000 sites as part of this inventory.

Task One: Smart Tree Inventory

Digital Monitoring of Community Trees

Our urban forests are changing rapidly. From pests and diseases to devastating weather events, it is becoming ever more critical that tree inventory data be relevant and up to date. Decisions made about the urban forest should be based on data that are current and accurate, and this is the outcome of a Smart Tree Inventory. DRG believes that the unique advantage for Somerville with this methodology is decreased inventory time, increased accuracy, and the ability to keep the inventory up to date on a regular basis. The cost of a Smart Tree Inventory is roughly equivalent to utilizing DRG arborists to conduct the inventory by traditional means. The recommended Smart Tree approach includes two LiDAR captures of the urban forest spaced two years apart. This bi-annual data capture creates the opportunity for comparisons of trees looking for “outliers” - trees which are at the extremes of a data field and may therefore need an arborist visit to collect additional information. However, the number of scans can be customized based on Somerville’s needs and available funding. For this project, DRG is proposing one scan. Additional scans can be performed at a later date if and when practicable.

Quality Control

Utilizing our proprietary method of QTC, we have developed the following approach to provide consistent high-quality tree inventory data. As a client-focused company, we prioritize clear and effective communication with our clients. We intend to keep you informed every step of the way so that you are confident in your data and our services. Our communication process aims to address any issues that may arise before they become problems, and we discuss issues as they occur and work towards developing solutions that work for everyone involved.

We maintain strict quality control measures throughout the project and monitor the site count, budget, and timeline while keeping you informed. Our proprietary approach to project implementation applies stringent quality control measures, engaged team members, and clear communication to deliver the final project with confidence in meeting the specifications.

Project Management

Prior to starting fieldwork, it is imperative that we are clearly aligned on the complete project scope. The DRG team sets up meetings and updates schedules prior to starting fieldwork and continually evaluates communication throughout the project to ensure the scope of work is completed on time and within budget. These meetings and e-mail updates include a Virtual Kick-Off Meeting, On-Site Kick-Off Meeting, project update emails, and On-Site Close-Out Meeting.

DRG will request relevant GIS data and imagery or, if necessary, we can use imagery from other public sources. We will use this data to program the data collection software and will confirm the agreed-upon data specifications. Once computers are programmed and fieldwork is scheduled, we will set up an on-site kick-off meeting. This meeting occurs on the first day of data collection and includes topics such as safety, data calibration, communication

procedures, project expectations, and milestones. We can also provide you with a press release, which can be utilized to notify homeowners about the project, funding sources, and what to expect.



A “digital twin” (left), one of five high-resolution photos (middle), and select attribute data (right) for a tree in a Smart Tree Inventory.

Tree Inventory Data Collection

Step 1. Data Capture

Technicians gather street ROW tree data in a standard vehicle equipped with a mounted mobile laser scanner and a 360 degree camera. The standard vehicle travels with the flow of traffic. Each vehicle assesses 4 million data points per second and RGB (red, green, blue) color capture. A detailed point cloud is created for the entire urban environment and high-resolution panoramic images are captured. For data capture in parks or other areas without accessible roadways, the mobile laser scanner and camera can be mounted instead on a small, remote-controlled mobile unit.

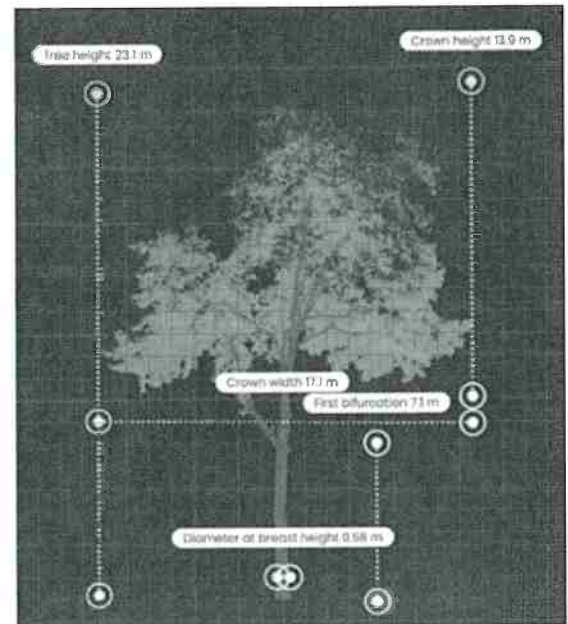
Step 2. “Digital Twin” Creation

The data are first reviewed using a machine learning (ML) application that automatically locates and identifies each tree. It also determines essential tree attributes using an Artificial Intelligence (AI) platform. This platform separates each tree from its surroundings and classifies woody parts from foliage. The final output is an exact “digital twin” of every tree scanned. This digital twin provides the finest resolution possible for canopy foliage volume, trunk diameter, health metrics, and safety information. These digital twins can be rotated and viewed in 3-dimensional space and are accompanied by up to five high-resolution photos of each tree collected at the same time as the LiDAR data. The level of precision and detail can enable Somerville to understand the growth dynamics of the urban forest over time - a task that was previously difficult or impossible.

Data field to be collected include:

- **Site ID:** A unique identifier for each site
- **Mapping coordinates:** X and Y coordinates for each site
- **Address:** street address or park name
- **Genus and species:** using botanical and common names

- **Tree Size:** measured as diameter at breast height (DBH) to the nearest tenth of an inch
- **Multi-Stem:** collected as the height at which the trunk of the tree first divides into two or more stems/branches. Any bifurcation which occurs below 4.5 feet indicates a multi-stem tree. This field can be reported as either the height of the first bifurcation OR as a boolean variable with any bifurcation below 4.5 feet indicating *yes*, this is a multi-stem tree and any bifurcation above 4.5 indicating *no*, this is not a multi-stem tree.
- **Overhead Utilities:** This field can be reported in several ways. It will be recorded as the distance in feet to overhead lines and can be reported as this measurement OR reported categorized into *present and not conflicting*, *present and conflicting*, or *not present*. Specifications for assigning overhead utility field data can be determined after consultation between Somerville and DRG.
- **Visible Root Flare (remote and field inspections only):** This field cannot be collected using the LiDAR methodology and will only be included for trees which are assessed by an arborist remotely or in the field. This is a boolean *yes/no* field.
- **Future Inspection Necessary (remote and field inspections only):** This field cannot be collected using the LiDAR methodology and will only be included for trees which are assessed by an arborist remotely or in the field. This is a boolean *yes/no* field.
- **Condition of Tree Canopy:** Tree canopy condition will be categorized as *good*, *fair*, *poor*, or *dead* based on the percentage of dead canopy identified by the LiDAR methodology. Specifications for assigning canopy condition can be determined after consultation between Somerville and DRG.
- **Condition of Tree Wood (remote and field inspections only):** This field cannot be collected using the LiDAR methodology and will only be included for trees which are assessed by an arborist remotely or in the field. Options for tree wood condition include *good*, *fair*, *poor*, or *dead*.
- **Primary Maintenance:** This field will be filled based on the results of percent live canopy, tree height, and DBH with one of the following options. Specifications for assigning maintenance needs can be adjusted after consultation between Somerville and DRG.
 - *Young tree train* - based on species, DBH, and height; only trees which are 6.0 inches DBH or less will be included and must be short enough to be pruned from the ground using pole tools.
 - *Stump removal* - for stumps.
 - *Tree removal* - for dead trees and trees with more than 50% dead canopy.
 - *Tree clean* - all trees not assigned another maintenance need will be included in this category.
 - *Plant tree* - this field cannot be collected using the LiDAR methodology. DRG arborists on the ground can add planting sites for an additional fee, if desired.
- **Growing Space Type & Size:** These fields will be filled using data matching from the previous 2018 inventory but cannot be directly calculated from the LiDAR methodology alone. For sites which are new since the 2018 inventory, these fields will be filled via remote assessment by a DRG arborist.
- **Presence of Girdling Roots (remote and field inspections only):** This field cannot be collected using the LiDAR methodology and will only be included for trees which are assessed by an arborist remotely or in the field. This is a boolean *yes/no* field.
- **Other Observations:** Certain observations can be included as an output from the LiDAR methodology, such as “remove stakes”. A set of observations to be included can be determined after discussion between DRG and Somerville. Additional observations will be added to trees which are assessed remotely or in the field.



- **Level 2 Risk Assessment & Rating (field inspection only):** These fields cannot be collected using the LiDAR methodology and will only be included for trees which are assessed in the field by DRG arborists. DRG arborists on the ground can add this data for all trees for an additional fee, if desired.
- **Tree Height:** measured in feet to the nearest foot or less.
- **Crown Width:** measured in feet to the nearest foot or less.
- **3–5 Pictures of Each Tree:** collected for every tree as a standard component of the data collection.
- **Digital Twin of Each Tree.**
- **Date of Inventory.**

Step 3. Field Monitoring of Outliers

DRG's urban foresters and ISA certified arborists play a significant role in the Smart Tree Inventory. While the AI and ML system can identify trees which are "outliers" - those which have data field values at the extremes (ex., trees in poor condition, trees with a lean greater than 10 degrees, or trees with low leaf area index), it cannot say definitively what is wrong with the tree - an arborist is needed to review photos and possibly visit the trees in the field. After the collection of point cloud data by the vehicle or park's tracker, tree extraction by AI machine learning to create a database, and initial AI database analysis, DRG's arborists perform the following activities:

1. **In-depth remote review of outliers:** DRG's arborists carry out an examination of the outlier data. During the remote review, the DRG arborist will sort and group data based on attribute-defined criteria. These criteria will be created in consultation with the city and are based on Somerville's priorities for the management of its urban forest. The main purpose of the remote review is to sort and assess the outliers, assigning work remotely, when possible, without field inspection. This will reduce the number of trees that need a field inspection. While remote inspection is a time saver compared to field inspection, it still requires time to review records and look at photographs of trees.
2. **Follow-up field inspections:** Trees that show signs of decline or stress, which typically account for a smaller percentage of the collected trees, are selected for follow-up field inspections. Field inspections are conducted to gather additional data and assess the health and condition of outlier trees. These inspections involve traditional ground-based tree inventory assessments, including Level 1 and Level 2 risk assessments, if desired. However, field inspections differ from a traditional tree inventory because the assessed trees may not be located in the same area and may require a more detailed inspection than is possible when inventorying thousands of trees by traditional means. Consequently, field inspections require more time to complete, both for the assessment and for locating the trees. Results from the field inspections are provided in the TreeKeeper® software.
3. **TreeKeeper® and software support:** All of DRG's inspection records are recorded directly in TreeKeeper®. This provides the city a clear format to track inspections completed and manage project work flow. DRG's experts provide support and assistance with the TreeKeeper® software. This software aids in managing and maintaining the tree inventory data.

