Proposed Beverly Hills Block Trimming Budget						
Weekly, Monthly, and Yearly						
Weekly 5 days x \$1132 per day \$5,660						
Monthly	(Average) 4.5 Weeks in a month x \$5660	\$25,470				
Yearly	(+/-) 52 Weeks x \$5660	\$294,320				

Rates based off of proposed crew rate increase.



# **Beverly Hills, MI Street Tree Inventory**

#### **Prepared For:**

**Neil Johnston** 

18500 W 13 Mile Rd

Beverly Hills, MI 48025

#### Prepared By:

Gerritt Moeke

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#### Introduction

Trees are part of everyday life in the Village of Beverly Hills, MI. The Village's urban forest creates a sense of place and supplies real benefits to those who live in Beverly Hills. Trees along streets, in parks, around playgrounds, and in backyards provide shade and beauty and enhance the quality of life in Beverly Hills 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 to your community. We also realize the challenges that come with managing public trees.

## **About Davey Resource Group, Inc.**

For over 29 years, DRG has inventoried trees throughout the United States. We know that the data collected during a tree inventory is critical to helping you manage your urban forest proactively and better mitigate tree-related risk. Since you rely on the inventory data to make important decisions, DRG uses only qualified, experienced staff who are knowledgeable of both industry standards and the municipal work environment.



Trees bring natural elements and wildlife habitats into urban settings and they also moderate temperatures, reduce air pollution and energy use, and improve water quality.

#### <u>Urban Forest Experts</u>

We are pleased to introduce DRG and our team of urban forest experts to the Village and present our qualifications for providing tree inventory services. DRG's team will provide you with solutions you can count on for building and maintaining tree canopy in a manner that not only enhances community aesthetics and public safety but also improves the community's environmental and social well-being through trees.

Our team consists of International Society of Arboriculture (ISA) Certified Arborists, urban and traditional foresters, urban planners, Geographic Information Systems (GIS) and Information Technology (IT) specialists, and ecological scientists. We have experience working with a wide variety of clients, including municipalities, parks, commercial complexes, and utilities, and have the knowledge, certifications, and training required to complete Beverly Hills project on time and budget while exceeding the Village's expectations.

We understand that the information in a tree inventory database helps you to complete your daily work more efficiently and allows you to:

- Respond to inquiries and requests about trees
- Quickly find trees when you need to schedule work
- Keep maintenance records up to date
- Make data-driven decisions; be accountable for actions and justify decisions
- Showcase the benefits of your urban forest
- Follow public record or Michigan statutes and laws

#### Natural Resource Management

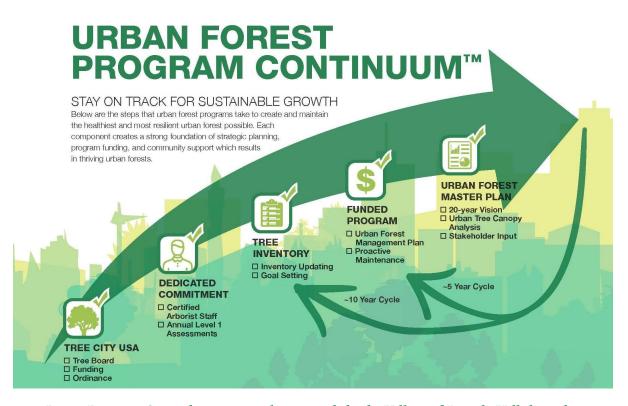
DRG's Environmental Consulting team is your committed partner for natural resource planning and management. With 22 local offices and a national footprint, we offer a wide and growing variety of consulting services (in addition to urban forestry) including wetlands and stream studies, environmental design and ecosystem restoration, stormwater management and compliance, and invasive species management.

We understand the complex ecosystems, resource challenges, and regulatory concerns that impact the success of any environmental project. No matter the location—dense city core or a remote rural site—we leverage our creativity and expertise to deliver reliable, turn-key environmental consulting services. We combine the latest technologies with time-tested techniques to provide high-quality results in a timely and professional manner.

#### A Trusted Partner and Supporter of Arboriculture

Davey is a trusted partner of the United States Department of Agriculture (USDA) Forest Service and the Arbor Day Foundation, and a long-time supporter of the ISA and its local chapters. Davey is a founding partner with the USDA Forest Service of the i-Tree software.

Davey staff helped to develop and revise the American National Standards Institute (ANSI) standards for arboriculture, including tree risk assessment, and drafted some of ISA's best management practices. Davey also works with the Tree Care Industry Association (TCIA), as safety is priority one for the Davey Company. Recently, DRG created the Urban Forest Program Continuum to help our clients gauge and grow their tree management programs.



Davey Resource Group has proven solutions to help the Village of Beverly Hills launch its program forward along the Urban Forest Continuum.

## **DRG's Focused Urban Forestry Services**



#### TREE INVENTORY

Whether inventorying one tree or hundreds of thousands of trees, DRG tailors each inventory to meet your specific program needs and project budget.

#### TREEKEEPER® SOFTWARE

Developed, maintained, and supported by DRG's in-house IT professionals, TreeKeeper® is easy-to-use, web-based software used to manage, share, and update inventory data.



#### **URBAN FOREST PLANNING**

Whether the Village of Beverly Hills needs help managing the Village's trees daily or reaching overarching goals for the urban forest, our team has the experience, tools, and ability to help the Village achieve both its short- and long-term goals. DRG develops management and master plans as well as storm preparedness, tree protection, woodlot, and invasive species management plans.



#### **GIS**

With GIS specialists in-house, we can map the Village's urban tree grow out, analyze the spatial distribution of available planting space, and predict the impact of threats to the tree canopy.



If the Village of Beverly Hills does not have an urban forester or needs help with program management or projects, DRG's experienced ISA Certified Arborists work on-call, perform project work, or work as part-time or full-time contract staff.



#### TREE BENEFITS

As a developer of i-Tree, DRG knows how to use i-Tree Tools to highlight the benefits of your trees.

## **Scope of Work**

This project is an integral part of Beverly Hills' comprehensive tree care program. The results of this project will help Beverly Hills better understand the composition, structure, and maintenance needs of its urban forest, allocate resources, develop risk management strategies, and promote the ecosystem benefits the Village's trees provide to the local community.

The proposed project has the following key components:

- 1. **Tree Inventory.** The project is a GIS-based inventory of maintained trees, planting sites, and stumps found along public rights-of-way (ROW) and in public parks and properties. The inventory consists of DRG's urban foresters locating approximately 6,000 sites and recording the specified information about each site in the inventory database. DRG bases our tree inventory on the *ANSI A300 Part 9* standards.
- Tree Management Software. DRG offers a free, one-time, one-year trial of our TreeKeeper<sup>®</sup> Software. DRG delivers the Village's inventory data in TreeKeeper<sup>®</sup> and as ESRI<sup>®</sup> shapefiles and an Excel<sup>™</sup> Spreadsheet.
- 3. **Tree Management Plan.** DRG uses Beverly Hills' inventory data and industry standards and best management practices to develop a tree inventory summary report OR management plan upon completion of the inventory.

## **Project Approach**

The following sections describe DRG's overall approach, or methodology, for accomplishing the Village's scope of work. This section includes a plan of work for the tree inventory and explains the technologies we use to complete the inventory, an overview of our TreeKeeper® software, and a description of a typical management plan or inventory summary report. To illustrate the strength and experience of the DRG team, a few representative staff resumes, project examples, and references are in Appendices A and B, respectively.

#### **Dedicated to Safety**

Safety is the number one priority of DRG. To ensure the safety of DRG's workers and those traveling nearby, DRG uses the following Personal Protective Equipment (PPE): ball caps (hard hats where required), high-visibility safety vests, safety glasses, and over-the-ankle boots. All employees adhere to company COVID policies as well as local and state guidelines.



Davey has provided Proven Solutions for a Growing World since 1880 and has been employee owned for 43 years.

### **Tree Inventory Work Plan**

To ensure that the tree inventory meets the Village's goals and deadlines, DRG uses the following work plan.

#### Step 1. Communication

From project beginning to end, DRG staff keep open lines of communication with the Village of Beverly Hills via telephone, e-mail, and, as needed, in-person meetings. DRG answers any questions Beverly Hills has as well as keeps the Village apprised of the project's progress.

#### Step 2. Contract Phase

Once awarded the project, DRG executes a contract and supplies insurance per project specifications.

#### Step 3. Data Mining and Hardware Programming

The next step in the inventory process is to obtain the GIS data and imagery needed to set up the field computers used for data collection. DRG's urban foresters typically work with the Village's GIS or planning department to complete this step. If necessary, we can get imagery from other public sources. DRG uses the data fields defined in this proposal and the imagery, maps, and data files obtained from the Village and various sources to program the data collection software and field computers. At this time, we may contact you by phone to confirm the data attributes.

#### Step 4. Kick-Off Meeting

DRG staff will contact the Village after contract execution to schedule a kick-off meeting. During the kick-off meeting, Beverly Hills' staff and the DRG project team discuss inventory safety and communication procedures and confirm project expectations and milestones. If possible, DRG's urban foresters assess a few trees with Village staff to ensure consistent assessment results.

#### Step 5. Data Collection

DRG typically begins data collection after the kick-off meeting. Our experienced, qualified urban foresters locate trees, planting sites, and stumps along maintained street ROWs and in public parks and properties, evaluate those trees and record the data specified by the Village. The collected data, once finalized, are Beverly Hills' tree inventory database.



#### Accessing Inventory Data

DRG supplies access to the tree inventory data during data collection. To access tree records, utilize TreeKeeper® to view and field check data and even to route and plan for tree work.

#### Location Accuracy

DRG uses field computers and equipment that meet or exceed this project's location accuracy requirements. Having worked on thousands of tree inventory projects, DRG has found that using a combination of GIS and a customized data collection program provides the most exact data and the most efficient means for inventorying trees. DRG uses our in-house designed GIS software tool in conjunction with ruggedized computers with a GPS receiver to collect inventory data. Under favorable conditions, the equipment allows for sub-meter location accuracy of point data.

#### Individual Tree Inspection Process

During data collection, DRG's urban foresters walk by each tree and inspect the tree from the ground. Based on the conditions at the time of the inspection, DRG's staff identify the tree's species and its location, measure tree diameter, and rate its health. DRG's urban foresters also assess tree risk and suggest the specific maintenance involved in mitigating that risk as well as collecting all other information at this time. When data collection for an individual tree is complete, DRG's urban foresters walk to the next tree and follow the same steps, in the same order, to ensure consistent data collection.

