AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Authorization to accept the Parkway Tree Inventory proposal from Graf Tree Care, Inc.
Presenter & Title:	Nate Landers, Superintendent of Streets, Fleets, and Facilities.
Date:	February 12, 2018

Please Check Appropriate Box:

x	Committee of the Whole Meeting		Special Committee of the Whole Meeting
x	City Council Meeting		Special City Council Meeting
	Public Hearing		Other -

Associated Strategic Plan Goal/Objective: Vision 5 Goal L

Estimated Cost: $47,970.00	Budgeted? _x___ Yes ____ No	Other Funding? ____ Yes ____ No

If "Other Funding," please explain how the item will be funded:

Executive Summary:

The 2018 budget included funds for a Parkway Tree Inventory. Staff issued an RFP in late December in which all proposals were to include three components. Component A calls for a computerized parkway tree inventory including; location, species, diameter, condition, maintenance need, and potential planting sites. Component B is an Urban Forestry Management Plan including; project summary, methodology, urban forestry characteristics, management recommendations, pruning specifications, species recommendations. Component C was classified as an additional alternate proposal for tree management software. The software must be able to track inventory, pruning, removals, work order history, and tree valuations.

Based on a review of the above listed components, staff recommends awarding the work to Graf Tree Care, Inc.

Graf's proposal included an inventory of up to 14,000 parkway trees. The other proposals included an additional charge per tree after exceeding 9,000 trees. The previous tree inventory, completed in 2000, included over 9,000Parkway trees. Fischer Farms and the Sunset Prairie subdivision had not yet been built. Graf's proposal also includes using the City's existing GIS program, at no cost to the city, for component C of the proposal related to tree management software. The other proposals included proprietary software programs with a yearly subscription renewal.

Attachments: *(please list)*
• Proposal Tab • Proposal • Resolution
Recommendation / Suggested Action: *(how item should be listed on agenda)*
Staff respectfully recommends that City Council award the Parkway Tree Inventory contract to Graf Tree Care Inc. in the amount not to exceed $47,970.

City of Geneva

Summary of Proposals

Name of Project: Tree Inventory

Recorded By: Nate Landers

Opened By: Nate Landers

Date/Time: January 29, 2018 @ 10:30 am

Approved Engineer Estimate/ Budget :

CONTRACTOR NAME	Tree Inventory Price	BID BOND % OF PRICE	Tree Management Plan	Tree Management Software	Notes
Graf Tree Care	$41,195.00	10%	$ 6,775.00	$ -	
Davey Tree Expert Company	$25,500 *	10%	$ 4,100.00	Included for one year	Based on 9,000 Trees $2.82 per each additional tree
HLR	$ 45,000.00	10%	$ 5,850.00	$ 9,350.00	Based on 10,000 trees

Tree Care, Inc.
.s Louis Bork Drive, Unit #113
Batavia, IL 60515
630-762-2400 Fax 630/578-1304
www.graftreecare.com

Urban Forestry Professionals Since 1999
(630) 762-2400 www.graftreecare.com

January 26, 2018

City of Geneva
Public Works Facility
1800 South Street
Geneva, Illinois 60132

Attn: Nate Landers, Superintendent of Streets
Re: Professional Services Contract for Environmental Consulting
Parkway Tree Inventory, and Urban Forestry Management Plan

Dear Nate,

Thank you for this opportunity to provide a proposal for a Parkway Tree Inventory and Urban Forestry Management Plan for the City of Geneva.

This proposal is for a GIS-based inventory of trees within City-owned right-of-way (street trees) and managed areas within the corporate boundaries of the City of Geneva. Data will be collected via handheld mobile devices, analyzed in a GIS environment, and utilized to prepare an Urban Forestry Management Plan (UFMP). Final deliverables will include the UFMP, a report including statistical analysis of the overall tree population, and full implementation of the tree inventory into the City's existing GIS system allowing for record keeping and mobile updating of the tree inventory from the office and field.