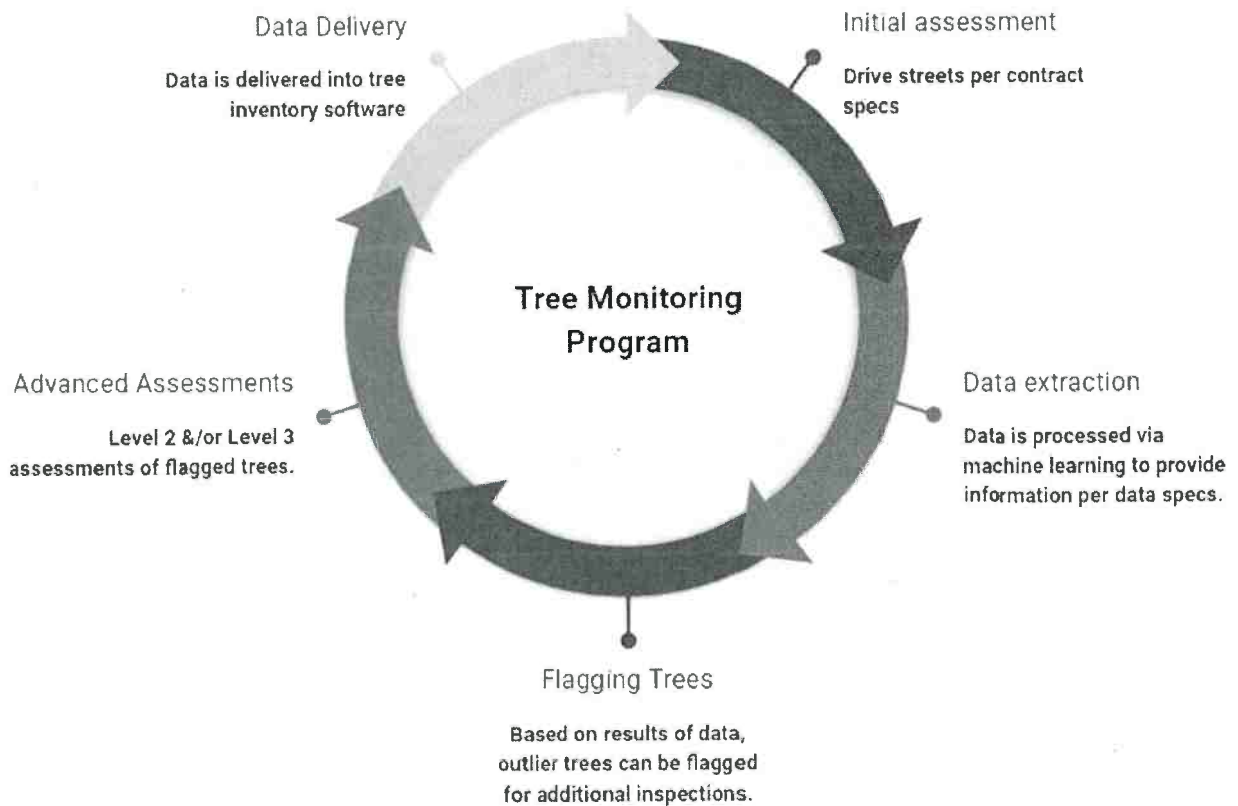
Step 4. Data Delivery

All output tree measurements and information will be incorporated into the city's existing TreeKeeper® (See Appendix A, Page 14, for more information on TreeKeeper® integration with SmartTree Inventories). Portions of the core tree measurements can be output as ESRI® shapefiles; however, items such as the digital twin and deep analysis of some tree metrics are not standard GIS datafiles. Information (e.g., status of tree, diameter, etc.) will be updated for trees already in the city's inventory and new data populated for trees not yet in the city's database. Via TreeKeeper®, the city will have access to view the digital twin of each tree captured during this process.

Step 5. Repeat (Optional)

One significant benefit of the Smart Tree Inventory approach is the regular monitoring capacity and repeatability of tree scans. Each time the LiDAR scans are repeated, a richer dataset emerges that provides robust analytics on tree growth rates and the light signature of tree foliage that provides incredible detail on tree vigor and vitality. This information can be used to intervene in tree maintenance at the early stages of tree stress, rather than when the tree

begins to change in observable 'condition'. Additionally, the information can be used to observe and compare trends with cohorts of similar trees, thus allowing the urban forester to make more informed decisions about trees. Based on the city's requested scope of work, DRG is proposing one scan at this time. However, additional scans can be performed in the future and used to keep Somerville's existing tree inventory up to date.



Data Quality and Accuracy

- Preliminary tree inspections done remotely from the office optimize staff time and resources. Tree managers have the information they need to identify liabilities and implement risk mitigation strategies.
- Delivers 3D models, 360° images, and automated analyses of every public tree. Somerville will have access to panoramic photos, an intuitive digital twin platform, and high-resolution images of each tree. This rich database of information will allow the town to more effectively manage its urban forest by providing resources that help see tree challenges early.
- Tree location data (X/Y) are not estimated or extrapolated—it is captured using highly accurate GPS and LiDAR technology. Each tree location is guaranteed to be within 1 foot of actual.
- Stem diameters will be calculated to within a tenth of an inch. This type of highly precise data allows arborists to precisely plan tasks and allocate resources for the job before going into the field.
- Tree crown size and tree height will be provided.

Limitations

Although DRG believes that a Smart Tree Inventory would provide the highest-quality data to support Somerville's urban forest management goals, there are certain limitations of the method that would prevent it from being used to

meet all qualifications within the city's RFQ. However, DRG feels that the benefits of this methodology merit proposing the use of a Smart Tree Inventory despite the limitations. These limitations are listed below.

- **Planting Sites:** The LiDAR-based Smart Tree Inventory methodology cannot provide detailed and specific information about potential planting locations. This information could be added to the tree inventory by staff on the ground at a later time.
- **Risk Assessment & Rating:** The LiDAR technology cannot provide a risk assessment in line with ANSI and the ISA's best management practices. Risk assessment will require an arborist to visit each tree. However, DRG staff can add risk assessments to every tree visited in the field, which may be a more efficient method of assessing risk as it targets trees which we have reason to believe may be higher risk ("outliers") rather than assessing risk for every tree, including small, young, and healthy trees.

Deliverables

- Updated and verified tree inventory database in TreeKeeper®.
- High-resolution 3D models for each tree in TreeKeeper®.
- Documentation and training materials covering the inventory methodology and use of the newly integrated greehill and TreeKeeper® system.

Timeline

Please note that the timeline presented here is tentative and dependent on a number of factors including the date of contract award, the length of time required to finalize a contract, and weather conditions, among others.

3/18/2024 - estimated contract award date - contracting, insurance paperwork, and meetings to discuss program build and finalize project timelines.

4/1/2024 - estimated project start date - TreeKeeper® updates to prepare Somerville's TreeKeeper® for greehill software integration and mobilization of LiDAR scanning equipment.

5/1/2024 - estimated LiDAR collection start date - greehill's techs start driving Somerville's public roads to collect LiDAR data. Data collection requires that leaves be present, so the start date for this phase of the project is dependent on leaf out. Data collection cannot be done during rain or fog, as water molecules in the air scatter the laser beams and prevent accurate data collection. Thus the amount of time required to collect all of Somerville's streets and parks will be somewhat dependent on the weather.

5/21/2024 - estimated LiDAR collection completion date and start of data post-processing, QC, and outlier analysis.

6/14/2024 - estimated start of remote assessments of trees.

7/14/2024 - estimated completion of remote assessments of trees and start of field checks of trees.

9/1/2024 - estimated date of project completion.

Section Three: Qualifications and Experience

Davey Resource Group, Inc. is the leader in urban forestry consulting in the United States and has provided tree inventory assessment services and assisted with managing urban forests since its founding in 1992. Our 3,000+ full-time employees regularly assess over two million trees annually and develop a wide range of plans for communities. These plans include data-driven operationally-focused work plans and strategic master plans guided by community and stakeholder input. Our TreeKeeper® software is used by over 500 clients nationwide and has more than 10 million trees hosted.

In addition to our on-the-ground arborist assessment and urban forest planning services, we provide GIS-based mapping and canopy assessments. Since 2010, DRG has completed over 225 urban tree canopy (UTC) assessments, providing accurate estimates of tree canopy cover and impervious surfaces. Our team consists of arborists, urban foresters, planners, landscape architects, ecologists, GIS, and Information Technology (IT) professionals. Together, we offer proven solutions for urban forest management and unique strategies for today's challenges, such as the urban heat island effect and the lack of tree canopy in underserved neighborhoods.

In addition to DRG's renowned urban forestry services, we also offer a diverse range of other environmental consulting services. These include wetlands and stream studies, environmental design and ecosystem restoration, stormwater management and compliance, and invasive species management. DRG's staff is well versed in complex ecosystems, resource challenges, and regulatory concerns that can impact project success. With 24 local regional offices and a national presence, DRG is well equipped to handle urban forestry and environmental projects in your area.

Internally, **we believe in the QTC method - Quality, Teamwork, and Communication.** How does this benefit you and your project? We continually look for ways to reinvent, innovate, and adapt our processes to achieve the highest quality results at the best value for our clients. This includes hiring and training team members who are accountable for good work, working safely, and providing accurate results. We encourage and engage in active communication with you and within our teams to provide quality service throughout the project and beyond. This philosophy has led to our history of satisfied repeat clients.

As a trusted partner, Davey collaborates with the United States Department of Agriculture (USDA) Forest Service, The Nature Conservancy, American Forests, and the Arbor Day Foundation on a variety of industry-leading initiatives. Our commitment extends to the International Society of Arboriculture (ISA) and its local chapters, with staff serving on boards and committees. We support the Urban and Community Forestry Society with regular presentations, sponsorships, and volunteering.

Davey has actively contributed to developing and revising arboriculture standards and best management practices, including tree risk assessment, through the American National Standards Institute (ANSI) and ISA. We also work directly with the USFS on the continued development and support of i-Tree to quantify the value ecosystem services trees provide.