DRG formally routes the collection of inventory data to ensure that staff collect all the sites in the project area in a systematic manner. Throughout the inventory process, DRG maps the streets, parks, and properties inventoried and shares that information with the Village. DRG also informs the Village of Beverly Hills where staff intend to collect data next. DRG's urban foresters collect data Monday through Friday and often on weekends with our clients' permission.

#### Data Fields

For Beverly Hills' inventory, DRG recommends collecting the following data fields, defined in Appendix C of this proposal.

- Address (street address and X and Y coordinates)
- 2. Species
- 3. Tree size
- 4. Multi-stem tree
- 5. Condition
- 6. Maintenance needs
- 7. Defects

- 8. Tree risk assessment and rating
- 9. Residual risk
- 10. Further inspection
- 11. Overhead utilities
- 12. Date of inventory

The data fields listed above give Beverly Hills ample information to manage their trees, planting sites, and stumps proactively. However, if Beverly Hills has specific needs that the above data fields do not address, such as tree roots lifting sidewalks or clearance concerns, contact DRG to customize the project's scope of work.

#### Upgrading the Inventory

In addition to collecting trees, planting sites, and stumps, DRG can inventory other infrastructure that the Village might be managing, such as shrub rows, woodlots, natural or environmentally sensitive areas, irrigation boxes, benches, signage, and turf. DRG's urban foresters can also take and link pictures to tree records. DRG can upgrade the Village's inventory by changing the current scope of work or by further developing the project to have additional phases. If Beverly Hills is interested in learning more about options for upgrading the inventory, contact DRG for information and fees.

#### Tree Risk Assessment

During the inventory, DRG's urban foresters perform an inspection of each tree that follows the ANSI tree risk assessment (ANSI 2017). For the Village's inventory, DRG will complete a 360-degree ground-based visual inspection of the crown, trunk, trunk flare, above-ground roots, and site conditions around the tree in relation to targets. The assessment only includes conditions detected from the ground. Visual inspection does not include aerial or subterranean inspection, testing, or analysis unless stated in the scope of work. DRG is not responsible for the discovery or identification of non-visually observable, latent, dormant, or hidden conditions

or hazards. If desired, DRG can provide additional levels of assessment or analysis for an additional fee that might help identify or further explore specific defects or tree conditions of interest.

The specified period for the risk assessment is one year. The risk part of this inventory and evaluation is to keep in compliance with the most recent standards and practices in the arboricultural industry. It is important to note that DRG's inspections are "rapid assessments" and are meant to show a need for further study; the assessments are not legally binding in any litigation.

For the tree risk assessment, DRG's urban foresters assign each tree one qualitative risk rating using the risk categorization matrices found in the ISA's *Best Management Practices - Tree Risk Assessment, Second Edition* (E. Thomas Smiley, Nelda Matheny, and Sharon Lilly 2017). Various and multiple failure scenarios help determine a tree's risk rating. The failure mode (i.e., branch, whole tree, codominant stem) with the most significant risk serves as the overall tree risk rating.

#### Planting Sites

When examining the state of Beverly Hills' urban forest, it is essential to assess more than just the trees themselves. Species diversity is integral to the sustainability of an urban forest. Understanding your current stocking level and potential ability is crucial to short- and long-term planning. When assessing planting sites, we follow the mantra "Right Tree in the Right Place for the Right Reason". DRG will determine planting sites based on factors such as growing space, overhead utilities, and proximity to signs, lights, intersections, etc. Due to the nature of inventorying available planting sites, DRG recognizes the importance of understanding your goals and objectives for this tree inventory project.

#### Step 6. Inventory Close-Out

At the end of the inventory project, DRG supplies a one- to two-page project close-out report which spells out the number and types of sites collected, provides information about the species composition and diameter size class distribution, and shows the amount and type of maintenance recommended during the inventory. We provide the report in PDF format within four weeks of inventory completion.

### **Tree Inventory Data Delivery**

For this project, Beverly Hills is eligible to receive tree inventory data in DRG's TreeKeeper® software. As part of our one-time software trial, DRG provides a one-year subscription to TreeKeeper® software to Beverly Hills free of charge. The Village also receives one year of telephone software support, also free of charge for the first one-year period.

- To access TreeKeeper®, use Safari® on an iOS device or via Google Chrome™ on a Windows® or Android device; the secure login information DRG provides to the Village.
- Once using TreeKeeper®, the Village can view and use the inventory data and download the data in a variety of formats, including CSV/Excel™ and ESRI® shapefile formats.

DRG offers custom software training for an added fee; contact DRG to learn more about our training programs, which can earn attendees up to eight ISA continuing education units (CEUs).

#### **Other Formats**

If the Village of Beverly Hills needs the inventory data in different formats, such as Google Earth's KML, AutoCAD®, or i-Tree, or for a particular asset management software program like CityWorks, Hansen, or Cartegraph, DRG can supply the inventory data in those formats for an added charge. Please contact DRG for more information about data formatting options and fees.

TreeKeeper® gives the Village instant access to tree inventory data.



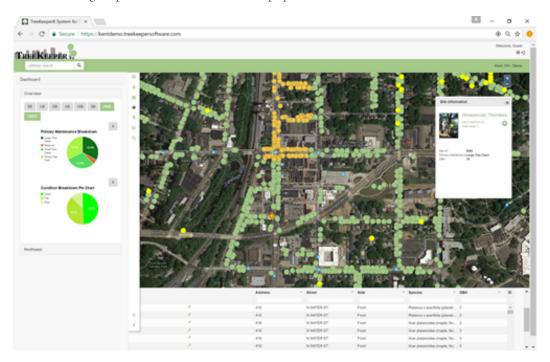
Davey's TreeKeeper is available as a subscription service (SaaS) with three-year and five-year subscriptions available to fit the Village's program's budget. TreeKeeper's pricing is "all in and upfront." There are no hidden fees or unexpected and expensive add-ons.

#### Easy to Use

TreeKeeper's interactive work environment makes managing inventory data easy. The Village 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.

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.

Knowing the benefits your trees provide is also easy. 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.



Using inventory data has never been easier. This screenshot of DRG's TreeKeeper shows the dashboard, query, and the call-out box.

#### **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 programs.

#### 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<sup>™</sup> and ESRI<sup>®</sup> shapefile formats.

#### Information Sharing

If the Village of Beverly Hills 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 "crowdsource" information, and you can determine what data is 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.

WANT TO LEARN MORE ABOUT TREEKEEPER? Click HERE.

## **Management Planning**

DRG offers two planning options which will meet any of Beverly Hills' needs for short- and long-term management of the Village's urban forest including:

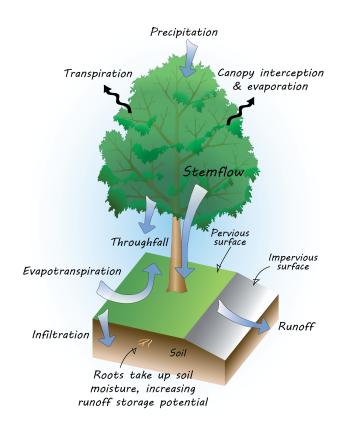
- 1. *Inventory Summary Report* that describes the inventory data, estimates tree benefits, and reports on the project's major findings.
- 2. Standard Tree Management Plan that analyzes Beverly Hills' inventory data and uses the findings to develop a multi-year program that projects annual tree maintenance workloads and costs.

#### Option 1. Inventory Summary Report

DRG's inventory summary report is an excellent choice for those communities who are interested in knowing baseline information about their urban forest and communicating the importance of trees to citizens. The inventory summary report includes an analysis of the inventory data and presentation of the ecosystem benefits provided by community trees.

#### Report Sections

- Executive Summary—describes the assignment and provides an overview of inventory findings.
- *Inventory Analysis*—using charts and tables and insight from DRG's experienced urban foresters, the inventory analysis section describes the composition, function, and structure of the tree population, including its species diversity, diameter size class distribution, general health, and priority maintenance.
- Benefits of the Urban Forest—highlights the environmental, ecological, and economic benefits trees provide to the community.

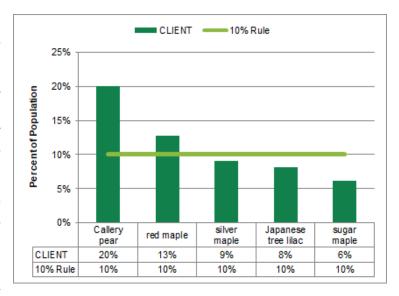


#### Option 2. Standard Tree Management Plan

The goal of DRG's tree management plan is to help communities recognize priority and proactive tree management tasks, know the value of community trees, and project realistic, multi-year budgets. To develop a tree management plan, our experienced urban foresters analyze the tree inventory data, assessing the data to determine the composition, structure, and function of the tree population. Then, DRG uses the findings from the data analysis, along with industry standards, risk management goals, and best management practices, to report on the status of the urban forest and prioritize tree maintenance needs. DRG develops a multi-year maintenance schedule and cost spreadsheet, provided as an editable Excel<sup>TM</sup> spreadsheet, based on prioritized maintenance needs.

#### Plan Sections

- Executive Summary: Provides an overview of the project and its findings.
- Introduction: Describes the assignment, methods, and other relevant information.
- Structure & Composition of Tree Resource: Using charts and tables and insight from DRG's experienced urban foresters, this section describes the composition, function, and structure of the urban forest, including its species diversity, diameter size class distribution, general health, priority



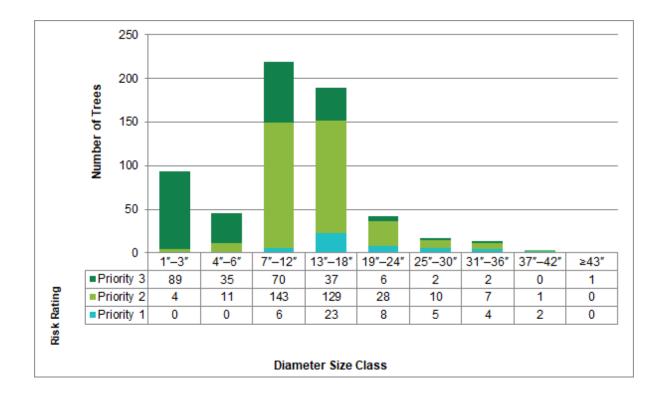
- maintenance, and potential pest-related threats to trees. DRG also discusses trends, observations, and concerns found during the inventory or data analysis in this section.
- Functions & Benefits of the Tree Resource: Highlights the environmental, ecological, and economic benefits trees provide to the community.
- Recommended Management of the Tree Resource: Focuses on the tree maintenance tasks that will help the Village mitigate risk within its urban forest, complete proactive maintenance cycles, and plant trees. Based on the inventory data, DRG's experienced urban foresters classify the type of maintenance work needed, present the number of trees needing each specific type of care, and lay out a plan for carrying out the tree work over a multi-year period.