Having performed dozens of inventories and management plans for municipal entities for the many years, we are aware of how much time, energy, and capital are invested in the management of the Urban Forest. The most valuable tool to have at your disposal for efficient and cost-effective Urban Forestry management operations is a full and complete inventory of all trees on City parkways and City-owned properties. This inventory will result in a comprehensive Urban Forestry Management Plan, establish a cyclical tree trimming program, identify current species composition, create, manage and track work orders, create a strategic tree planting plan, and provide an invaluable monitoring tool for years to come.

Graf Tree Care will provide a complete GIS-based (computerized) tree inventory customized to your data management needs, and analyze that information to produce a comprehensive Urban Forestry Management Plan. Our Inventory Products do not require the purchase of tree inventory specific software, have no recurring maintenance fees, and will integrate seamlessly with the existing GIS system already in place in the City. Graf Tree Care is an industry-leading resource when it comes to the management of the urban forest and other municipal natural resources, and we look forward to working with you as part of your Urban Forestry Team to achieve your management objectives.

Regards,

Phil Graf

Phil Graf
Graf Tree Care, Inc.
ISA Certified Arborist # 1553-AM, Municipal Specialist

MEMBER ISA · CERTIFIED ARBORIST ISA · MUNICIPAL SPECIALIST ISA

PROJECT UNDERSTANDING AND APPROACH

The City of Geneva is seeking to create a comprehensive inventory of trees within the City owned right-of-way and property, and develop an Urban Forestry Master Plan (UFMP) based on that data. This inventory can also be used to evaluate and prioritize tree pruning and removal operations and manage Urban Forestry activities such as tree maintenance and homeowner requests. This in turn produces a diverse and resilient urban forest, and an efficient management tool. The GIS data itself will become incorporated into the City's existing Geographic Information System (GIS) through the use of web applications, web maps, and operations dashboards.

Graf Tree Care has a refined approach to accomplishing these goals, and is very experienced in doing so. Our approach includes: GIS data collection by certified arborists, GIS data analysis by our in-house team of GIS professionals and arborists, producing a comprehensive Urban Forestry Management Plan which assist in managing the urban forest, and the knowledge to incorporate that GIS data into the Village's system. Our approach uses GIS software (ESRI's ArcGIS Platform), a thorough tree data analysis, and a commitment to long-term, continuing assistance and development when it comes to arboricultural and GIS needs. Please note that all work performed on this project will be done by Certified Arborists, and no subcontractors or interns will be used for tree data collection or GIS work.

CONSULTANT OVERVIEW

Graf Tree Care / Graf Natural Resources Management and GIS has extensive expertise in the fields of Tree Inventory, GIS Technology and Geospatial Data Management, as well as Plant Pathology and Plant Health Care, Urban Forestry, Arboricultural Consulting, and Traditional Tree Work. Our extensive staff qualifications and experience in all facets of Arboriculture set us apart from other consulting firms who do not specialize in all of these areas. All of our staff who work on these projects have been cross-trained in each of these areas so that the data we collect has real value, and is viewed through the eyes of an experienced professional who is familiar with all aspects of municipal tree care and maintenance. We maintain continuing education as a high priority and stay on the cutting edge of Arboriculture, having pioneered techniques for using GIS in reforestation planning, and incorporating TRAQ Risk Assessment concepts into our data collection when appropriate.

We do not use subcontractors, "out-of-town" staff, or part-time interns on any large-scale tree surveys, ensuring high accuracy, professional results. We pride ourselves on our ability to meet deadlines consistently. Not once in over 40 major inventory projects and dozens of smaller projects have we ever missed or needed to extend a deadline in order to deliver work on time, and our commitment to continued support ensures that all of our clients are serviced at the highest level possible. We respond to emails and phone calls promptly (within 1 business day), and are committed to helping you maintain the best quality data possible to avoid the need for re-inventory in the foreseeable future. We also offer many additional services that other consultants do not. These include establishing real-time updating of the tree inventory via smartphone or tablet and 3D tree mapping, a new and innovative service that our clients can use to make exceptional presentations to City Boards or citizen groups in order to visualize street tree plantings over time.