DRG's Urban Forestry Services

DRG's urban foresters support municipalities, campuses, parks, cemeteries, utilities, and the private sector across North America and Internationally. We often provide tree risk reduction strategies through assessments and tools such as tree inventories, risk assessments, and urban tree canopy assessments. DRG tailors each project to meet our client's specific program needs and project budget. We provide:

- Tree inventory data collection and updates of existing data.
- Smart tree inventory data collection (AI and machine learning).
- TreeKeeper® software.
- Urban forest planning services to help manage trees and achieve short- and long-term goals.
- GIS services and specialists in-house to assess urban tree canopy, map tree growth, analyze planting space, and predict the impact of threats to tree canopy, such as the urban heat island effect.
- Staff augmentation and contract forestry.
- i-Tree Tools and analyses to highlight the benefits of trees.

We provide innovative solutions through experience and expertise.

Why Choose the Davey Team?

DRG's Unique Qualifications

The following assets and qualities of DRG distinguish us within the arboriculture and urban forestry fields and demonstrate our ability to provide high-quality services.

- **Large professional arborist and GIS/IT staff.** DRG has over 100 professional arborists dedicated to tree inventories and urban forestry consulting, 20 GIS/IT specialists, and access to additional trained employees as the needs arise. As a large national firm, DRG can expand a project team quickly to meet the needs of any project. Our size and internal resources allow it to complete large, long-term inventory projects.
- **Large equipment inventory.** DRG owns multiple handheld computers and pen tablets for tree data collection and precise GPS units. We have national purchase and rental agreements with computer hardware manufacturers and technical equipment to quickly obtain specialty, additional, or replacement equipment.
- **Tree inventory and software project experience.** DRG has over 30 years of experience conducting municipal tree inventories, creating long-term management plans, and creating customized software systems. We have successfully completed more tree inventories than any other company and regularly assess more than 2 million trees annually. Our inventory arborists are highly trained in tree identification, tree maintenance determinations, and tree risk assessments.

- **Local offices and staff with national support.** DRG maintains several offices throughout the region, and our staff can respond directly to any questions or inquiries you might have, ensuring quick and constant communication. Our parent company, The Davey Tree Expert Company, also has residential and commercial tree care and landscaping, horticultural technical support, and urban forestry consulting offices throughout the region. These local offices have our nationwide company's collective support and resources and can assist as necessary.

A 135-year history of providing clients with quality work and proven results. The Davey Tree Expert Company has been in business for over 135 years. It is an employee-owned company that has stood the test of time. While other urban forestry companies and their inventory software programs have gone out of business, The Davey Tree Expert Company's history speaks to longevity and security, such that it will remain successful and be able to serve the needs of your community well into the future.

The Project Team

DRG's staff members are the most qualified and credentialed in the industry and possess extensive industry knowledge and experience. This knowledge and experience includes industry standards, best management practices (BMPs), and the municipal work environment. All of our DRG team members are either ISA Certified Arborists or on a path to becoming certified. Many have additional credentials and maintain the ISA Tree Risk Assessment Qualification (TRAQ) and/or are Board Certified Master Arborists (BCMA). Our team also includes IT and GIS analysts, plan writers, software technicians, data analysis, and administrative support. DRG has the largest staff of urban forestry consultants in the country, allowing us to scale and substitute staff as needed. The staff listed below have been identified as an ideal solution for your project, but due to timing or other assignments, we may elect to substitute staff of equal expertise if needed.

Project Manager - Moriah Day

A project manager with DRG, Moriah Day oversees the Shrewsbury, Massachusetts office's urban forestry initiatives, leading a team of arborists and coordinating tree inventory and management projects for public and private clients. In a consulting arborist role, she advises municipalities on tree selection, planting, maintenance, and urban forestry best management practices. Moriah has demonstrated specialized knowledge and robust expertise in tree risk assessment by becoming Tree Risk Assessment Qualified, an ISA Certified Arborist, a Massachusetts Certified Arborist, and a Massachusetts pesticide applicator.

During college and graduate school (2011–2016), Moriah conducted summer research inventorying tree regeneration for Clark University's Forest Ecology Research Lab. After graduation, starting in 2016, Moriah served as an inventory arborist for the Asian longhorned beetle ground survey project before transitioning to the northeast urban forestry team. Promoted to site manager in 2020, she led field operations and ensured data quality for urban forestry projects while gaining proficiency with use of TreeKeeper[®] 8 and leading training on the program for clients.

In her current role as project manager, Moriah collaborates with various clients and urban forestry programs. Notable projects include conducting a comprehensive tree inventory for Worcester's urban forest master plan and assisting communities like Holyoke, Haverhill, and Fall River in securing funding through the Inflation Reduction Act grant. Moriah expertly guides the City of Fall River on planting strategies, tree species selection, volunteer training, and overseeing extensive planting initiatives. She also conducts tree risk assessments for municipalities such as Concord, Sudbury, and Fall River, adhering to ANSI and ISA guidelines.

Education

- M.S., Geographic Information Science, Clark University, Worcester, MA
- B.S., Environmental Science, Clark University, Worcester, MA

Certifications

- Certified Arborist (#NE-7281A), ISA
- Tree Risk Assessment Qualification (TRAQ), ISA
- Certified Arborist (#2624), Massachusetts Arborists Association
- Certified Massachusetts Pesticide Applicator (#AL-0050459), Massachusetts Department of Agricultural Resources
- Adult First Aid/CPR/AED, American Red Cross

Site Manager - Greg Baldwin

Greg Baldwin joined DRG in July 2014 as a surveyor on the Massachusetts Asian longhorned beetle eradication project. As a surveyor, he performed routine tree inspections looking for the subtle signs and symptoms of invasive insect damage and demonstrated extensive skills in tree identification, time management, and attention to detail. His exceptional work ethic led to his promotion in 2017 to project foreman, where he was responsible for the oversight of up to eight surveyors. This position included assigning work areas, approving timesheets, performing quality assurance/control, training new staff, and providing performance feedback to staff and management.

In early 2022, Greg shifted his focus to urban forestry projects and was promoted to the Site Manager position in May. As an inventory arborist and site manager, Greg applies the skills he honed as a foreman on the ALB eradication project. He manages the inventory team members, assigning survey areas and tracking crew progress, training new staff on inventory protocols, and ensuring open and clear communication between the crew, the project manager, and clients. He manages quality control both through TreeKeeper[®] and with field checks. His inventory experience includes both large urban areas like Worcester, MA as well as smaller municipal inventories, including Southborough, MA and Westford, MA.

Education

- B.A. English, University of Massachusetts, Lowell

Certifications

- Certified Arborist (#NE-7214A), ISA
- Tree Risk Assessment Qualification (TRAQ), ISA
- Certified Arborist (#2557), Massachusetts Arborists Association
- Certified Massachusetts Pesticide Applicator (#AL-0050689), Massachusetts Department of Agricultural Resources
- Adult First Aid/CPR/AED, American Red Cross

Greehill Project Manager - Tim Lacey

Tim Lacey is the Head of Project Management for greehill North America. He is responsible for assisting in the sales process, managing data capture and production, and delivering greehill products to clients. From an engineering background, Tim started his career by co-founding a company focused on haptic technology – the science and presentation of touch and feel interfaces in computer environments and devices. His role there focused on finance and operations and after his departure, he spent over 15 years consulting in business management and IT roles, eventually landing in the nonprofit world at Tree San Diego, implementing GIS systems to manage tree inventories, operational practices, and grant reporting. He oversaw many inventories, one with Davey as the contracted partner, and others with volunteers and contracted staff. Since 2024, he has worked with greehill to bring his experience to manage the Smart Tree Inventory adoption cycle in North America.

Education

- B.S & M.S. Mechanical Engineering, Stanford University, California

Related Projects

We understand the importance of this project and how you only have one chance to get it right. With our vast experience providing urban forestry consulting, you can rest assured we will get it right the first time, and your investment will not be wasted. Below is a limited selection of projects demonstrating our expertise in delivering similar scopes of work on time and within budget. We are happy to provide additional project examples or references if desired.

City of Pittsburgh, PA **April 2023 - May 2023**

With a need to have a good working example of a smart tree inventory in North America, DRG contracted with grehill and worked in collaboration with the City of Pittsburgh to conduct the first smart tree inventory in North America. This pilot project was fully funded and managed by DRG in collaboration and with full support from the City of Pittsburgh. The tree inventory included the collection of 37,000 trees and stumps along public streets using ground-based LiDAR and high-resolution photography. Information collected in Pittsburgh included 3D digital twins, 5 photos of each tree, street view, location, tree species, tree size (DBH, height, canopy), leaning angle, leaf area index, and more.

The smart tree inventory information was uploaded into the city's TreeKeeper® system and is connected with an API to the 3D viewable information. DRG further field inspected several hundred outlier trees to assess percent dieback of crown and condition. City staff are receiving ongoing training from DRG.

Client Contact:

Lisa Ceoffe
City Forester
414 Grant St, Pittsburgh, PA 15219
lisa.ceoffe@pittsburghpa.gov
(412) 665-3626

City of Somerville, MA **June 2017 - January 2019** **Inventory Budget: approximately \$95,000** **TOTAL BUDGET: approximately \$95,000**

DRG conducted a street and park tree inventory for the City of Somerville that included over 15,000 trees, stumps, and vacant planting sites. The inventory was conducted over the course of around a year and a half, necessitating strong coordination between DRG staff and Somerville staff to ensure that data collection remained consistent despite gaps in collection. DRG collected data fields including address, species, growing space type and size, overhead utilities, condition, maintenance need, and tree risk. The data was delivered in Somerville's customized TreeKeeper® program, which the city has since been using to manage trees across a variety of ownership including municipal, state, and private.

Client Contact:

Vanessa Boukili
Senior Urban Forestry & Landscape Planner

93 Highland Ave, Somerville, MA 02143
vboukili@somervillema.gov
617-625-6600 X 2516

City of Worcester, MA

January 2022 - October 2023

Inventory Budget: \$117,663

UFMP Budget: \$104,560

TOTAL BUDGET: \$222,223

DRG conducted a street tree inventory of over 33,000 trees, stumps, and vacant planting sites along public ways in the City of Worcester. Data fields collected in Worcester included location, presence of overhead utilities, tree species, tree size, condition, maintenance need, and risk assessment, among others. The original inventory specifications were for 30,000 trees; however, arborists found that more than 30,000 trees, stumps, and planting sites existed along Worcester's ROW. As a result, an agreement was reached with Worcester to provide additional funding to add 3,000 sites to the inventory and complete the street tree assessments.