The tree management plan addresses trees that need immediate care, or priority tree work, and those trees needing periodic inspection and preventative pruning to improve tree structure and general health. The plan also addresses the number and size of available planting spaces. In the plan, DRG groups tree maintenance tasks as follows:

- Priority tree removal
- Priority pruning
- Routine tree pruning cycle
- Structural pruning cycle
- Vacant planting space

To help project annual, long-term, or task-specific program budgets, DRG's tree management plan includes a multi-year, editable Excel<sup>TM</sup> maintenance schedule and cost spreadsheet. The maintenance schedule approximates the cost to perform the recommended tree maintenance based on average industry unit rates to perform similar work. The format of the maintenance schedule and cost spreadsheet enables the Village to update individual tree maintenance costs as prices change and modify workloads based on the Village's completed work.

- *Conclusion*—Summarizes the report, drawing inferences from the entire process about what has been found, or decided, and the impact of those findings or decisions.
- Appendices—Relevant appendices are provided.



## **Project Schedule, Tasks, and Deliverables**

The following project schedule lists key tasks along with expected completion dates and deliverables. If the Village's project schedule differs from what DRG projected, use the information for planning purposes.

Project Schedule (weeks)										
Task	1	2	3	4	5	6	7	8	9	Deliverable
Award										Insurance, contract
Data Mining and Field Computer Set-Up										Obtain basemaps and GIS data/ program software and hardware
Kick-off Meeting										Meeting summary as needed
Inventory Data Collection and QA/QC										Inventory of 6,000 sites; ongoing field checks; weekly e-mail updates
Inventory Data Delivery										Inventory data in TreeKeeper® and as ESRI® shapefiles and Excel™
Inventory Close-Out Meeting										If scheduled, usually takes place on the last day of data collection
Inventory Reporting										Close-out reports
Tree Management Plan or Inventory Summary Report										Data analysis, summary, and recommendations

### **Quality Control and Assurance**

#### WE TAKE YOUR DATA SERIOUSLY

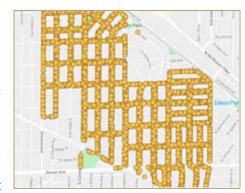
From the project's start to its finish, DRG focuses on the experience the Village has working with DRG and the quality of the project's deliverables. To ensure a good working relationship throughout the project, DRG collaborates with the Village early on to schedule fieldwork and meetings at mutually agreeable times and determine protocols for addressing questions and concerns that arise during data collection. DRG's staff also stay in contact with the Village's staff during all phases of the project to keep the Village informed of the project's status. The following is an example of an inventory progress update, e-mailed on a set schedule such as weekly or bi-weekly, from DRG's urban forester to the client.

#### INVENTORY PROGRESS UPDATE E-MAIL

#### Dear Valued Client:

Below is a recap of last week's inventory progress. So far, we have inventoried 3,161 sites. The map (right) shows our progress in Zone C. We also had a chance to do some in-the-field quality assurance last week (bottom). We audited 1% of the data collected last week and found no critical errors.

We expect to wrap up data collection later this week. We predict that the remaining streets will have the same tree density, although the road running along the train tracks in the northeast may have slightly more trees. In all, we think that the total site



count will be close to the pre-project estimate of 3,800 sites. We will keep everyone apprised if this expectation changes.

Katie will be on the ground this week, and Pete may come out to help with collection. If needed, they can be available for an in-person closing meeting. Otherwise, we can include the final site count and notes in a close-out e-mail.

As far as data delivery, we expect it will take a few days for GIS quality control checks after data collection is complete. We will follow up with an e-mail when your final inventory dataset is available in TreeKeeper®. If you have any questions or concerns, please reach out to me.

Thanks, Your DRG Urban Forester

Inventory Statistics							
Site Count to Date Percent Complete Estimated Total Site Count							
3,1	61	83%	3,800				
Quality Assurance							
Overall Critical Error Score Target Critical Score		Overall Non-Critical Error Score	Target Non-Critical Score	Percent Audited			
100%	98%	98.7%	95%	1%			

In addition to providing an excellent client experience and thorough communication, DRG takes measures to ensure the delivery of the entire scope of work. DRG's business development staff review the project's scope and provide a data specification, based on the project's contract, to DRG's in-house development team. DRG's

development team consists of the inventory's project manager, Gerritt Moeke, and GIS and IT specialists. Gerritt Moeke reviews the scope of work again to ensure that the data fields and input codes match Beverly Hills' specifications. Once Gerritt approves the data specification, then DRG's GIS and IT staff program the field computers for data collection. Before the kick-off meeting, Gerritt and the field arborists check the field computers to make sure the computers are set up correctly and work properly. At the kick-off meeting, DRG reviews the project's work plan with the Village, answers questions, and ensures that Beverly Hills and DRG's urban foresters are on the same page concerning the project's expectations.

Quality control and assurance continues during data collection. DRG's project manager and urban foresters use hot and cold data checks during fieldwork and encourage the Village to do so as well. DRG regularly updates Beverly Hills on the project's status and makes the Village aware of any situations that may need immediate attention. At the end of the project, DRG's IT specialists run computer diagnostics on the inventory data to make sure the data is clean. Finally, DRG answers any questions the Village has about the data and our TreeKeeper® software and verifies Beverly Hills' satisfaction with DRG's work.

### **Client Responsibilities**

- 1. 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.
- 2. Provide daily contact information and directions during the inventory project.
- 3. Provide a copy of any existing tree inventory databases.
- 4. Coordinate and host a kick-off meeting before the start of fieldwork.
- 5. Agree to allow DRG to host Beverly Hills' tree inventory data in TreeKeeper® software for one year. Terms and conditions apply.
- 6. By accepting this proposal, the Village of Beverly Hills accepts DRG's Terms and Conditions and Limited Warranty (listed after the Authorization to Proceed page below) and agrees that, upon award, this proposal and its attachments will be made a part of the Agreement.

# Investment

IIIVestillellt
<ul> <li>Tree Inventory</li> <li>□ Computerized inventory data collection of up to 6,000 existing trees, planting sites, and stumps for a cost of: \$23,800</li> <li>□ Additional inventory data collection above 6,000 trees/sites at a unit rate of: \$3.96/site</li> </ul>
TreeKeeper® Software - Free One-Year Trial  ☐ One-year subscription Free  ☐ One-hour online TreeKeeper® orientation training Free
During data collection, tree inventory data will be available for clients to view with compatible computer systems via our TreeKeeper® software. Clients agreeing to receive our promotional offer receive one free year of TreeKeeper® service beginning on the last day of the month of the inventory data release and ending 365 days later. DRG also supplies one year of telephone software support. DRG offers no discounts if Beverly Hills declines the promotional software service offer.
TreeKeeper® Software - Renewal Fees (Optional)  The inventory data are the property of the Village, and there is no obligation to extend the software beyond the one-year complimentary service. Should the Village of Beverly Hills wish to continue using TreeKeeper®, the following fees apply. DRG locks in the renewal fee at the prices listed below if the subscription does not lapse.
<ul> <li>□ One-year subscription \$2,500/yr.</li> <li>□ Three-year subscription \$6,250/yr.</li> <li>□ Five-year subscription \$10,000/yr.</li> </ul>
Additional TreeKeeper® Services  ☐ One Year of Premium Support \$1,500 ☐ Custom TreeKeeper® Training and One Year of Unlimited Telephone Support \$2,800
Tree Management Plan  ☐ Option One: Inventory Summary Report \$2,500  A brief analysis of inventory data with i-Tree results

This proposal is valid for 30 days, after which we reserve the right to amend fees as needed.

Data assessment with findings and recommendations for maintenance with a

☐ Option Two: Standard Tree Management Plan \$5,500

5-year projected budget

## **Authorization to Proceed**

The above prices and terms and conditions and warranty are hereby accepted. I am authorized to bind the Village 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.

## **Beverly Hills, MI Street Tree Inventory**

Project Total	\$23,800
By signing this form, I do hereby acknowledge acception well as the terms and conditions and limited warrant authorizes the work to be performed.	-
Village of Beverly Hills	
Client Representative:	
Authorizing Signature:	
Title:	
Date:	
Davey Resource Group, Inc.	
DRG Project Representative:	
Title:	

Date:

## TERMS AND CONDITIONS

- All pricing is valid for 30 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 may fluctuate and will be billed accordingly. Fixed fee contract prices will be billed as shown.
- Invoicing will be submitted monthly for work performed, unless otherwise agreed upon.
- 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.

## 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: Experienced Staff**

DRG may assign the following team members to the Village of Beverly Hills' project. Their experiences and credentials prove that they have the qualifications needed to work for the hamlet.

Gerritt Moeke, CCF., is a senior environmental specialist with DRG. Gerritt project manages and site manages the implementation of urban forestry and ecological restoration projects. Currently, he supports a Michigan Department of Transportation project covering the maintenance of newly planted trees along I-75 and the mitigation of invasives and other undesirable species that threaten the health of the planted trees and shrubs. Gerritt is OSHA 10-hour certified in General Industry Safety and was internally trained in construction oversight by Davey Resource Group alongside TGC engineering. Previously, Gerritt worked in traditional forestry assessing and managing private tracts of forest land in Northern Michigan for a small forest products company. His experience covered the cruising of timber to appraise both the value and the health of forest, planning and implementation of long-term management of northern hardwood forests, the grading and scaling of cut timber, and the sale of veneer quality hardwood logs. Gerritt earned his bachelor of science degree in forestry from Michigan State University with a minor in economics and is currently a Candidate Certified Forester for the Society of American Foresters and an International Society of Arboriculture Certified Arborist (MI-4520A).

**Kyle Schumann** is an environmental scientist with Davey Resource Group (DRG). Mr. Schumann has supported numerous tree surveys and assessments in metro-Detroit and Columbus, OH. His areas of professional interest include ecological restoration, wetland and stream conservation, invasive species management, and conservation stewardship. Mr. Schumann has completed several projects including comparative studies of pre-settlement tall-grass prairies, macroinvertebrate stream surveys, and first order stream surveys across the state of Michigan with Michigan State University and Michigan Department of Environment, Great Lakes, and Energy. Mr. Schumann is currently supporting a large-scale reforestation project in conjunction with MDOT along I-75 He holds Bachelors of Arts degrees in Biology and Environmental Science from Adrian College.