KEY STAFF

These are the only staff which will be employed on this project. Each team member specializes in at least one field, but has worked in the field performing multiple tree surveys, trimming and removal, plant health care, and consulting. We communicate internally throughout inventory projects to arrive at the most expert opinion on difficult tree assessments, and ensure the highest quality field data that never values quantity over quality on every tree we collect.

PHIL GRAF

Phil is the owner of Graf Tree Care / Graf Natural Resources Management and GIS, and has been in the tree care industry for over 20 years. He is an ISA Certified Arborist, and also an ISA Certified Municipal Specialist. He has worked for the City of Wheaton in the Forestry Division, where he gained valuable experience working in a municipal setting. He founded Graf Tree Care in 1999, specializing in tree trimming, removal, Urban Forestry consulting, tree inventory, plant health care, and planning. He has been instrumental in Emerald Ash Borer management in Illinois, having worked with countless municipalities, park districts, businesses, and homeowners to survey their tree populations and provide custom tailored strategies to manage the Emerald Ash Borer. Phil's unique perspective as an arborist, municipal specialist, and business owner who has worked in both the public and private sectors in all facets of arboriculture make him an expert in the field. Professional Associations: International Society of Arboriculture, Illinois Arborist Association, Midwest Institute of Park Executives, Illinois Parks and Recreation Association.

STEVE LANE

Steve is the GIS Coordinator and Ecologist at Graf Tree Care / Graf Natural Resources Management and GIS, and has been in the tree care and environmental industry for over 10 years. He has been an ISA Certified Arborist for 10 years and is Tree Risk Assessment Qualified. He holds a Bachelor of Science from the University of Oregon, with a Major in Environmental Science, and a double-minor in Geography and Biology. He recently completed a GIS Certification Program through Elmhurst College and is also a member of the US Forest Service's Urban Forest Strike Team. He is also the Vice President of the Illinois Arborist Association, where chairs the Advanced Training program for the IAA, and frequently teaches courses. Steve has worked performing tree surveys, consulting forestry, plant health care, traditional tree care, GIS mapping, wetland delineation, and ecological restoration in his career. His multifaceted experience in arboriculture, GIS, ecology, and engineering, brings a holistic perspective to Urban Forestry that fits in with many other disciplines. Professional Associations: International Society of Arboriculture, Illinois Arborist Association, Illinois GIS Association, Illinois Parks and Recreation Association.

LESLIE DELLES

Leslie is a full-time staff member, consulting arborist, and our tree inventory data collection Field Supervisor. She has been in the environmental and tree care industry for over 15 years, and is an ISA Certified Arborist and is Tree Risk Assessment Qualified. She holds a Bachelor's Degree in Earth Science from Northeastern Illinois University, and was previously employed for over 10 years by the US Department of Agriculture's APHIS (Animal and Plant Health Inspection Service), where her extensive experience dates back to surveying Asian Longhorned Beetle throughout Illinois. She has also worked on APHIS's monitoring and control of Gypsy Moth and Emerald Ash Borer, among other insect pests. Leslie has been working performing tree inventories and tree mapping for several years, and has a unique approach to arboriculture, having worked in the public sector for a long time as an insect and survey specialist with APHIS. Professional Associations: International Society of Arboriculture, Illinois Arborists Association.