DRG worked closely with the city to develop an Urban Forest Master Plan (UFMP). Master Plans are visioning documents which are intended to incorporate multiple stakeholder viewpoints and provide guidance for the city with regards to its urban forest management and planning for years to come. Tasks associated with developing this UFMP have included: stakeholder engagement, public meetings, inventory data analysis, best management practices development, ordinance review, and report writing. The UFMP is under review by the City Council and should be approved in 2024.

Worcester has been using DRG's TreeKeeper[®] software to store, organize, and update their tree inventory data since the early 2000s. As a component of the 2022 inventory update, key staff have been trained on how to use the program to update sites, search for specific trees, and create work orders in TreeKeeper[®] to maximize the benefits this tree inventory software can provide.

Client Contact:

Robert Antonelli
Assistant Commissioner - DPW & Parks
455 Main St, Worcester, MA 01608
antonellir@worcesterma.gov
(508) 799-1190

Town of Ayer, MA

September 2021 - December 2021

Inventory Budget: \$16,500

Management Plan Budget: \$3,500

TOTAL BUDGET: \$20,000

Conducted an inventory of over 5,000 public trees, stumps, and vacant planting sites located along street rights-of-way, in public parks, and on public grounds for the Town of Ayer. Data fields collected in Ayer included location, presence of overhead utilities, tree species, tree size, condition, maintenance need, and risk assessment, among others. Since Ayer is a heavily wooded town, DRG worked with the town's Tree Warden to come up with an appropriate method to inventory trees within wooded areas, such that important maintenance information could be collected for the town without an excessive number of trees being collected along forested areas which were unlikely to receive intensive maintenance.

Upon completion of the inventory, DRG analyzed the inventory data to determine trends in species and genus distribution, tree size/age, and tree condition. They also identified pests/diseases of concern for the town and used information on the maintenance needs of the inventoried trees to develop a 10-year tree maintenance schedule and budget. Inventory data were run through i-Tree Eco to quantify the benefits provided by the inventoried trees. These analyses were incorporated into a Standard Tree Management Plan to help guide the town's evolving tree care program. The information from this management plan was used to develop a tree care budget for Financial Year 23 and advocate for increased spending on tree care.

Since the inventory, the town has been using DRG's TreeKeeper[®] software to store their tree inventory data, create work orders, and inform bid requests and work specifications.

Client Contact:

Mark Wetzel
Special Projects Manager - DPW
25 Brook St, Ayer, MA 01432
mwetzel@ayer.ma.us
(978) 772-8240

Town of Westford, MA

January 2022 - January 2023

Inventory Budget: \$31,000

Planning Budget: \$48,200

TOTAL DRG BUDGET*: \$79,200

* note that the total project budget does not include pricing for our partner, Dodson & Flinker, who was responsible for the majority of mapping, writing, and formatting of the final plan deliverables.

DRG conducted an inventory of over 7,000 trees, stumps, vacant planting sites, and invasive species located along public street rights-of-way for the Town of Westford. Data fields collected in Westford included location, presence of overhead utilities, tree species, tree size, condition, maintenance need, and risk assessment, among others. Data on the estimated extent of invasive species infestations were also collected during the inventory. DRG worked with Westford to determine appropriate areas to inventory, as there was not sufficient budget to inventory the entire town. Instead, DRG focused on getting data from a variety of land-use types such as residential, forested, industrial, and commercial areas; collecting data in environmental justice areas; and collecting data along designated Scenic Roads.

Working with consultant Dodson & Flinker, DRG helped to write a tree and invasive species management plan for the Town of Westford. This project was undertaken with aid from the Municipal Vulnerability Preparedness Grant Program and as such focused on climate change vulnerability and town response. Tasks associated with this Management Plan included public meetings, GIS mapping of proposed study areas, meetings with key stakeholders in the town, inventory data analysis, and compilation of approved planting lists for different contexts within the town.

Client Contact:

Jeffrey Morrissette
Director of Land Use Management
55 Main St, Westford, MA 01886
jmorrissette@westfordma.gov
(978) 692-5524

CLIENT RESPONSIBILITIES

- Provide DRG with imagery, maps, and data files. Our request may include the following: digital orthophotographs, available GIS data layers, other electronic or paper copies of maps for roads, pavement widths, right-of-way widths, boundaries and utilities, and an electronic file or printed list of street names and endpoints.
- Provide daily contact information and directions during the inventory project.
- Provide a copy of any existing tree inventory databases.
- Coordinate and host an on-site kick-off meeting before the start of fieldwork.
- By accepting this proposal, you accept DRG's Terms and Conditions and Limited Warranty and agree that, upon award, this proposal and its attachments will be made a part of the Agreement.

TERMS AND CONDITIONS

- All pricing is valid for 90 days from the date of this proposal, after which time we reserve the right to amend fees as needed.
- Time and materials (T&M) estimates will be billed using the labor rates in DRG's current commercial price list. Fixed Fee Contract Prices will be billed in monthly increments for the percentage of work completed in the billing period. Firm-Fixed Unit Prices will be billed in monthly increments for the number of completed units in the billing period.
- Payment terms are net 30 days.
- If prevailing wage requirements are discovered after the date of this proposal, we reserve the right to negotiate our fees.
- The client is responsible for any permit fees, taxes, and other related expenses unless noted as being included in our proposal.
- The client shall provide 48 hours notice of any meetings where the consultant's attendance is required.
- Unless otherwise stated, one round of revisions to deliverables is included in our base fee. Additional edits or revisions will be billed on a time and material (T&M) basis.
- All reports are provided only to the client unless otherwise directed.
- DRG represents that it and its agents, and consultants employed by it, are protected by Workers' Compensation insurance and that DRG has coverage under liability insurance policies which DRG deems reasonable and adequate. DRG shall furnish certificates of insurance upon request. DRG agrees to maintain general liability insurance in commercially reasonable amounts. Client is responsible for requesting specific inclusions or limits of coverage that are not present in DRG insurance, and the cost of such inclusion or coverage increases if available, will be at Client's sole cost and expense. If the Client requires an Additional Insured endorsement, DRG shall provide one in the certificate of insurance, listing only the entities requested in the "Additional Insured Requirements" section above.

LIMITED WARRANTY

Davey Resource Group, Inc. ("DRG") provides this limited warranty ("Limited Warranty") in connection with the provision of services by DRG (collectively the "Services") under the agreement between the parties, including any bids, orders, contracts, or understandings between the parties (collectively the "Agreement").

Notwithstanding anything to the contrary in the Agreement, this Limited Warranty will apply to all Services rendered by DRG and supersedes all other warranties in the Agreement and all other terms and conditions in the Agreement that conflict with the provisions of this Limited Warranty. Any terms or conditions contained in any other agreement, instrument, or document between the parties, or any document or communication from you, that in any way modifies the provisions in this Limited Warranty, will not modify this Limited Warranty nor be binding on the parties unless such terms and conditions are approved in a writing signed by both parties that specifically references this Limited Warranty.

Subject to the terms and conditions set forth in this Limited Warranty, for a period of ninety (90) days from the date Services are performed (the "Warranty Period"), DRG warrants to Customer that the Services will be performed in a timely, professional and workmanlike manner by qualified personnel.

To the extent the Services involve the evaluation or documentation ("Observational Data") of trees, tree inventories, natural areas, wetlands and other water features, animal or plant species, or other subjects (collectively, "Subjects"), the Observational Data will pertain only to the specific point in time it is collected (the "Time of Collection"). DRG will not be responsible nor in any way liable for (a) any conditions not discoverable using the agreed upon means and methods used to perform the Services, (b) updating any Observational Data, (c) any changes in the Subjects after the Time of Collection (including, but not limited to, decay or damage by the elements, persons or implements; insect infestation; deterioration; or acts of God or nature [collectively, "Changes"]), (d) performing services that are in addition to or different from the originally agreed upon Services in response to Changes, or (e) any actions or inactions of you or any third party in connection with or in response to the Observational Data. If a visual inspection is utilized, visual inspection does not include aerial or subterranean inspection, testing, or analysis unless stated in the scope of work. When performing tree inventories or assessments, DRG will not be liable for the discovery or identification of non-visually observable, latent, dormant, or hidden conditions or hazards, and does not guarantee that Subjects will be healthy or safe under all circumstances or for a specified period of time, or that remedial treatments will remedy a defect or condition.

To the extent you request DRG's guidance on your permitting and license requirements, DRG's guidance represents its recommendations based on its understanding of and experience in the industry and does not guarantee your compliance with any particular federal, state or local law, code or regulation.

DRG may review information provided by or on behalf of you, including, without limitation, paper and digital GIS databases, maps, and other information publicly available or other third-party records or conducted interviews (collectively, "Source Information"). DRG assumes the genuineness of all Source Information. DRG disclaims any liability for errors, omissions, or inaccuracies resulting from or contained in any Source Information.

If it is determined that DRG has breached this Limited Warranty, DRG will, in its reasonable discretion, either: (i) re-perform the defective part of the Services or (ii) credit or refund the fees paid for the defective part of the Services. This remedy will be your sole and exclusive remedy and DRG's entire liability for any breach of this Limited Warranty. You will be deemed to have accepted all of the Services if written notice of an alleged breach of this Limited Warranty is not delivered to DRG prior to the expiration of the Warranty Period.

To the greatest extent permitted by law, except for this Limited Warranty, DRG makes no warranty whatsoever, including, without limitation, any warranty of merchantability or fitness for a particular purpose, whether express or implied, by law, course of dealing, course of performance, usage of trade or otherwise.

Appendix A: About TreeKeeper®

Easy to Use

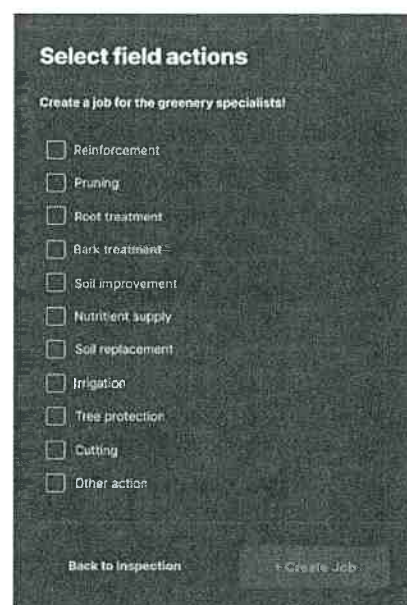
TreeKeeper® is the leading tree management software for cities across the U.S. As part of the Smart Tree Inventory package, TreeKeeper® is used for updating, work orders, and as a mobile solution for the inventory data. Greehill software lends the tree data visualization to the project. The unified system has a shared IP address to create a seamless management tool.