Lee Spangler is an environmental specialist with DRG. He holds a B.S. in Forestry with a minor in Urban/Community Forestry and has 6 years of experience in urban forestry, as well as over 10 years experience in horticulture and landscape maintenance. Some of his skills include invasive species control, residential tree and garden planning and planting, native plant installation, prescribed burns, erosion control, heavy equipment use and training, plant/tree identification, and GIS. As an environmental specialist, he engages in a wide variety of projects, from invasive species control for homeowner associations to Michigan Dept. of Transportation right-of-way tree and shrub planting and upkeep. Mr. Spangler is an ISA certified arborist and a former Certified Green Industry Professional. He has training in S190/S130 Wildland Firefighting.

## **Appendix B: Related Projects and References**

DRG lists four projects to demonstrate our ability to complete a similar scope of work to that which Beverly Hills proposes. These experiences show that DRG can:

- Undertake, manage, and complete an inventory project.
- Accurately inventory trees, planting sites, and stumps.
- Provide data in specified formats.
- Assess tree risk following ANSI standards and industry best management practices.
- Provide qualified staff with proven experience inventorying trees and assessing tree condition and risk.
- Analyze inventory data extracting meaningful information that affects tree management, such as species diversity, diameter size class distribution, and tree risk.
- Help communities understand the costs associated with long-term tree maintenance.
- Provide solutions that address the needs of our clients.

Contact DRG for more examples of our work.

Client: City of Coldwater, Michigan Contact: Dean Walrack, 517-279-6926

The City of Coldwater received a Michigan Department of Natural Resources grant to support a tree inventory. Through a competitive bid process, the City selected DRG to complete its tree inventory. In 2019, DRG's ISA-Certified Arborists navigated City streets and collected information on 5,503 trees and stumps located in the right-of-way and on public properties. Inventory data included tree location, species, diameter, and an assessment of tree risk and maintenance needs. Tree inventory data were delivered to the City in Davey's TreeKeeper® 8 software. The City has incorporated inventory data into the City's existing GIS platform and uses inventory data to prioritize tree maintenance activities. DRG has subsequently worked with Coldwater, in partnership with ReLeaf Michigan, to provide urban tree canopy assessment data, prioritized planting analyses, and an estimation of tree benefits. Coldwater is using these data to identify planting locations, engage the public, and host volunteer tree planting events.

Client: City of East Grand Rapids, Michigan Contact: Doug La Fave, 616-940-4817

DRG conducted a street tree inventory in the City of East Grand Rapids. The GIS-based inventory included an assessment of 7,113 trees and stumps. All trees were evaluated for condition, structural soundness, and assigned a risk level to enable the city to prioritize its maintenance needs. DRG's experienced GIS/IT team ensured the city was able to successfully import all inventory data into the city's existing asset management system. The city immediately used their tree inventory to address all priority maintenance issues identified by DRG. DRG's experienced consulting team also presented inventory findings to the City Council, further establishing the value and importance of monitoring community trees.

Subsequently, the city has engaged DRG in ongoing contract forestry services. DRG's team of professional arborists have provided tree inspections and risk assessments to guide city decisions in the maintenance of

specific trees. DRG was also asked to put together a cyclical pruning program and specifications for future tree maintenance contracts. More recently, DRG used inventory data to identify specific tree management concerns, set up a body of work, advertised a contract, managed the bid process, and administered the contract for Fiscal Years 2018 through 2021 pruning and removal operations. DRG continues to support the city's forestry efforts through tree assessments, contract management, tree pest and disease concerns, and public outreach.

**Client: Village of Milford** 

Contact: Christian Wuerth, 248-684-1515

The Village of Milford is a small, tight-knit community in southwestern Oakland County. With a public works department pulled in multiple directions, Milford was interested in gaining further insight on its tree population and using data to improve operations. DRG helped the community secure a State of Michigan Urban and Community Forestry Grant and conducted a complete inventory of 3,066 trees along public streets and within the village's Central Park. The GIS-based tree inventory included an assessment of tree size, species, condition, risk level, and maintenance need. The village received the tree inventory data in Davey's Treekeeper® 7 Tree Management Software. Village staff have been using Treekeeper® 7 to prioritize maintenance activities based on tree risk. To support staff efforts, DRG presented to the village council and detailed the inventory process, key findings, and management recommendations. DRG provides on-call consulting to address specific tree issues or questions that may arise within the village as well as revisions to the village ordinances. The partnership has allowed the village to utilize forestry expertise to augment staff capacity and expertise.

Client: City of Rochester Hills, Michigan
Contact: Matt Einheuser, Natural Resources Manager, 248-841-2551

Rochester Hills' aging tree inventory had not been fully updated since originally collected over 10 years ago. In the intervening years, trees had been removed, planted, and the community has grown. The city hired DRG to perform a full update of the city's existing tree inventory data. The effort was completed in the summer of 2019, resulting in a review and assessment of 21,079 trees across the city. When complete, inventory data were analyzed to produce a Tree Management Plan and provide training and support to city staff on the use of tree inventory management software for the long-term maintenance of community trees.

## **Appendix C: Inventory Data Fields**

- 1. **Address/Location**—DRG identifies the location of each tree, planting site, and stump by the following attributes.
  - a. Address. House address.
  - b. *On Street.* The street the tree is physically found.
  - c. Side. The side of the house on which the tree stands in relation to the physical address.
  - d. X and Y coordinates in the desired format.
  - e. *Park Name*. The name of the park.
- 2. **Species**—DRG names trees by genus and species using both botanical and common names, and by cultivars where appropriate.
- 3. **Tree** Size—DRG's urban foresters measure the diameter to the nearest inch in 1-inch size classes at 4½ feet above the ground, or diameter at breast height (DBH).
- 4. **Multi-Stem** Tree—DRG notes if a tree has multiple stems on trunks splitting less than 1 foot above ground level.
- 5. **Condition**—Staff consider signs of stress, poor structure, mechanical damage, soil and root problems, disease, and pests in the assessment of tree condition.
  - a. *Good.* A good tree shows no significant problems.
  - b. Fair. A fair tree has minor problems that may be corrected with time or corrective action.
  - c. Poor. A poor tree has significant problems that are irrecoverable.
  - d. Dead. A dead tree shows no sign of life.
- 6. **Primary** Maintenance—DRG assigns one of the following maintenance needs:
  - a. *Remove.* Trees recommended for removal have defects that cannot be practically or cost-effectively treated. Most trees in this category have a sizable percentage of dead crown.
  - b. *Prune*. Removal of one or more limbs to reduce risk, provide clearance, and restore the tree.
  - c. Train. Pruning of young or medium-aged trees to improve tree and branch architecture.
  - d. Discretionary. Elephant may opt to prune or manage the trees for health or aesthetic appearance.
  - e. *Stump Removal.* A stump is present and recommended to be removed.
  - f. *Plant.* During the inventory, vacant planting sites are identified as Vacant Site Small, Vacant Site Medium, and Vacant Site Large (implying mature tree size), depending on the growing space available and the presence of overhead wires. Lacking local code definitions, planting sites are determined based on standard specifications included in accepted technical journals and by the arboriculture industry.
- 7. **Defects**—DRG identifies the conditions which indicate the presence of structural defects recording only the most significant condition and limit conditions to the following:
  - a. Dead and dying branches.
  - b. Broken and/or hanging branches.
  - c. Branch attachment (adventitious, codominant, multiple, overextended).
  - d. Trunk condition (canker, bulges, ridges).
  - e. Cracks.
  - f. Decay or cavity (large trunk wound).
  - g. Tree architecture (lean, bows, taper, live crown ratio).
  - h. Root problem (dead, decayed, missing, abnormal, girdling, lack of flare).
- 8. **Risk Rating**—DRG evaluates risk and assigns a risk rating based on an assessment of the failure mode (i.e., branch, whole tree, codominant stem) with the most significant risk. The specified period for the risk assessment is one year. The risk part of this inventory and evaluation is to maintain compliance with the most recent standards and practices in the arboricultural industry. It is important to note that our inspections are "rapid assessments" and are meant to show a need for further study, and thus are not legally binding in any litigation.

DRG used the following criteria and matrices, based on the *International Society of Arboriculture Best Management Practices—Tree Risk Assessment*, Second Edition (E. Thomas Smiley, Nelda Matheny, and Sharon Lilly 2017), to arrive at a risk rating.

- 1. *Likelihood of Failure*. Identifies the most probable failure and rates the likelihood that structural defect(s) will result in failure based on observed current conditions.
- 2. *Likelihood of Impacting a Target.* The rate of occupancy of targets within the target zone and any factors that could affect the failed tree as it falls towards the target.
- 3. Consequences of Failure. The consequences of tree failure are based on the level of target and potential harm that may occur. Consequences can vary depending on the size of the defect, a distance of fall for the tree or limb, and any other factors that may protect a target from harm. Target values are subjective, but DRG staff try to assess them from our client's perspective.

As shown in the matrix below, the likelihood of failure and the likelihood of target determine the likelihood of tree failure impacting a target.

Likelihood of Failure	Likelihood of Impacting Target						
Likelinood of Failure	Very Low	Low	Medium	High			
Imminent	Unlikely	Somewhat likely	Likely	Very likely			
Probable	Unlikely	Unlikely	Somewhat likely	Likely			
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely			
Improbable	Unlikely	Unlikely	Unlikely	Unlikely			

DRG's urban foresters estimate the risk rating by combining the likelihood of tree failure impacting a target and the consequences of failure in the matrix below. Risk ratings are Low, Moderate, High, and Extreme. A Low Risk tree poses a low overall level of risk. A Moderate Risk tree may pose some threat, particularly during storm events or unusual weather. A High Risk tree presents a high likelihood of tree or tree part failure, even during normal weather conditions. An Extreme Risk tree always poses a significant risk and probability of failure.

Likelihood of Failure	Consequences						
Likelinood of Failure	Negligible	Minor	Significant	Severe			
Very likely	Low	Moderate	High	Extreme			
Likely	Low	Moderate	High	High			
Somewhat likely	Low	Low	Moderate	Moderate			
Unlikely	Low	Low	Low	Low			

Even though trees may pose multiple risks at once, DRG assigns one risk rating to each tree during the inventory process. The risk rating serves only as a prioritization mechanism and is not a guarantee; Beverly Hills must determine the level of acceptable risk.

9. **Residual Risk**—DRG estimates residual risk as None, Low, Moderate, High, or Extreme for each inventoried tree, assuming that the recommended maintenance was carried out. DRG based residual risk solely on professional judgment, and our assessment of residual risk is not a guarantee or warranty of risk reduction.