Environmental Benefits

Knowing the benefits your trees provide is simple with this software. TreeKeeper® automatically calculates the environmental benefits provided by trees. Air quality, carbon sequestration and storage, and stormwater benefits can be estimated for one tree, groups of trees, or for the entire population. An advantage of using greehill data with TreeKeeper® is that the calculated benefits are based on leaf area measurements that are obtained during the inventory rather than on DBH or height alone.

Work Order System

TreeKeeper®'s interactive work environment makes managing inventory data easy. The city can see and work with the tree inventory data through an interactive map and table. The map and table can be used independently or at the same time, giving you a totally custom work environment. The work order system for TreeKeeper® is included in the pricing. There are no add-ons to TreeKeeper®. With the data from greehill's "digital twins", some work can be visualized from the office environment. Digital twins and photographs can be used to determine the need for field actions. For example, if trees need to be pruned for sidewalk clearance, those trees can be determined through both visual and programmable work needs. Looking at all the tree data, one can set a query for all trees that are not clearing the sidewalk to the city's specifications. Work orders can be developed including the opportunity to show online where the tree(s) need to be pruned. Another reason TreeKeeper® is easy to use is that it is accessible by multiple people in separate locations at the same time. Any changes to the data, such as adding new sites, updating the information for an existing site, or running a report, are updated in real-time.



Key Features

- **Map-Centric:** use the map to find information about individual sites or groups of sites.
- **List View:** sort and analyze data.
- **Query:** look up sites by any data field, such as address, species, or condition.
- **Search:** by one or multiple data fields; no nested searches.
- **Narrow Down:** refine the search results to find the result needed.
- **Switch Layers On-the-Fly:** change the data layer through a drop-down menu.
- **Dashboards:** gauge the inventory data via pre-set and user-designed graphs.
- **Reporting:** create reports at the touch of a button.
- **Work Orders:** assign work to crews, projects, or programs.
- **Work History:** keep track of the edits made to a site.
- **Edit:** update one site at a time or make batch edits to multiple sites.
- **Multi-User Access:** available via a secure internet connection.
- **Permissions:** assign access levels (no read or edit access) to users and viewers.
- **Tree Value:** calculated using a built-in tree value estimator based on i-Tree Tools.
- **Export Data:** to software such as Microsoft® Office and other word processing and spreadsheet program

In the Field

While in the field, you can find and update site information and add new trees or sites to the database using TreeKeeper®. All edits are real-time. TreeKeeper® works with most tablet computers and uses the tablet computer's location services or GPS availability to determine location.

Data Download Formats

In TreeKeeper®, you can view, edit, and update the inventory data and download the data in a variety of formats, including CSV/Excel™ and ESRI®shapefile formats.

Information Sharing

If the City of Somerville wants to share the tree inventory data with other organizations or the public, TreeKeeper® provides a public interface for third-party viewing. TreeKeeper®'s public interface does not allow visitors to edit the data or "crowdsourced" information, and you can determine what data are shown to visitors to the site.

We Listen to You

DRG stays on top of the latest technology trends to maintain TreeKeeper®'s place as one of the most advanced software systems for tree inventory management on the market. And, we also listen to you, our clients, to make sure TreeKeeper® responds to the needs of their respective workplaces. Over the past 20 years, many of the upgrades to TreeKeeper®, made by DRG's in-house software developers, came about by suggestion from our clients.

Appendix B
Cost Details

- Service rate(s): Per Details Below**
- Supply rate(s): Per Details Below**
- Number of payments: Per Details Below**
- Payment upon completion of deliverables: Per Details Below**
- Fixed fee: Per Details Below**
- Other: Per Details Below**

The Vendor shall periodically submit invoices to the City, for which compensation is due under this Contract and requesting payment for goods received or services rendered by the Vendor during the period covered by the invoice. The invoice must agree to the rates/payment schedule as indicated in this contract and must include the applicable Purchase Order number. The invoice shall include the following information: vendor name, vendor remit address, invoice date, invoice number, itemized listing of goods, services, labor, and expenses and indicating the total amount due.

Note: The contract award will be for the value of all of the items described in the Smart Tree Inventory Services table, with the exception of the “2026 Smart tree inventory (Rescanning of 15,000 trees, 3,000 remote inspections, and 750 field inspections)”. Thus, the total contract value will be \$171,900 (\$55,125 + \$28,125 + (\$88,650, reserved for items listed under “Any Other Related Services/Fees (describe)” which is to be utilized on an on-call/ as-needed basis, subject to budgetary constraints and requiring specific approval from the project manager (i.e., Vanessa Boukili)).

A PROPOSAL PREPARED FOR

The City of Somerville

Smart Tree Inventory Services Price Proposal

Mar 12, 2024

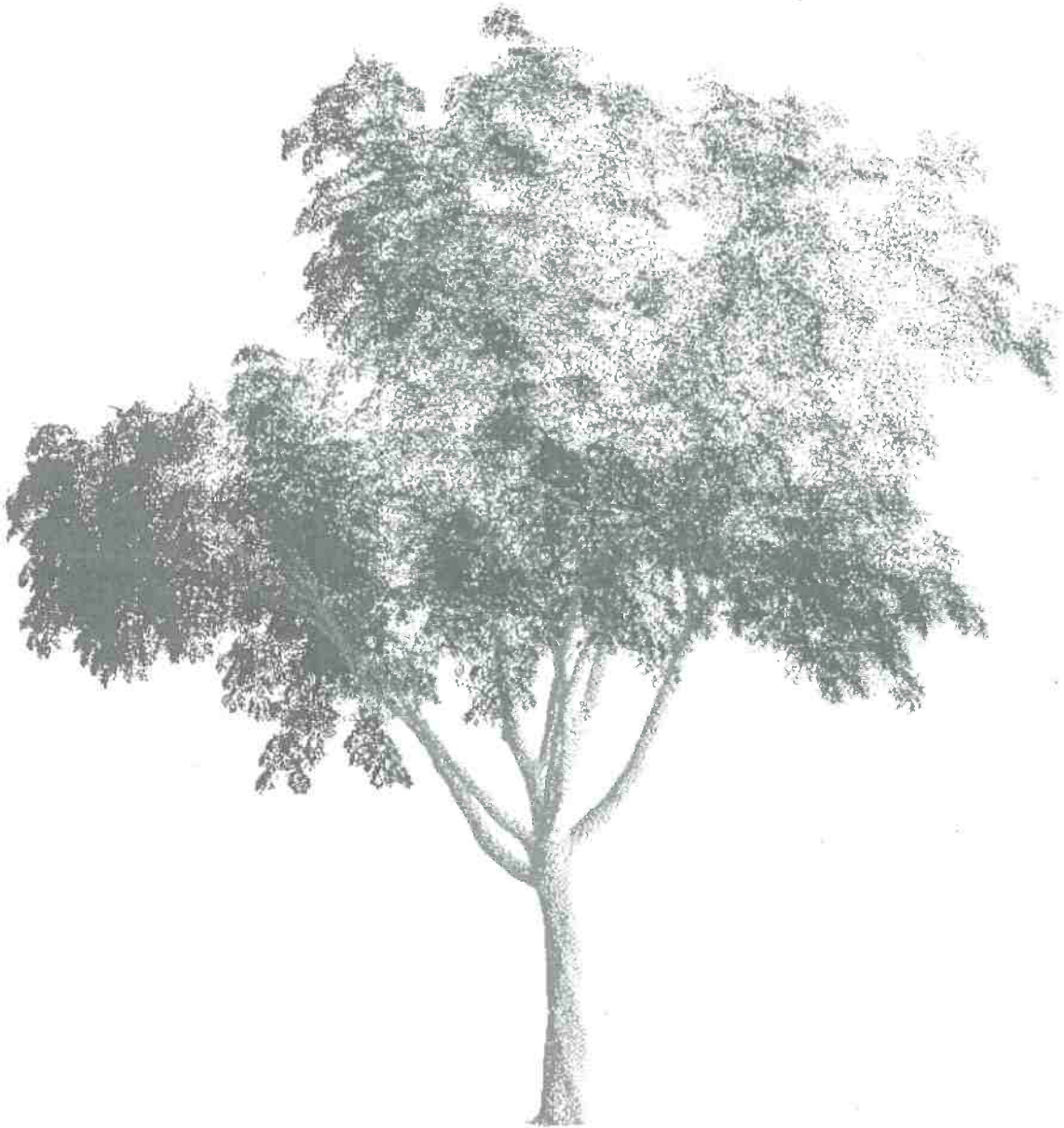


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March 8, 2024

Thupten Chukhatsang
Senior Procurement Manager
The City of Somerville
93 Highland Avenue
Somerville, MA 02143
RE: Response to RFP #24-47 Tree Inventory Update

Dear Thupten Chukhatsang,

Davey Resource Group, Inc. (DRG), in cooperation with our exclusive partner, greehill, is delighted to present a proposal to the City of Somerville for a Smart Tree Inventory. Our proposal introduces advanced technology that combines ground-based LiDAR and artificial intelligence (AI) to revolutionize the collection of urban forest tree inventory data. This cutting-edge approach surpasses traditional methods in terms of both accuracy and efficiency. It provides precise tree attributes, including location to the nearest foot. Moreover, our technology gathers attributes that were previously difficult to accurately collect, such as tree height, canopy spread, and leaf area index. Additionally, we include five high-resolution photographs and a “digital twin” of each tree captured at the time of the scan. Using our Smart Tree Inventory, the City of Somerville can make well-informed decisions to improve the long-term health and sustainability of the city’s urban forest. DRG guarantees the pricing provided in this proposal for 90 days from the date of the submission deadline.

Trees are part of everyday life. The urban forest creates a sense of place and supplies real benefits to those who live in an area surrounded by trees. Trees along streets, in parks, around playgrounds, and in backyards provide shade and beauty and enhance the quality of life by bringing natural elements and wildlife habitats into urban settings. Trees also moderate temperatures, reduce air pollution and energy use, improve water quality, and promote human health and well-being. Davey Resource Group, Inc. “DRG” understands the benefits trees bring, and we also realize the challenges that come with managing public trees. Through the years, our company has developed numerous tree care and maintenance protocols, standards, and best practices - including developing software for organizing and managing tree inventories. Fundamentally, our tree knowledge is rooted in direct science and research, differentiating us from our competitors and ensuring our clients receive the best advice to manage and maintain trees.