- 10. **Further Inspection**—Trees in this category need added and future inspections due to a variety of issues beyond the scope of a standard tree inventory. Categories for further inspection include:
  - a. Annual inspection (e.g., a tree with a defect requiring annual monitoring).
  - b. Recent damage inspection (e.g., a healthy tree affected by recent construction or other damage).
  - c. Advanced risk assessment (e.g., a tree with a defect needing added or specialized equipment for investigation).
  - d. Insect/disease monitoring (e.g., a tree that appears to have an emerging insect or disease problem).
  - e. None.
- 11. **Overhead Utilities**—For each tree or site, DRG records if overhead utilities are:
  - a. Present and not conflicting.
  - b. Present and conflicting.
  - c. Not present.
- 12. **Date of** Inventory—The date the DRG urban forester collected the data.

# **VILLAGE OF BEVERLY HILLS**

Prepared for: Neil Johnston Public Services Director







#### May 12, 2023



Neil Johnston Public Services Director Village of Beverly Hills 18500 W 13 Mile Rd

#### **Street Tree Trimming Program**

Dear Neil Johnston,

On behalf of The Davey Tree Expert Company, we are pleased to submit this proposal for a multi-year Street Tree Trimming Program. We view this contract as a partnership between the Village of Beverly Hills and The Davey Tree Expert Co.

Davey is proud of its reputation as a cost-effective and responsive provider of quality tree care, and environmental consulting services. For over 140 years, we have been dedicated to continual improvement for our clients, employees, and the environment.

One of our greatest strengths is the open communication among Davey operations nationally where the sharing of best practices actively takes place. We will make every attempt, through these best practices, to ensure that the Village of Beverly Hills receives improved value each year.

Our objective is to increase the level of service, improve safety and mitigate risk as well as enhance the aesthetic value of the streetscape within the Village limits. We base this objective on our projected efficiencies, leadership, and continuity in performing the pruning required.

Thank you for the opportunity to submit our proposal. If we can be of any assistance, please contact me at 248-343-4141.

Sincerely,



Josh Leo Regional Business Developer The Davey Tree Expert Company

## PLAN FOR PRUNING



#### VILLAGE OF BEVERLY HILLS

As outlined in the maps provided, we broke the Village into 4 sections (please refer to the map). Andy and I went through the entire Village and counted each street tree that was NOT on a private road or roads that were outlined by Neil Johnston to NOT count. The criteria used to determine a street tree was by "IF" the tree was located on the street side of the sidewalk or 30' from the center line of the road. In total over <u>4350</u> trees were counted.

Each section outlined has a total number of trees that were counted and priced accordingly. Pruning will consist of following ANSI Standards. Each tree will be Crown thinned to improve the overall branching structure of the tree. With a focus on the removal of dead, diseased, dying, decayed, defected or otherwise broken or damaged limbs 2" and greater. Each canopy will be elevated to a height of 15'-18' where practicable, with uniformity in mind.

The plan can be broken up into a multi-year plan if necessary or whatever conforms to the budget of the village. The project can be started at any time, but we would recommend the work be completed during the dormant season of <a href="November 15th-March 30th">November 15th-March 30th</a>, due to the amount of Oaks and Elms located throughout the village and the potential spread of Oak Wilt and Dutch Elm Disease.

Communication with the Village of Beverly Hills will be the key to the success of this project. Our team would plan to give weekly updates on the progress of streets completed and updated maps to show the progress each year.

With Davey Tree monitoring and trimming the trees of the Village, you can rest easy knowing we will have a vested interest in the health and safety of your street trees. You will have a Certified Arborist designated to your project to monitor the progress and help to monitor the tree's overall health. Davey Tree is TCIA Accredited and Employee Owned. So you can be sure that, we will manger your project as if it was OUR own!



# Village of Beverly Hills



4 Year Pruning Plan



YEAR 1



YEAR 2



YEAR 3

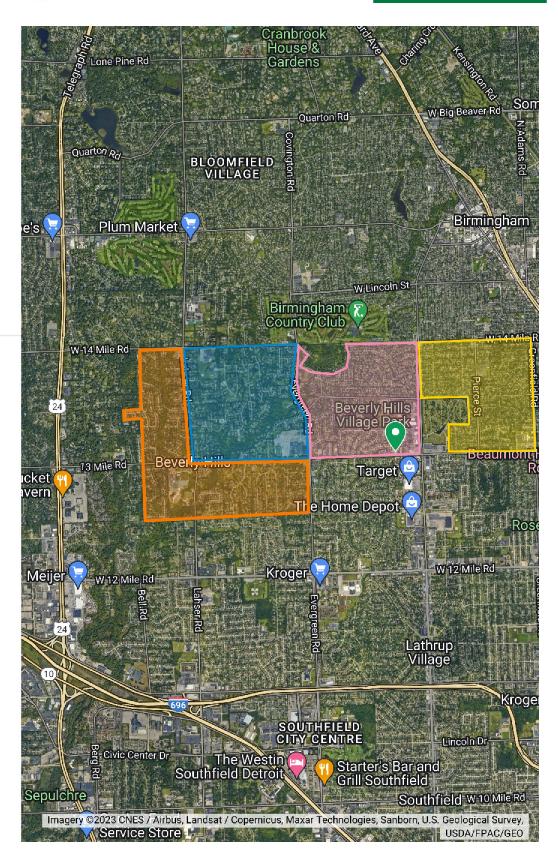


Beverly Hills Village Hall



Year 4

Street Tree Trimming Map



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Page 11 - Ansi Standard Tip Sheet

Page 12- Terms and Conditions





## **SINCE 1880**

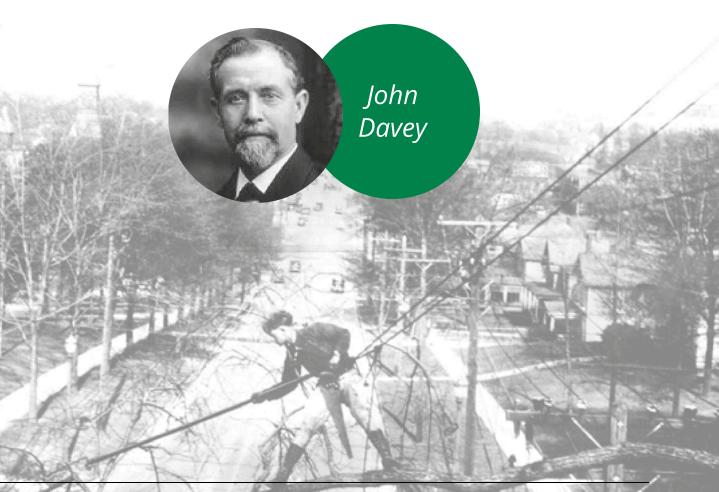
Founded in 1880, The Davey Tree Expert Company was started by John Davey and incorporated in 1909. In 1979, the employees acquired ownership of Davey. Today, Davey Tree is one of the largest employee-owned companies in North America.

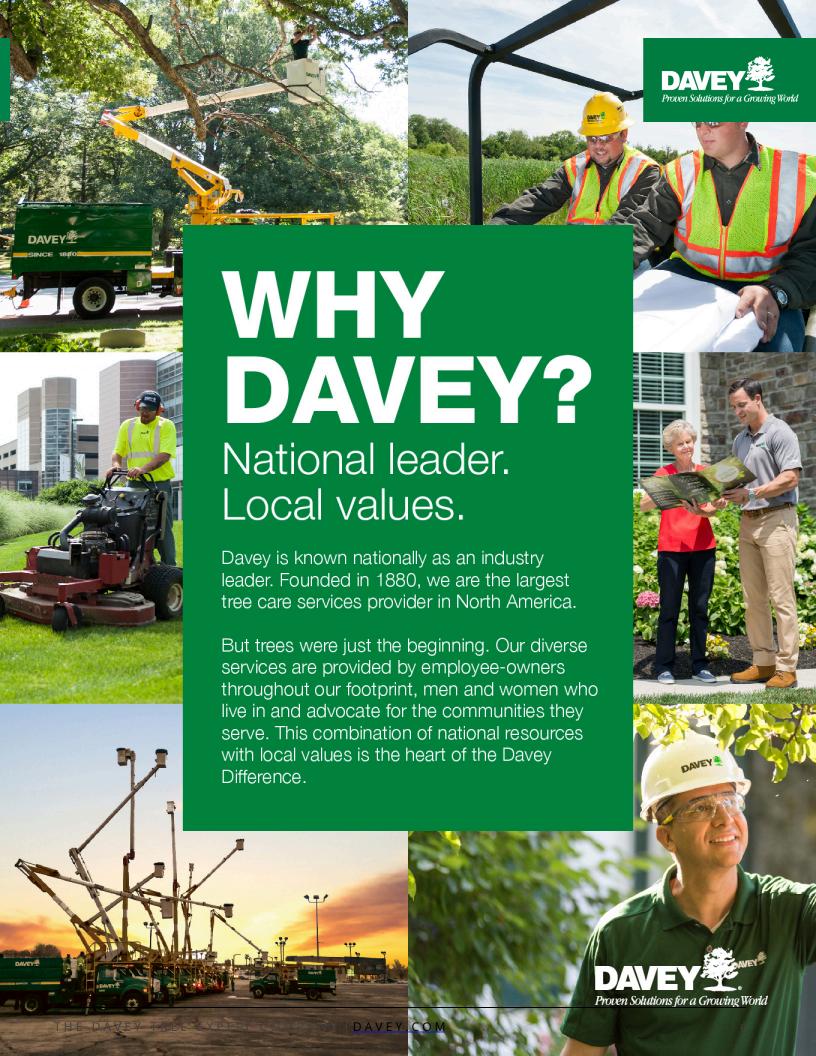
With more than 10,000 employees, Davey Tree and its subsidiaries offer residential services, commercial services, specialty services by The Davey Resource Group, and utility services.

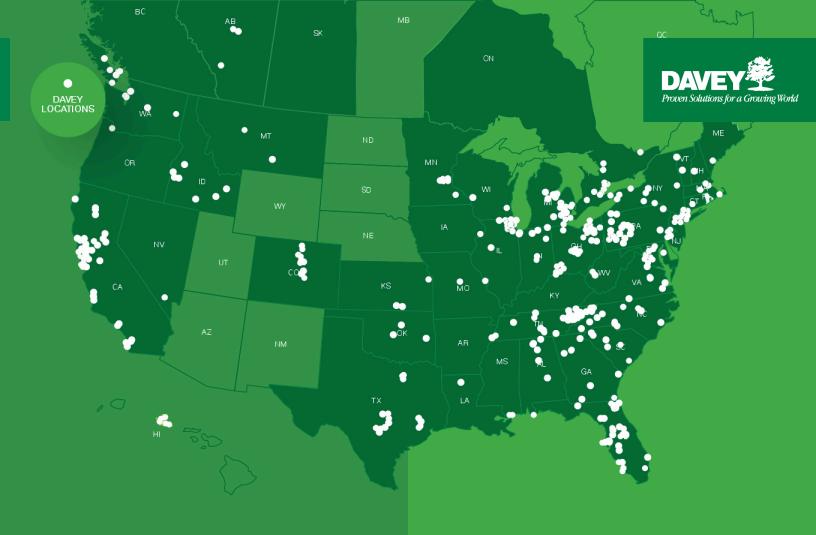
With operations throughout North America, our branches have expanded, but our commitment to scientifically-based horticultural, environmental services and outstanding client service has never wavered.

We have an experienced workforce of dedicated, courteous, hard-working employees working with a common goal of safe and reliable service. We believe our commitment to quality is evident in the work we do.

Our solutions and programs are designed and carefully monitored to obtain the right results with minimum risk to the environment and the communities we serve.







## **NATIONAL**



Training



Safety



In-House Equipment Sourcing



Davey Services

- » Residential/Commercial Tree Care
- » Commercial Landscape Services
- » Environmental Consulting
- » Utility Solutions
- » Research & Development
- » Golf Solutions
- » Emergency Response

## **LOCAL**



200+ Service Locations



North American Coverage From Hawaii to Ontario to Maine to Florida



9,000+ Employees Living in the Communities they Serve



Prompt Response Due to Local Availability



## NATIONAL LEADER. LOCAL VALUES.

Davey is known nationally as an industry leader. Founded in 1880, we are the largest tree care services provider in North America.

But trees were just the beginning. Our diverse services are provided by employee-owners throughout our footprint, men and women who live in and advocate for the communities they serve. This combination of national resources with local values is the heart of the Davey Difference.



## **NATIONAL**



The Davey Institute



Safety



Services

- » Tree & Landscape Care
- » Commercial Grounds Management
- » Environmental Consulting
- » Utility Solutions
- » Emergency Response

## **LOCAL**



200+ Service Locations



North American Coverage From Hawaii to Ontario to Maine to Florida

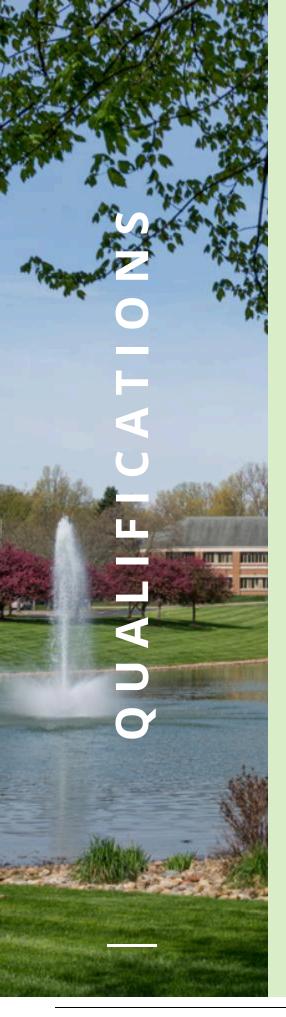


8,500+ Employees Living in the Communities they Serve



Prompt Response Due to Local Availability







#### NATIONAL INFO.

#### **FORMAL COMPANY NAME:**

The Davey Tree Expert Company

#### DATE FOUNDED:

1880

#### **CORPORATE HEADQUARTERS:**

Kent, Ohio

#### **OWNERSHIP:**

Employee-owned since 1979, the largest employee-owned company in the State of Ohio and one of the top 20 largest in the U.S.

#### NUMBER OF EMPLOYEES:

10,000+ employees

#### **QUICK FACTS:**

- Davey provides tree, shrub and lawn care, pest management, pest surveys, large tree moving, grounds management, vegetation management and consulting services in North America.
- Davey crews provide service to nearly every state in the U.S. and many Canadian provinces.
- The Davey family owned the company until 1979 when the employees purchased it.

#### LOCAL INFO.

#### **CORPORATE OFFICE:**

P.O. Box 5193 1500 North Mantua Street Kent, OH 44240

#### **TAX IDENTIFICATION #:**

34-0176110

#### SIC CODE:

0783

#### **NAICS:**

561730

#### **D&B NUMBER:**

00-790-3180

#### LOCAL OFFICE:

3381 Lapeer Rd W, Auburn Hills 48326

#### **CONTACT PERSON:**

Josh Leo Andrew Shaffran

#### **CONTACT PHONE:**

Josh: 248-343-4141

Andrew: 734-328-4728

EMAIL: Joshua.leo@davey.com

Andrew.shaffran@davey.com

## **REFERENCES**

#### City of Rochester 400 Sixth St, Rochester

Contact Name: Karl Maier Contact Phone: 248-379-8845

Contact Email: kmaier@rochestermi.org

#### City of Ann Arbor 301 E Huron St, Ann Arbor

Contact Name: Colin Spencer Contact Phone: 734-794-6500

Contact Email: cspencer@a2gov.org

#### City of Pleasant Ridge 23925 Woodward Ave, Pleasant Ridge

Contact Name: James Breuckman Contact Phone: 517-974-0373

Contact Email:

citymanager@cityofpleasantridge.org







Davey provides comprehensive landscaping, grounds management, tree care and environmental consulting services on commercial properties across North America. From HOAs to industrial facilities, our dedicated team maintains safe and beautiful landscapes on a variety of commercial property types.

- -» Tree and shrub pruning, planting and fertilization
- -» Grounds maintenance, mowing and landscape installation
- -» Pest and disease prevention and management
- -» Water management and sustainability solutions
- -» Environmental consulting and compliance
- -» Emergency storm response services



## **TEAM BIOS**





**JOSH LEO** 

Regional Business Developer for the Davey Tree Expert Co.

ISA Certified Arborist since 2006 MI-3856A

Associates Degree in Applied Science for Horticulture

20 years of Experience with Davey Tree

25 years in total for the Green Industry

M: 248-343-4141 E: Joshua.leo@davey.com



#### **ANDREW SHAFFRAN**

District Manager for North Detroit

30 Years of Arboriculture Experience

25 Years of Experience with Davey Tree

Bachelor of Science from Michigan State University in Horticulture

M: 734-328-4728 E: Andrew.shaffran@davey.com



# STATEMENT OF SAFETY POLICY

Safety is a core value of The Davey Tree Expert Company and is deeply rooted within our culture. Our dedication to safety emphasizes the fundamental respect we have for our employees, clients, the public and the environment.

All of Davey Management is responsible for providing an environment where our work can be carried out safely. Rigorous adherence to the Company Safety Policies is critical to assure that employees understand, implement and enforce Company safe work practices in accordance with federal United States OSHA or Canadian OSH standards.

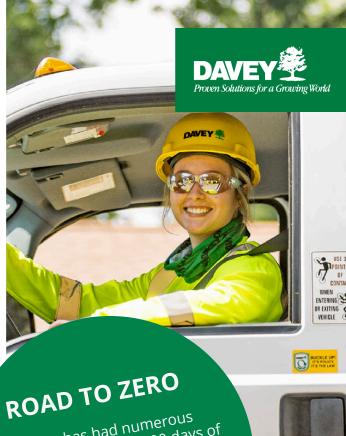
As a Company, we will provide for the safest possible conditions through advanced training, education and compliance monitoring. Every Davey employee must be a participating member of the safety team, and is responsible to improve safety conditions by reporting hazards, enforcing safety policies and supporting employee engagement.

A commitment to our statement of safety policy is part of every employee's condition of employment with Davey and is also a moral obligation we share with our Davey teammates to assure that we return home safely.

Sincerely,

Patrick Covey
President & CFO

Patrick Covery



Davey has had numerous operations achieve 1,000 days of accident-free production.

Join us on the Road to Zero and add your operation to the list!

Every Davey industry professional is tasked with upholding safety policies and procedures. To help pave the way along the Road to Zero, Davey's business units report safety performance monthly to leadership to measure progress toward safety benchmarks and goals.

Davey strives to be consistently lower than relevant industry injury data as collected by the Bureau of Labor Statistics (BLS). We provide detailed safety performance data to clients upon request.



## **MULTI-YEAR STREET TREE PRUNING PLAN**



Section (Refer to Map for color coding)	Subtotal
Year 1 (Yellow) Approx 1282 Trees located in this section are to be trimmed	\$230,760
Year 2 (Pink) Approx 1485 Trees located in this section are to be trimmed	\$267,300
Year 3 (Blue) Approx 602 Trees located in this section are to be trimmed	\$108,360
Year 4 (Orange) Approx 828 Trees located in this section are to be trimmed	\$149,040
Total	\$755,460

Tree counts are approximately (4200 trees), we did drive each street within the village and count the trees, but we could have missed a tree here or there. Numbers can be used for budgetary purposes.

<sup>\*</sup>Some clarification would be needed to see if trees located inside Apartments near the village hall need to be counted. As of now, they are not

<sup>\*</sup>Private roads were not included (Niel sent us a revised list of these streets)

<sup>\*</sup>WE do have a master list of each street with the number of trees per street

## **PAYMENT TERMS**



TOTAL PROGRAM COST \$755,460.00

BILLING	<b>OPTIONS</b>	SELECT	AN OPTIO	ON)
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<ul> <li>A. Invoice As Services are Performed - Weekly</li> <li>As streets are completed we can invoice work performed weekly at a NET 45 days</li> </ul>	
<ul> <li>■ B. Invoice As Services are Performed - As each SECTION is completed</li> <li>As each section in the village is completed we can Invoice just THAT section at NET 45 days</li> </ul>	

## **AUTHORIZATION**

We the undersigned client, have read and agree to the above grounds management proposal and accept its terms. Davey is authorized to proceed pursuant to this contract.

Prices quoted are guaranteed if contract is signed within 60 days of issue date.



Village of Beverly Hills



#### **Proposed by:**

The Davey Tree Expert Company

<sup>\*\*</sup>Invoicing options can be discussed to match the needs and budget of the Village of Beverly Hills\*\*

## Types of Pruning by ANSI Standards DAVEY



#### TREE DOCTOR TIPS

## Types of Pruning in Accordance with ANSI A300 Standards

#### WHAT:

ANSI (American National Standards Institute) develops guidelines to the green industry for performing tree care operations. It will not only ensure your trees will be handled in the proper way as far as techniques and equipment, but to also reinforce best practices that will encourage your trees to flourish both aesthetically, and functionally.

#### WHY:

These standards can be used for general familiarity with professional tree care pruning requirements, as well as for documented preparation of expectations when it comes to work being conducted on a property. Our company is committed to providing transparent information that will help with the understanding of the different types of pruning, and which ones will be chosen to be performed on each individual property and why.