The team we proposed to manage your project has the knowledge, experience, and availability to meet your goals and help you with the next steps for your project. They understand how to help you meet your specific program needs and project budget. We believe that our expertise in urban forestry management and our commitment to sustainability make us an ideal partner for The City of Somerville in this important endeavor. Thank you for considering DRG, and we look forward to talking with you about the next steps.

Sincerely,

Josh Behounek
Business Development Manager
Davey Resource Group, Inc.
3 Industrial Drive, Suite A
Shrewsbury, MA 01545
573-673-7530
josh.behounek@davey.com

RFP #24-47
SECTION 3.0
PRICING

By signing this Price Form, the Proposer certifies the following bulleted statements and offers to supply and deliver the materials and services specified below in full accordance with the Contract Documents supplied by the City of Somerville entitled: Tree Inventory Update

- The proposals will be received at the office of the Chief Procurement Officer, Somerville City Hall, 93 Highland Avenue, Somerville, MA 02143 no later than **3/13/2024 by 2:30 PM EST**
- If the **awarded** vendor is a Corporation a "Certificate of Good Standing" (produced by the Mass. Sec. of State) must be furnished with the resulting contract (see Section 4.0.)
- **Awarded Vendor** must comply with Living Wage requirements (see Section 4.0; only for services)
- **Awarded Vendor** must comply with all applicable laws, including but not limited to the Somerville Wage Theft Ordinance.
- **Awarded Vendor** must comply with insurance requirements as stated in Section 4.0.
- The Chief Procurement Officer reserves the right to accept or reject any or all proposals and/or to waive any informalities if in her/his sole judgment it is deemed to be in the best interest of the City of Somerville.
- The following prices shall include delivery, the cost of fuel, the cost of labor, and all other charges.
- This form to be enclosed in sealed proposal package.

Please provide prices for the following and include any additional/optional fees not listed:

Item	Per Unit Price	Estimated Quantity	Total Price
Tree Inventory Update: City-owned Street Trees*	\$ <u>5.25</u> per tree	10,500 trees	\$ <u>55,125.00</u>
Tree Inventory Update: All Other Publicly-owned Trees*	\$ <u>6.25</u> per tree	4,500 trees	\$ <u>28,125.00</u>
Any Other Related Services/Fees (describe):	Please see proposal		

**Tree Inventory Update prices include 3D model for each tree, as well as all tree inventory data fields required to be verified and updated/added, as described in the Scope of Work.*

Name of Company/Individual: Davey Resource Group, Inc.

Address, City, State, Zip: 295 S. Water Street, Suite 300, Kent, Ohio 44240

Tel # 800-828-8312 **Email:** karen.wise@davey.com

Signature of Authorized Individual *Karen Wise*

Please acknowledge receipt of any and all Addenda (if applicable) by signing below and including this form in your proposal package. Failure to do so may subject the proposer to disqualification.

ACKNOWLEDGEMENT OF ADDENDA: N/A

Addendum #1 ___ **#2** ___ **#3** ___ **#4** ___ **#5** ___ **#6** ___ **#7** ___ **#8** ___ **#9** ___ **#10** ___

INVESTMENT AND AUTHORIZATION TO PROCEED

The prices, terms and conditions, and warranty are hereby accepted. I am authorized to bind and authorize Davey Resource Group, Inc. to perform the specified work. I am familiar with and agree to the terms and conditions appended to this proposal. I understand that once accepted, this proposal constitutes a binding contract. This proposal is based on an estimated number of trees/sites to be inventoried. Davey Resource Group, Inc. reserves the right to renegotiate the price based on the timing of the award, scheduling of fieldwork, the final methodology chosen by the client, and availability, completeness, and quality of maps and GIS information.

Smart Tree Inventory Services

Description of Service	Per-Unit Price	Estimated Quantity	Total Price	Accept
Street Tree Inventory				
<p>Scan of up to 10,500 trees along public streets during the 2024 leaf-on season.</p> <p>Remote inspection of up to 2,100 and field Inspection of up to 525 outlier trees by a DRG Arborist in 2024.</p> <p>Two years of integrated software with 3D viewable interface & current TreeKeeper[®] system.</p>	\$5.25/site	10,500 trees	\$55,125	<input checked="" type="checkbox"/>
Publicly-Owned Tree Inventory				
<p>Scan of up to 4,500 trees within publicly-owned areas during the 2024 leaf-on season.</p> <p>Remote inspection of up to 900 and field Inspection of up to 225 outlier trees by a DRG Arborist in 2024.</p> <p>Two years of integrated software with 3D viewable interface & current TreeKeeper[®] system.</p>	\$6.25/site	4,500 trees	\$28,125	<input checked="" type="checkbox"/>
Any Other Related Services/Fees (describe)				

Database matching between existing trees in TreeKeeper® and newly scanned trees.	\$950 1-time fee	1-time fee	\$950	<input checked="" type="checkbox"/>
In-person training sessions on utilizing new systems and information.	\$1,000/ session	1 session	\$1,000	<input checked="" type="checkbox"/>
Smart tree inventory consulting services.	\$150/hour	8 hours	\$1,200	<input checked="" type="checkbox"/>
2026 Smart tree inventory (Rescanning of 15,000 trees, 3,000 remote inspections, and 750 field inspections)	\$4.50/tree	15,000 trees	\$67,500	<input type="checkbox"/>
Field-based risk assessment of all inventoried trees not assessed as part of the Smart Tree Inventory process	\$6.00/tree	14,250 trees	\$85,500	<input checked="" type="checkbox"/>
Project Total	\$ _____			

We want the option to do this, but may not actually use it

We want the option to do this, but may not actually use it in full

We do want this, but only for a proportion of the 14,250 trees.

By signing this form, I do hereby acknowledge acceptance of the scope of work and associated fee, as well as the terms and conditions and limited warranty contained herein. Furthermore, my signature authorizes the work to be performed effective the date of my signature and denotes that I am an authorized representative of The City of Somerville with authority to authorize and bind my company.

The City of Somerville

Davey Resource Group, Inc.

Client Representative: _____
 Authorizing Signature: _____
 Authorizing Name: _____
 Title: _____
 Date: _____
 Phone Number: _____
 E-mail: _____

DRG Project Representative: _____
 Title: _____
 Date: _____
 Phone Number: _____
 E-mail: _____

INVOICING METHOD

How would you like to receive invoices for this project?

Mail: Invoice(s) will be mailed to the address listed on page 1 of this proposal.

E-mail: Invoice(s) will be e-mailed to:

vboukili@somervillema.gov

Other: Please provide instructions below:

INSURANCE REQUIREMENTS

Certificate Holder Name and Address (if different than listed on page 1 of the proposal):

List of Additional Insured Entities:

CLIENT RESPONSIBILITIES

- Provide DRG with imagery, maps, and data files. Our request may include the following: digital orthophotographs, available GIS data layers, other electronic or paper copies of maps for roads, pavement widths, right-of-way widths, boundaries and utilities, and an electronic file or printed list of street names and endpoints.
- Provide daily contact information and directions during the inventory project.
- Provide a copy of any existing tree inventory databases.
- Coordinate and host an on-site kick-off meeting before the start of fieldwork.
- By accepting this proposal, you accept DRG's Terms and Conditions and Limited Warranty and agree that, upon award, this proposal and its attachments will be made a part of the Agreement.

TERMS AND CONDITIONS

- All pricing is valid for 90 days from the date of this proposal, after which time we reserve the right to amend fees as needed.
- Time and materials (T&M) estimates will be billed using the labor rates in DRG's current commercial price list. Fixed Fee Contract Prices will be billed in monthly increments for the percentage of work completed in the billing period. Firm-Fixed Unit Prices will be billed in monthly increments for the number of completed units in the billing period.
- Payment terms are net 30 days.
- If prevailing wage requirements are discovered after the date of this proposal, we reserve the right to negotiate our fees.
- The client is responsible for any permit fees, taxes, and other related expenses unless noted as being included in our proposal.
- The client shall provide 48 hours notice of any meetings where the consultant's attendance is required.
- Unless otherwise stated, one round of revisions to deliverables is included in our base fee. Additional edits or revisions will be billed on a time and material (T&M) basis.
- All reports are provided only to the client unless otherwise directed.
- DRG represents that it and its agents, and consultants employed by it, are protected by Workers' Compensation insurance and that DRG has coverage under liability insurance policies which DRG deems reasonable and adequate. DRG shall furnish certificates of insurance upon request. DRG agrees to maintain general liability insurance in commercially reasonable amounts. Client is responsible for requesting specific inclusions or limits of coverage that are not present in DRG insurance, and the cost of such inclusion or coverage increases if available, will be at Client's sole cost and expense. If the Client requires an Additional Insured endorsement, DRG shall provide one in the certificate of insurance, listing only the entities requested in the "Additional Insured Requirements" section above.

LIMITED WARRANTY

Davey Resource Group, Inc. ("DRG") provides this limited warranty ("Limited Warranty") in connection with the provision of services by DRG (collectively the "Services") under the agreement between the parties, including any bids, orders, contracts, or understandings between the parties (collectively the "Agreement").

Notwithstanding anything to the contrary in the Agreement, this Limited Warranty will apply to all Services rendered by DRG and supersedes all other warranties in the Agreement and all other terms and conditions in the Agreement that conflict with the provisions of this Limited Warranty. Any terms or conditions contained in any other agreement, instrument, or document between the parties, or any document or communication from you, that in any way modifies the provisions in this Limited Warranty, will not modify this Limited Warranty nor be binding on the parties unless such terms and conditions are approved in a writing signed by both parties that specifically references this Limited Warranty.

Subject to the terms and conditions set forth in this Limited Warranty, for a period of ninety (90) days from the date Services are performed (the "Warranty Period"), DRG warrants to Customer that the Services will be performed in a timely, professional and workmanlike manner by qualified personnel.