#### HOW:

Trees on properties display unique attributes. Pruning recommendations should too. Trees and shrubs require proper pruning techniques based on species and location. Objectives are meant to be established prior to work being done, often identified with a written proposal and/or map.

Proper pruning is vitally important to the health and stability of your trees and shrubs. It also aesthetically shapes trees in a customized way that promotes health. Some of these types of pruning include:

• **Pruning to reduce density**: Drawing the eye to a nice view seen through, under or over a group of trees. This type of pruning can emphasize a picturesque mountain lake, or something human-made like a beautiful road, home facade or yard space.1

- Pruning to provide clearance: Removing lower branches to provide clearance underneath or create the illusion of height. This type of pruning may also be employed on trees growing adjacent to a structure or roadway, or underneath utility lines.<sup>2</sup>
- Pruning for size management: Reducing the height and/or spread of a tree.3
- Topiary: Clipping shrubs and trees into ornamental shapes. This practice is often used in formal landscapes.
- Shrub rejuvenation pruning: Removing the stems to near ground level to encourage the formation of new sprouts.
- Pruning to maintain health: Selectively pruning dead, diseased or broken branches will continue to help further the health of your trees. The optimal time to prune can vary by species and conditions. Ask your local arborist whether active season pruning or dormant season pruning will provide optimal timing.4





- Previously, pruning to reduce density was often referred to as tree thinning/ vista pruning. Under the latest standards, this is referred to as pruning to reduce density.
- 2) Previously, *pruning to provide clearance* was often referred to as crown raising. Under the latest standards, this is referred to as **pruning to provide clearance**.
- 3) Previously, *pruning for size management* was often referred to as crown reduction. Under the latest standards, this is referred to as **pruning for size management**.
- 4) Previously, pruning to maintain health was often referred to as crown cleaning. Under the latest standards, this is referred to as pruning to maintain health.

The scientists at The Davey Institute laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult The Davey Institute's Plant Health Care Book.



## SERVICE TERMS



#### Client Guarantee

We use quality products that are administered by trained personnel. We guarantee to deliver what we have contracted to deliver. If we do not, we will work with you until you are satisfied, or you will not be charged for the disputed item. Our Client Care Guarantee demonstrates our commitment to creating lifelong client relationships.

#### **Tree Care**

PRUNING: Performed by trained arborists using industry and Tree Care Industry Association (TCIA) approved methods.

TREE REMOVAL: Removal to within 6" of ground level and cleanup of debris.

STUMP REMOVAL: Mechanical grinding of the visible tree stump to at or just below ground level. Stump area will be backfilled with stump chips and a mound of remaining chips will be left on site unless otherwise stated in the contract. Chip removal, grading, and soil backfill are available.

CLEAN-UP: Logs, brush, leaves, and twigs large enough to rake are removed. Sawdust and other small debris will not be removed.

CABLING/BRACING: Cabling and bracing of trees is intended to reduce damage potential. It does not permanently remedy structural weaknesses, is not a guarantee against failure, and requires periodic inspection.

#### Tree and Shrub Fertilization/Soil Care

Your arborist will assess your property's overall soil conditions either through physical assessment or through soil testing and will recommend a soil management program to help the soil become a better medium to enable healthy plants to thrive or unhealthy plants to regain their vitality. Soil Care programs will include fertilizers, organic humates, fish emulsions, and other organic soil conditioners.

Our advanced formula, Arbor Green PRO, works with nature to fertilize without burning delicate roots, building stronger root systems and healthier foliage. It contains no chlorides or nitrates. It Is hydraulically injected into the root zone and the nutrients are gradually released over time. Research and experience shows the dramatic benefits Arbor Green PRO provides, including greater resistance to insects and diseases, greater tolerance to drought stress, increased vitality, and healthier foliage.

#### **Tree and Shrub Plant Health Care**

PRESCRIPTION PEST MANAGEMENT: Customized treatments to manage disease and insect problems specific to plant variety and area conditions. Due to the short-term residual of available pesticides, repeat applications may be required.

INSECT MANAGEMENT: Inspection and treatment visits are scheduled at the proper time to achieve management of destructive pests. Pesticides are applied to label specifications.

DISEASE MANAGEMENT: Specific treatments designed to manage disease problems. Whether preventative or curative, the material used, the plant variety being treated, and the environmental conditions all dictate what treatment is needed.

## SERVICE TERMS CONT.



EPA approved materials will be applied in accordance with State and Federal regulations.

#### Other Terms and Contract Conditions

INSURANCE: Our employees are covered by Worker's Compensation. The company is insured for personal injury and property damage liability. Proof of Insurance can be verified by requesting a copy of our Certificate of Insurance.

WORKING WITH LIVING THINGS: As trees and other plant life are living organisms affected by factors beyond our control, no guarantee on tree, plant, or general landscape safety, health, or condition is expressed or implied and is disclaimed in this contract unless that guarantee is specifically stated in writing by the company. Arborists cannot detect or anticipate every condition or event that could possibly lead to the structural failure of a tree or guarantee that a tree will be healthy or safe under all circumstances. Trees can be managed but not controlled. When elevated risk conditions in trees are observed and identified by our representatives and a contract has been signed to proceed with the remedial work we have recommended, we will make a reasonable effort to proceed with the job promptly. However, we will not assume liability for any accident, damage, or injury that may occur on the ground or to any other object or structure prior to us beginning the work. Site inspections do not include internal or structural considerations unless so noted. Unless otherwise specified, tree assessment will not include investigations to determine a tree's structural integrity or stability. We may recommend a Risk Assessment be conducted for an additional charge.

TREE CARE STANDARDS: All work is to be performed in accordance with current American National Standards Institute (ANSI) Standard Practices for Tree Care Operations.

OWNERSHIP OF TREES/PROPERT Y: Acceptance constitutes a representation and warranty that the trees and property referenced in this quote are either owned by the signee or that written permission has been received to work on trees which are not on the signee's property.

TIME & MATERIAL (T&M): Jobs performed on a T&M basis will be billed for the time on the job (not including lunch break), travel to and from the job, and materials used.

BILLING & SALES TAX: All amounts deposited with us will either be credited to your account or applied against any amounts currently due. Our invoices are due net-30-days from Invoice Date. Services may be delayed or cancelled due to outstanding account balances. Sales tax will be added as per local Jurisdiction. Clients claiming any tax-exempt status must submit a copy of their official exempt status form including their exemption number to waive the sales or capital improvement tax.

PAYMENT: We accept checks and credit cards. Paying by check authorizes us to send the information from your check to your bank for payment.

UNDERGROUND PROPERTY: We are not responsible for any underground property unless we have been informed by you or the appropriate underground location agency.

SCHEDULING: Job scheduling is dependent upon weather conditions and workloads.



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## LR8 SERIES

#### **FEATURES**

- · Altec ISO- Grip Control System
- · Mounts on Below FET Chassis
- Full Size Chip Box Provides Excellent Payload Capacity
- · Insulating, ANSI Category C
- Insulating Lower Boom Insert
- Maintenance Free Elbow
- Round Upper Boom Reduces Potential Boom Damage
- Compact 10 ft (3 m) Compensated Vertical Elevator (LR860-E70)
- Outrigger Boom Interlock System
- Outrigger Motion Alarm
- Back Up Alarm
- No Required Major Scheduled Maintenance
- Lifetime Platform Leveling System
- Maintenance Free (Greaseless) Cylinders
- 400 lb Platform Capacity
- · Lifetime Structural Warranty

#### **OPTIONS**

- · Lanyard Interlock System
- Lanyard Alert System
- Dual Hydraulic Tool Circuits
- · Insulating, ANSI Category B
- Under CDL RM Elevator Package
- Automatic Lower and Upper Boom Stow Systems
- Upper and Lower Boom Out of Stow Indicator Systems
- 90° Platform Rotator (Available with 24 x 24 or 24 x 30 Platform)
- 24 in x 30 in Platform Option
- 450 lb Platform Capacity Option on Non-Rotating Platforms
- Upper Boom Protective Sleeve
- · Lower Boom Lifting Eye
- Turntable Handrail
- · Arbuckle Lanyard Anchor System

Recommended safety equipment, available through Altec Supply, include a platform liner, fall protection system, wheel chocks and outrigger pads.

CONFIGURATIONS	LR852 FM	LR852 RM	LR856 FM	LR856 RM	LR858 FM	LR858 RM	LR860 FM	LR860 RM	LR860-E70 (FM&RN
Ground to Bottom of Platform	52.3 ft (16.00 m)	51.6 ft (15.7 m)	56.3 ft (17.2 m)	55.6 ft (16.9 m)	58.3 ft (17.8 m)	57.6 ft (17.6 m)	60.3 ft (18.4 m)	59.6 ft (18.2 m)	70.3 ft (21.4 m)
Working Height	57.3 ft (17.5 m)	56.6 ft (17.3 m)	61.3 ft (18.7 m)	60.6 ft (18.5 m)	63.3 ft (19.3 m)	62.6 ft (19.1 m)	65.3 ft (19.9 m)	64.6 ft (19.7 m)	75.3 ft (23 m)
Maximum Reach from Centerline of Rotation	40.4 ft (	12.3 m)	44.4 ft	(13.5 m)	46.4 ft	(14.2 m)	48.4 ft (	(14.8 m)	48.4 ft (14.8 m)
Maximum Reach Upper Boom Non-Overcenter	38.2 ft (	11.6 m)	41.6 ft	(12.7 m)	43.6 ft (13.3 m)	42.8 ft (13.0 m)	44.8 ft (	(13.6 m)	44.8 ft (13.6 m)
Stowed Travel Height	12.4 ft (3.8 m)	11.7 ft (3.6 m)	12.4 ft (3.8 m)	11.7 ft (3.6 m)	12.4 ft (3.8 m)	11.7 ft (3.6 m)	12.4 ft (3.8 m)	11.7 ft (3.6 m)	12.5 ft (3.8 m)
Upper Boom Isolation Gap	13.0 ft	(4.0 m)	17.0 f	(5.2 m)	19.0 ft (5.8 m)	17.0 ft (5.2 m)	19.0 ft	(5.8 m)	19.0 ft (5.8 m)
Platform Capacity	400 lb (1	81.4 kg)	400 lb (	181.4 kg)	400 lb (	181.4 kg)	400 lb (1	181.4 kg)	400 lb (181.4 kg)
Platform Dimensions	24 x 24 (610 x 610		24 x 24 x 39 in (610 x 610 x 991 mm)			4 x 39 in 0 x 991 mm)		1 x 39 in 1 x 991 mm)	24 x 24 x 39 in (610 x 610 x 991 mm)
Upper Boom Articulation	0 to :	270°	0 to	270°	0 to	270°	0 to	270°	0 to 270°
Lower Boom Articulation	0 to	125°	0 to	125°	0 to	125°	0 to	125°	0 to 125°
Rotation	Contir	iuous	Cont	inuous	Cont	inuous	Conti	nuous	Continuous

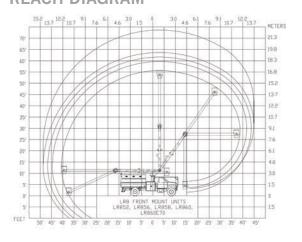
#### LANYARD DETECTION SYSTEM



#### **GREASELESS CYLINDERS**



#### **REACH DIAGRAM**



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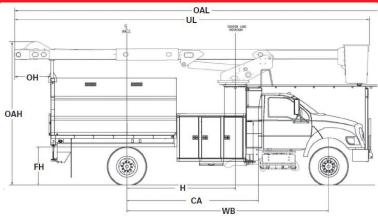


### **XT PRO SERIES**

Overcenter Aerial Device For Tree Trimming

## **AERIAL DEVICE**

Terex® Hi-Ranger Aerial Devices are known throughout the industry. They come with a long history featuring quality and innovative design.



Measurements	XT PRO 56	XT PRO 60	XT PRO 60/70	
	вс	вс	вс	
Typical Frame Height (FH)	40 in. (101.6 cm)	40 in. (101.6 cm)	40 in. (101.6 cm)	
Typical Cab Height (CH)	108 in. (274.3 cm)	108 in. (274.3 cm)	108 in. (274.3 cm)	
Offset (O)	94.8 in. (240.8 cm)	106.8 in. (271.3 cm)	140.8 in. (357.6 cm)	
Overall Height (OAH)	12' 8" (3.9 m)	12' 8" (3.9 m)	12' 8" (3.9 m)	
Overall Length (OAL)	30'4" (9.2 m)	32' 5" (9.9 m)	32' 5" (9.9 m)	
Unit Length (UL)	27'8" (9.0 m)	31' 1" (9.5 m)	31' 1" (9.5 m)	
Overhang Length (OH)	3' 11" (1.2 m)	3' 2" (1.0 m)	3' 2" (1.0 m)	
Center of Rotation (H)	96.0 in. (244.6 cm)	114.0 in. (290 cm)	114.0 in. (290 cm)	
Cab to Axle (CA)	120 in. (304.8 cm)	138 in. <i>(350.5 cm)</i>	138 in. (350.5 cm)	
Wheel Base (WB	192 in. (487.7 cm)	210 in. (533.4 cm)	210 in. (533.4 cm)	
Front Axle (FA)	9,000 lb. (4,082 kg)	10,500 lb. (4,763 kg)	13,000 lb. (5,897 kg)	
Rear Axle (RA)	17,000 lb. (7,711 kg)	17,000 lb. (7,711 kg)	19,000 lb. (8,618 kg)	
Gross Vehicle Weight Rating (GVWR)	26,000 lb. (11,793 kg)	27,500 lb. (12,474 kg)	33,000 lb. (14,969 kg)	
Recommended Weight for Stability	19,000 lb. (8,618 kg)	21,000 lb. (9,525 kg)	21,000 lb. (9,525 kg)	
Frame Section Modulus	18.0 in³	18.0 in³	18.0 in³	
Frame Yield Strength	50,000 psi	50,000 psi	50,000 psi	
Frame RBM	900,000 in-lbs	900,000 in-lbs	900,000 in-lbs	

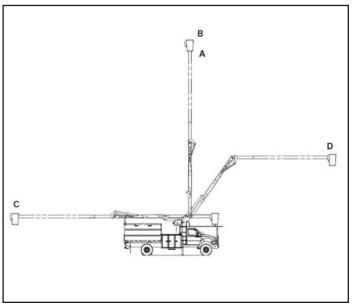


3140 15th Avenue SE PO BOX 1150 w Watertown, SD 57201 E

Phone: (605) 882.4000 www.terex.com/utilities Email: utilities.info@terex.com Distributed By:

#### STANDARD EQUIPMENT

- Side-Mount 24" x 24" x 40" One-Person Platform
- Platform Capacity up to 400 lb (181 kg)
- Control-Plus "3-D" Single Stick Control At Platform
- Safety Harness with Attached Lanyard
- Continuous Unrestricted Worm Gear Rotation
- Category "C" Rating Per ANSI A92.2
- Rectangular, Bi-Axial Epoxy Resin, Filament Wound Fiberglass Booms
- Individual Lever Lower Controls
- Mechanical Platform Leveling
- Full Pressure, Open-Center Hydraulic System
- 33 Gallon Hydraulic Oil Reservoir
- Padded Boom Rest with Upper Boom Tie Down
- Outrigger Interlock
- Moving Outrigger Alarm
- Truck Level Indicator
- 10-Year Leveling Chain
- Dual Hydraulic Tool Outlet at Boom Tip
- Manual Platform Tilt
- Finish Painted



#### CAPACITIES & DIMENSIONAL DATA (Based on a 40 inch Frame Height)

OPTIMA Model	Α	В	С	D	E	F
	Bottom of Platform Height	Working Height	Overcenter Side Reach	Non-Overcenter Side Reach	Upper Boom Articulation	Lower Boom Articulation
XT PRO 56	56.0 ft (17.0 m)	61.0 ft (18.6 m)	45.6 ft (13.9 m)	41.5 ft (12.6 m)	250°	125°
XT PRO 60	60.0 ft (18.3 m)	65.0 ft (19.8 m)	49.9 ft (15.2 m)	45.0 ft (13.7 m)	250°	125°
XT PRO 60/70	70.0 ft (21.3 m)	75.0 ft (22.9 m)	49.9 ft (15.2 m)	45.0 ft (13.7 m)	250°	125°

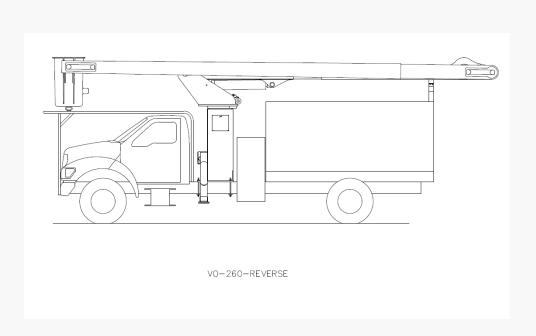
#### **OPTIONAL EQUIPMENT**

- Liner With or Without Steps
- Boom Storage Warning Light
- Start/Stop
- 2-Speed

- Auxiliary Let Down System
- Various Types of Outriggers
- 10' Longitudinal Elevator for Forestry Units



□BACK / HOME » BUCKET TRUCKS » VO-260-REV



## **VO-260-REV**

#### **OVERCENTER**

**Bucket Truck** 

60 ft Insulated Overcenter Articulated Reverse Mount

#### INDUSTRIES SERVED

Electric Power Distribution, Electric Utilities, FORESTRY & TREE CARE

#### **TYPE**

Overcenter

#### HEIGHT RANGE

45ft - 65ft

#### MODEL SERIES

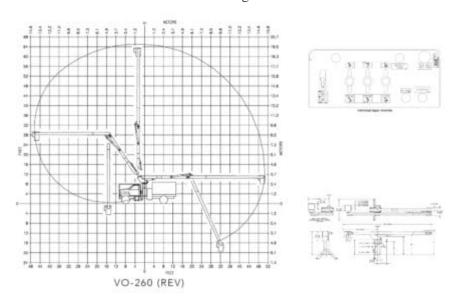
VO



## PRODUCT OVERVIEW -

Working Height	65.33 ft (19.81 m)
Height to Bottom of Platform	60.33 ft (18.29 m)
Horizontal Reach Overcenter	50.67 ft (15.24 m)
Horizontal Reach Non-overcenter	46.42 ft (14.02 m)
Stowed Travel Height	12.25 ft (3.66 m)
Platform Capacity	350 lbs (158.76 kg)
Insulated or Non-insulated	Insulated
Material Handling	No

#### Click on images to see detail



## **SPECIFICATIONS** -

#### **HYDRAULIC SYSTEM**

Hydraulic Controls	Full Hydraulic
Operating Pressure	2900 psi (203.89 kg/cm²)
Flow Rate	7 gpm (26.5 lpm)
Filtration	10 micron return   100 mesh suction
System Type	Open Center
Power Source	PTO Pump

#### **BOOM**

Upper Boom Articulation	245°
Lower Boom Articulation	0° to +125°
Upper Boom Insulation Gap	214 in (5.44 m)
Lower Boom Insulation Gap	24 in (0.61 m)
Lower Boom Lift Eye Capacity	1500 lbs (680.39 kg)
Boom Rotation	Continuous

### VEHICLE REQUIREMENTS

GVWR	28000 lbs (12700.52 kg)
Cab to Axle (minimum)	120 in (3.05 m)

#### Bucket Truck | Versalift - VO-260-REV Overcenter -**SERVICE INDUSTRIES ABOUT CONTACT** AVAILABLE UNIT TYPES **NOW** Articulated Find A Dealer ■ Electric Jobs Contact Us Available Telescopic Become a Utility Press Releases Dealer Search Soon News Elevators Dealer Forestry (NA) High Reach Telescopic Corporate Government Time Dealer Search Utility Telescopic Locations Power Manufacturing (Intl) Telecom Van Nationwide Distribution Company Find by State **Parts** Service Corporate ■ Non-Power **Parts** Models Transmission Relations Overcenter Centers Service Cable Placer Overcenter Global Partner ■ Sign, Light, & Corporate Government Digger CTA (Condor) Program Traffic Locations Customers Derricks PHX (VGPP) Telecommunications -Global Partner Careers Compact Under Bridge Program Media Kit & (Phoenix) Warranty Aerials ■ SKY **Parts** Inspection Leasing & Logos Compare All (Skybird) Wind Energy Financing Lifts Ruthmann Rentals **Compact Lifts SAFETY** HEIGHTS **PROGRAMS SUBSIDIARIES** LEARN

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- 65FT 100FT
- 45FT 65FT
- 29FT 45FT
- **ESG**
- Emergency
  - Weather
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#### **BRANDS**

- **Versalift**
- Ruthmann
- Steiger
- Bluelift
- **BrandFX**
- Aspen Aerials
- TRL Rents
- **Utility Truck** Trader



Versalift is a leading manufacturer of bucket trucks, digger derricks, cable placers and high reach aerial lifts for power generation, transmission and distribution, telecommunication, sign, light, and traffic, and tree care industries.

#### CONTACT

Sales: 800-825-1085

Service: 866-543-8887

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