To the extent the Services involve the evaluation or documentation ("Observational Data") of trees, tree inventories, natural areas, wetlands and other water features, animal or plant species, or other subjects (collectively, "Subjects"), the Observational Data will pertain only to the specific point in time it is collected (the "Time of Collection"). DRG will not be responsible nor in any way liable for (a) any conditions not discoverable using the agreed upon means and methods used to perform the Services, (b) updating any Observational Data, (c) any changes in the Subjects after the Time of Collection (including, but not limited to, decay or damage by the elements, persons or implements; insect infestation; deterioration; or acts of God or nature [collectively, "Changes"]), (d) performing services that are in addition to or different from the originally agreed upon Services in response to Changes, or (e) any actions or inactions of you or any third party in connection with or in response to the Observational Data. If a visual inspection is utilized, visual inspection does not include aerial or subterranean inspection, testing, or analysis unless stated in the scope of work. When performing tree inventories or assessments, DRG will not be liable for the discovery or identification of non-visually observable, latent, dormant, or hidden conditions or hazards, and does not guarantee that Subjects will be healthy or safe under all circumstances or for a specified period of time, or that remedial treatments will remedy a defect or condition.

To the extent you request DRG's guidance on your permitting and license requirements, DRG's guidance represents its recommendations based on its understanding of and experience in the industry and does not guarantee your compliance with any particular federal, state or local law, code or regulation.

DRG may review information provided by or on behalf of you, including, without limitation, paper and digital GIS databases, maps, and other information publicly available or other third-party records or conducted interviews (collectively, "Source Information"). DRG assumes the genuineness of all Source Information. DRG disclaims any liability for errors, omissions, or inaccuracies resulting from or contained in any Source Information.

If it is determined that DRG has breached this Limited Warranty, DRG will, in its reasonable discretion, either: (i) re-perform the defective part of the Services or (ii) credit or refund the fees paid for the defective part of the Services. This remedy will be your sole and exclusive remedy and DRG's entire liability for any breach of this Limited Warranty. You will be deemed to have accepted all of the Services if written notice of an alleged breach of this Limited Warranty is not delivered to DRG prior to the expiration of the Warranty Period.

To the greatest extent permitted by law, except for this Limited Warranty, DRG makes no warranty whatsoever, including, without limitation, any warranty of merchantability or fitness for a particular purpose, whether express or implied, by law, course of dealing, course of performance, usage of trade or otherwise.

Appendix C
Forms



**Certificate of Authority
(Corporations Only)**

Instructions: Complete this form and sign and date where indicated below.

1. I hereby certify that I, the undersigned, am the duly elected Clerk/Secretary of
Davey Resource Group, Inc.

(Insert Full Name of Corporation)

2. I hereby certify that the following individual **Karen M. Wise**
(Insert the Name of Officer who Signed the Contract and Bonds)

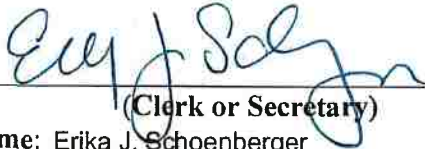
is the duly elected Vice President, Environmental Consulting
(Insert the Title of the Officer in Line 2) of said Corporation.

3. I hereby certify that on **August 23, 2023**
(Insert Date: Must be on or before Date Officer Signed Contract/Bonds)

at a duly authorized meeting of the Board of Directors of said corporation, at which a quorum was present, it was voted that

Karen M. Wise Vice President, Environmental Consulting
(Insert Name of Officer from Line 2) (Insert Title of Officer from Line 2)

of this corporation be and hereby is authorized to make, enter into, execute, and deliver contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.

4. ATTEST: 
Signature: _____
(Clerk or Secretary)
Printed Name: Erika J. Schoenberger
Printed Title: General Counsel, VP & Secretary
Date: **February 26, 2024**
(Date Must Be on or after Date Officer Signed Contract/Bonds)





The Commonwealth of Massachusetts
Secretary of the Commonwealth
State House, Boston, Massachusetts 02133

William Francis Galvin
Secretary of the
Commonwealth

May 22, 2023

To Whom It May Concern:

I hereby certify that the records of this office show that

DAVEY RESOURCE GROUP, INC.

a corporation organized under the laws of **Delaware** on **June 19, 2017** was qualified to do business in this Commonwealth on **October 10, 2017** under the provisions of the General Laws, and I further certify that said corporation is still qualified to do business in this Commonwealth.

I also certify that said corporation is not delinquent in the filing of any annual reports required to date.



In testimony of which,
I have hereunto affixed the
Great Seal of the Commonwealth
on the date first above written.

William Francis Galvin

Secretary of the Commonwealth

INSURANCE SPECIFICATIONS

INSURANCE REQUIREMENTS FOR AWARDED VENDOR ONLY:

Prior to commencing performance of any work or supplying materials or equipment covered by these specifications, the contractor shall furnish to the Office of the Purchasing Director a Certificate of Insurance evidencing the following:

A. GENERAL LIABILITY - Comprehensive Form

Bodily Injury Liability.....\$ One Million

Property Damage Liability.....\$ One Million

B. PROFESSIONAL LIABILITY.....\$ 1,000,000.00

C. COVERAGE FOR PAYMENT OF WORKER'S COMPENSATION BENEFIT PURSUANT TO CHAPTER 152 OF THE MASSACHUSETTS GENERAL LAWS IN THE AMOUNT AS LISTED BELOW:

WORKER'S COMPENSATION.....\$ Statutory

EMPLOYERS' LIABILITY.....\$ Statutory

D. AUTOMOBILE LIABILITY INSURANCE AS LISTED BELOW:

BODILY INJURY LIABILITY.....\$ STATUTORY

1. A contract will not be executed unless a certificate (s) of insurance evidencing above-described coverage is attached.
2. Failure to have the above-described coverage in effect during the entire period of the contract shall be deemed to be a breach of the contract.
3. All applicable insurance policies shall read:
"CITY OF SOMERVILLE" as a certificate holder and as an additional insured for general liability only along with a description of operation in the space provided on the certificate.

Certificate Should Be Made Out To:

**City Of Somerville
c/o Purchasing Department
93 Highland Avenue
Somerville, Ma. 02143**

Note: If your insurance expires during the life of this contract, you shall be responsible to submit a new certificate(s) covering the period of the contract. No payment will be made on a contract with an expired insurance certificate.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
05/07/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).


PRODUCER MARSH USA LLC. 200 Public Square, Suite 3760 Cleveland, OH 44114-1824 104550 RESOU Fergus	CONTACT NAME: Marsh U.S. Operations PHONE (A/C No, Ext): (866) 966-4664 E-MAIL ADDRESS: Cleveland.CertRequest@marsh.com FAX (A/C No):
	INSURER(S) AFFORDING COVERAGE
INSURED Davey Resource Group, Inc 295 S. Water Street Suite 300 Kent, OH 44240	INSURER A : Old Republic Insurance Company INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :
NAIC # 24147	

COVERAGES **CERTIFICATE NUMBER:** CLE-007213530-02 **REVISION NUMBER:** 3

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			MWZY 314042 23	09/01/2023	09/01/2024	EACH OCCURRENCE \$ 5,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 5,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 5,000,000 GENERAL AGGREGATE \$ 5,000,000 PRODUCTS - COMP/OP AGG \$ 5,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> OTHER:			MWTB 314041 23	09/01/2023	09/01/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N N/A			MWC 314040 23 (AOS)	09/01/2023	09/01/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 5,000,000 E.L. DISEASE - EA EMPLOYEE \$ 5,000,000 E.L. DISEASE - POLICY LIMIT \$ 5,000,000
A	Excess Workers Compensation			MWXS 314043 23 (NC, OH, PA, WA)	09/01/2023	09/01/2024	Workers Compensation Statutory
A	SIR: \$5,000,000			MWXS 316391 23 (CA)	09/01/2023	09/01/2024	Employer's Liability 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Re: Project: Tree Inventory Update.
City of Somerville is(are) included as Additional Insured(s) as respects General Liability where required by written contract or agreement and only as respects operations performed on their behalf by the Named Insured. This insurance is primary and non-contributory over any existing insurance and limited to liability arising out of the operations of the named insured where required by written contract, subject to policy terms and conditions. Coverage includes waiver of subrogation where required by written contract on General Liability, Auto Liability, and Workers Compensation coverage.

CERTIFICATE HOLDER City of Somerville C/O Purchasing Department 93 Highland Avenue Somerville, MA 02143	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE of Marsh USA LLC 
--	---

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AGENCY CUSTOMER ID: CN101565730

LOC #: Cleveland



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY MARSH USA LLC.		NAMED INSURED Davey Resource Group, Inc 295 S. Water Street Suite 300 Kent, OH 44240	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Workers Compensation does not apply in MN. Coverage is obtained from Workers Compensation reinsurance association (W.C.R.A.) as required by the state. Minnesota
Employers Liability is covered by policy number MWC 314040 23.



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
04/30/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Northeast, Inc. Cleveland OH Office 950 Main Avenue Suite 1600 Cleveland OH 44113 USA	CONTACT NAME:	
	PHONE (A/C No. Ext): (866) 283-7122	FAX (A/C No.): 800-363-0105
E-MAIL ADDRESS:		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED Davey Resource Group, Inc. 295 S Water Street Suite 300 Kent OH 44240 USA	INSURER A: AIG Specialty Insurance Company 26883	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

Holder Identifier :

COVERAGES **CERTIFICATE NUMBER:** 570105328846 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS.

Limits shown as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION						EACH OCCURRENCE AGGREGATE	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y / N <input checked="" type="checkbox"/> N/A					<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	
A	E&O - Professional Liability Primary			014251699 Claims Made SIR applies per policy terms & conditions	09/01/2023	09/01/2024	Each Claim Aggregate	\$2,000,000 \$2,000,000

570105328846
Certificate No :

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER City of Somerville c/o Purchasing Department 93 Highland Avenue Somerville MA 02143 USA	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Aon Risk Services Northeast, Inc.</i>

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SOMERVILLE LIVING WAGE ORDINANCE CERTIFICATION FORM
CITY OF SOMERVILLE CODE OF ORDINANCES SECTION 2-397 et seq.*

Instructions: This form shall be included in all Invitations for Bids and Requests for Proposals which involve the furnishing of labor, time or effort (with no end product other than reports) by vendors contracting or subcontracting with the City of Somerville, where the contract price meets or exceeds the following dollar threshold: \$10,000. If the undersigned is selected, this form will be attached to the contract or subcontract and the certifications made herein shall be incorporated as part of such contract or subcontract. **Complete this form and sign and date where indicated below on page 2.**

Purpose: The purpose of this form is to ensure that such vendors pay a “Living Wage” (defined below) to all covered employees (i.e., all employees except individuals in a city, state or federally funded youth program). In the case of bids, the City will award the contract to the lowest responsive and responsible bidder paying a Living Wage. In the case of RFP’s, the City will select the most advantageous proposal from a responsive and responsible offeror paying a Living Wage. In neither case, however, shall the City be under any obligation to select a bid or proposal that exceeds the funds available for the contract.

Definition of “Living Wage”: For this contract or subcontract, as of 7/1/2023 “Living Wage” shall be deemed to be an hourly wage of no less than **\$17.09** per hour. From time to time, the Living Wage may be upwardly adjusted and amendments, if any, to the contract or subcontract may require the payment of a higher hourly rate if a higher rate is then in effect.

CERTIFICATIONS

1. The undersigned shall pay no less than the Living Wage to all covered employees who directly expend their time on the contract or subcontract with the City of Somerville.
2. The undersigned shall post a notice, (copy enclosed), to be furnished by the contracting City Department, informing covered employees of the protections and obligations provided for in the Somerville Living Wage Ordinance, and that for assistance and information, including copies of the Ordinance, employees should contact the contracting City Department. Such notice shall be posted in each location where services are performed by covered employees, in a conspicuous place where notices to employees are customarily posted.
3. The undersigned shall maintain payrolls for all covered employees and basic records relating hereto and shall preserve them for a period of three years. The records shall contain the name and address of each employee, the number of hours worked, the gross wages, a copy of the social

*Copies of the Ordinance are available upon request to the Procurement & Contracting Services Department.

Form: _____
Contract Number: _____

CITY OF SOMERVILLE

Rev. 03/27/2023

security returns, and evidence of payment thereof and such other data as may be required by the contracting City Department from time to time.

4. The undersigned shall submit payroll records to the City upon request and, if the City receives information of possible noncompliance with the provisions the Somerville Living Wage Ordinance, the undersigned shall permit City representatives to observe work being performed at the work site, to interview employees, and to examine the books and records relating to the payrolls being investigated to determine payment of wages.

5. The undersigned shall not fund wage increases required by the Somerville Living Wage Ordinance by reducing the health insurance benefits of any of its employees.

6. The undersigned agrees that the penalties and relief set forth in the Somerville Living Wage Ordinance shall be in addition to the rights and remedies set forth in the contract and/or subcontract.

CERTIFIED BY:

Signature: Karen Wise
(Duly Authorized Representative of Vendor)

Title: Vice President, Environmental Consulting

Name of Vendor: Davey Resource Group, Inc.

Date: 03/13/2024



SOMERVILLE ORDINANCE TO SAFEGUARD

VULNERABLE ROAD USERS

CITY OF SOMERVILLE CODE OF ORDINANCES ARTICLE VIII, SEC. 12-117 et seq.

Prospective contractors must familiarize themselves with the City of Somerville’s Ordinance to Protect Vulnerable Road Users. The full text of this local law can be found here.

1. **Request for Inspection:** Inspections are conducted on Thursdays from 4pm-7pm at the Somerville Department of Public Works, located at 1 Franey Road. Each inspection takes approximately 20 minutes.
 - a. Any vendor covered by this Ordinance shall complete an inspection request form and email it to fleetinspections@somervillema.gov.
 - b. Please submit request form no later than 3pm on the Tuesday before the requested inspection date.
2. **Fee:** The fee for the initial inspection is \$100. The fee for a renewal inspection (every two years) is \$50.
 - a. Payment of the fee is due upon scheduling of the inspection. The fee can be paid via check or credit card. Checks should be made out to the City of Somerville and include the vendor’s phone number.
3. **Approval:** Vehicles inspected and approved by the Fleet Division will have an inspection approval sticker affixed to the windshield of the vehicle. A copy of the inspection report and certificate of inspection shall be issued to the vendor.
 - a. Inspection stickers are not transferable.
 - b. Any major overhaul of safeguard equipment shall be required to be re-inspected.
4. **Rejection:** If a vehicle is rejected for failing to comply with any of the technical specifications outlined in the ordinance, it shall be corrected and henceforth re-inspected within 30 days at no additional fee.
 - a. If a second inspection results in a rejection, a fee of \$50 will be required for any subsequent inspections.
 - b. Any vendor who fails to comply within 60 days of their first inspection may be subject to having their contract cancelled.
5. **Questions:** Please direct questions about vehicle inspections to Department of Public Works, at: fleetinspections@somervillema.gov or call 617-625-6600 ext. 5100

Acknowledgement

In accordance with Sec. 12-119 “Requirements” in the Ordinance, bidders must sign the following:
Unless certified that the Ordinance is not applicable to this contract or otherwise waived by the City, I acknowledge that my company has installed (or will install prior to commencing work for the contract) side guards, cross-over mirrors or equivalent blind spot countermeasures, convex mirrors or equivalent blind spot countermeasures, side-visible turn signals, and appropriate warning signage, in accordance with SCO Chapter 12, Article VII on all large vehicles it uses or will use within the City of Somerville in connection with any contract.

Karen Wise

03/13/2024

Authorized Signatory’s Name Karen M. Wise, VP, Environmental Consulting

Date

Davey Resource Group, Inc.

Company Name

I certify that the Ordinance does not apply to this contract for the following reason:

- Vehicles do not meet or exceed Class 3 GVWR
- Vehicles do not exceed 15 MPH
- No vehicles on project
- Other: _____

QUALITY REQUIREMENTS

Quality requirements, or basic business requirements, are the minimum set of standards that an entity must meet and certify to be considered responsible and responsive. **Please complete the Quality Requirements form, below, and submit it with your completed proposal.** The City of Somerville will disqualify any response that does not meet the minimum quality requirements. A "No" response to items 1, 2, 3, or 4 or a failure to respond to any of the following minimum standards, will result in disqualification of your proposal.

QUALITY REQUIREMENTS		YES	NO
1.	Vendor has completed at least two (2) tree inventories for at least two (2) municipalities.	X	
2.	Vendor guarantees that all workers collecting tree inventory data are arborists certified by the Massachusetts Arborist Association or the International Society of Arboriculture (ISA).	X	
3.	Vendor guarantees that all arborists collecting data on Tree Risk have a current ISA TRAQ certification or equivalent.	X	
4.	Vendor has experience in 3D modeling techniques, and the capability to integrate 3D tree models with GIS platforms for spatial analysis.	X	
5.	Optional: Are you a Mass. Supplier Diversity Office MBE/WBE certified minority or woman owned business? Additional diversity designations may be submitted by attaching supporting documentation.		X

In order to provide verification of affirmative responses to items 1, 2, 3, and 4 under the quality requirements listed in the Quality Requirements Form, Offeror must submit written information that details the general background, experience, and qualifications of the organization. Subcontractors, if applicable, must be also included.

Form: _____
Contract Number: _____

CITY OF SOMERVILLE

Rev. 08/01/12



Non-Collusion Form and Tax Compliance Certification

Instructions: Complete each part of this two-part form and sign and date where indicated below.

A. NON-COLLUSION FORM

I, the undersigned, hereby certify under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person.

As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Signature: Karen Wise
(Individual Submitted Bid or Proposal)
Duly Authorized Karen M. Wise, Vice President, Environmental Consulting

Name of Business or Entity: Davey Resource Group, Inc.

Date: 03/13/2024

B. TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support, as well as paid all contributions and payments in lieu of contributions pursuant to MGL 151A, §19A(b).

Signature: Karen Wise
(Duly Authorized Representative of Vendor) Karen M. Wise, VP, Environmental Consulting

Name of Business or Entity: Davey Resource Group, Inc.

Social Security Number or Federal Tax ID#: 82-1948528

Date: 03/13/2024



**CITY OF SOMERVILLE
PROCUREMENT AND CONTRACTING SERVICES DEPARTMENT
RFP 24-47**

The City of Somerville, through the Procurement and Contracting Services Department, invites sealed proposals for:

Tree Inventory Update

The RFP package may be obtained online at <https://www.somervillema.gov/procurement> or from the City of Somerville's BidExpress page at <http://www.somervillema.gov/BidExpress> on or after: **Wednesday, February 21st, 2024**. Sealed proposals will be received at the PCS Department, Somerville City Hall, 93 Highland Ave., Somerville, MA, 02143 or via Bid Express until: **Wednesday, March 13th, 2024 at 2:30pm**.

The City of Somerville reserves the right to reject any or all proposals, waive any minor informality in the RFP process, and accept the proposal(s) deemed to be in the best interests of the City of Somerville.

Please email tchukhatsang@somervillema.gov for more information.

**Thupten Chukhatsang
Senior Procurement Manager
617-625-6600 x3400**

2/21/24 The Somerville Times

Bid Opening Date: 03/13/2024 02:30 PM
Printed: 02/21/2024 09:45 AM

BID SOLICITATION

Description: RFP 24-47 Tree Inventory Update

Bid Number BD-24-1166-COS01-COS01-98748
Alternate ID RFP 24-47
Requisition Number

Item	Class-Item	Quantity	Unit	Unit Price	Total
1	RFP 24-47 Tree Inventory Update	1	EA	_____	_____
				TOTAL:	_____

THIS IS NOT AN ORDER, AND DOES NOT COMMIT THE PURCHASING ENTITY TO PURCHASE ANY GOODS OR SERVICES.

PURCHASED

By: Thupten Chukhatsang

Phone#: (617) 625-6600

Email: tchukhatsang@somervillema.gov

BUYER

Secretary of the Commonwealth of Massachusetts
 William Francis Galvin

Goods and Services submission confirmation

The following Goods and Services submission was successfully received.

Planned date of publish is 2/19/2024

Awarding Agency

Agency Name and Address: **City of Somerville 93 Highland Avenue
 Somerville, MA 02143**

Bid Number: **RFP 24-47**

Contact Information

Name: **Thupten Chukhatsang**

Title: **Senior Procurement Manager**

Phone: **617-625-6600** Fax:

Email Address: **tchukhatsang@somervillema.gov**
Notify email address listed when final publish date assigned.

Address:
 (if different from above)

Description

Tree Inventory Update

Contract Information

Estimated Rate		Duration	9 months
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Bid Release Date	02/21/2024	Release Time	
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Bid Deadline Date	03/13/2024	Deadline Time	2:30 PM
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Additional Information: **A RFP package may be obtained online at <https://www.somervillema.gov/procurement> or from the City of Somerville's BidExpress page at <http://www.somervillema.gov/BidExpress> on or after 2/21/2024**

This page can be printed for your records.

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