ZAC KING

Zac is a full-time staff member, consulting arborist, tree inventory data collector, and also manages Graf Tree Care's plant health care division. He has been an ISA Certified Arborist for over 10 years, is Tree Risk Assessment Qualified, and has attained the ISA Board Certified Master Arborist (BCMA) credential, the highest level of certification offered by ISA. He holds a Bachelor of Science in Integrated Biology from Northern Illinois University. Zac has been performing tree surveys and been a plant health care specialist in the private sector for over 10 years, as well having spearheaded a GIS mapping program with another tree care firm several years ago. His in-depth knowledge of pests and pathogens and general tree care provides a specialized knowledge base, and he can rapidly diagnose tree ailments as well as provide detailed remediation methods and techniques. As a pathologist with a solid background in traditional tree care and tree surveys, he brings a much-needed skill to the table when it comes to Urban Forestry. Professional Associations: International Society of Arboriculture, Illinois Arborists Association.

JIM SEMELKA

Jim brings 40 years of private sector and municipal urban forest management experience to Graf Tree Care. He has a Bachelor's Degree in Forest Resource Management from Southern Illinois University. Jim has been an ISA Certified Arborist for over 25 years, is Tree Risk Assessment Qualified, and has been an ISA Municipal Specialist since the qualification was introduced. He served as the Village Forester for the Village of La Grange, and as the Urban Forestry Superintendent with the Village of Oak Park before leaving municipal work for the private sector. Jim's municipal management experience includes establishing complete tree inventories, creating long term, contract-driven pruning cycles, forming Dutch Elm Disease and Emerald Ash Borer management programs, municipal tree planting programs, and serving as Staff Liaison to Forestry Commissions and other Municipal Boards. He was President of the Suburban Tree Consortium and has been active in the Illinois Arborist Association for many years, serving as Municipal Chair, Program Committee Chair, and is currently the President of the IAA. Jim received an IAA Special Recognition Award in 2013 for his work in clarifying the role of Prevailing Wage rates as they apply to municipal pruning and removal contracts, and teaches Advanced Training Courses for the IAA.

Professional Associations: International Society of Arboriculture, Illinois Arborist Association, Society of Municipal Arborists.

SAMPLE PROJECT EXPERIENCE

Client	Services Performed	Contact Name	Contact Email	Phone Number
City of Wheaton	Tree Inventory, Tree Risk Assessment, Reforestation Planning, Public Outreach, Preparing Bid Specifications, General Consulting, GIS	Kevin Maloney	kmaloney@wheaton.il.us	630-260-2122
City of St. Charles	Urban Forestry Management Plan, Tree Inventory, Reforestation Planning, Code Enforcement, Permit Review, Preparing Bid Specifications, General Consulting, Public Outreach, Education	Jeremy Craft	jcraft@stcharlesil.gov	630-377-4420
City of Batavia	Tree Inventory, General Consulting, GIS	Scott Haines	shaines@cityofbatavia.net	630-454-2400
Village of Roselle	Tree Inventory, EAB Management Plan, Reforestation Planning, Public Outreach, Permit Review, Preparing Bid Specifications, General Consulting, GIS	Mike Schulz	mschulz@roselle.il.us	630-671-2368
Village of Oak Park	Tree Inventory, Reforestation Planning, General Consulting, GIS	Rob Sproule	rsproule@oak-park.us	708-358-5740

BASIC INVENTORY SERVICES

BASE MAP SETUP

Using GIS base data and REST services provided by the City and/or County, a base map and layering system shall be set up in our ArcGIS Online account for field data collection. The base map will display the following information:

- Aerial Photography
- Corporate Limits
- Streets/Street names
- Parcel lines
- Right of way limits
- Building footprints/additional layers when available

BASE INVENTORY DATA COLLECTION

Data in the field will be collected using mobile devices which have been connected via bluetooth to a submeter accuracy GPS antenna. Data collection will be performed in real time using the Collector for ArcGIS mobile application to access the feature services directly. Data to be collected will include:

- GPS location (along with Illinois State-Plane XY coordinates and/or WGS 84 coordinates).
- Location/Relative Location (Zone (geographical area of the City), street name and address, tree site number, block side, and relative location of tree at address)
- Species (common name, as well as genus and species in scientific name)
- Size (DBH in diameter inches to the nearest inch)
- Tree height and canopy spread in feet
- Condition rating, 1-5 (see description below)
- Maintenance Need / Recommendation – Removal, Priority Prune, Routine Prune, and others per client
- Utilities – Identification of utility type (electric, telephone, cable, etc.) when present
- Potential Planting Sites – Small, Medium, and Large depending on available growing space of 40'–50' between trees, 20' from lights, 75' from street intersections, and the presence of overhead wires.
- Identification of tree defects such as rot, deadwood, etc
- Any relevant comments pertinent to the tree
- Additional data fields available upon request

DATA COLLECTION FIELDS / PARAMETERS

GPS LOCATION

The GPS data collectors we use are Samsung tablets, referencing an ArcGIS Online Feature Service, using the Collector for ArcGIS Application. These tablets are Bluetooth linked to submeter GPS / GNSS receivers which use both the US satellite constellation as well as the GLONASS constellation. Coordinates will be delivered in Illinois State Plane East Coordinates, and can also be delivered in WGS 84, or any other desired system. Locations are checked for multipath (locational) errors at the end of every week and month to maintain accuracy.

ADDRESS

The address is taken as the numerical address at which a tree is located, based on the listed street address of the GIS parcel data we have available to us. If no numerical address is listed for the property the tree is located at, a designation can be made (such as '99999' or 'x') based on whatever standard is already being utilized by the City GIS professional(s).

STREET ADDRESS

The street name will conform to the names as determined by City GIS professionals. This may be based on street signage, or a prepopulated list of street name spellings from the city or county GIS data. The street name shall also be for the address at which the parcel is listed, regardless of how the house is oriented (if on a corner lot). As a courtesy to the Village, Graf Tree Care will attempt to notify City GIS professionals when such mismatches are identified.

RELATIVE LOCATION

All trees are listed by zone, address, street name, and the following site prefixes:
F – Front of the property
R – Right side of the property
L – Left side of the property
B - In the back of the property
M – If the tree was located in a planted median in between opposing lane of traffic

The order of trees at a parcel with multiple trees will be with the flow of traffic, or front to back, as one is looking at the parcel. This holds true for any 1-way streets as well, in order to maintain convention. The front of the parcel is defined by the side of the home the street address is on, not necessarily the side which the front door faces. This can be adjusted base don the wishes of the City.

SPECIES

All tree species are recorded using common names, and are identified to the species level. Specific cultivars, hybrids, or varieties will not be identified unless there is a programmatic need to do so. This is mostly due to the fact that certain genera such as Apple trees, Hybrid Elms, and other ornamentals have such great variation that it is unnecessarily time consuming to identify down to this level. The deliverable database will have an open field for entering known cultivars.

SIZE

DBH (Diameter at Breast Height) is a standard forestry measure of diameter, defined as the diameter of the tree, measured at 4.5 feet above the ground surface on the uphill side of the tree. Measurements are made using a foresters DBH tape. This device has diameter adjusted inches on it (each "inch" on the tape measures 3.141 inches). This method of measurement provides the most accurate reading of tree diameter, which can be highly variable depending on the dimension in which it is linearly measured.

CONDITION

Condition ratings are based on a normal standard distribution. Much like in academic circles, we expect the greatest number of trees in the average category (3), fewer trees in the good and poor categories (2 and 4, respectively), and the fewest number of trees in the excellent and very poor categories (1 and 5, respectively). Condition is a summary number that takes into account all of our other analysis of the tree, and presents it as one overall figure.

Condition 1	**Excellent** – Tree has no observable defects, wounds, diseases, and has textbook perfect form for the species. In addition, since young trees have a tendency to be trouble free, a condition 1 tree must by definition be greater than 16" DBH. These are legacy trees, and as such are rare.
Condition 2	**Good** – Tree may have a small amount of deadwood, or a very limited number of nonthreatening defects. The overall form of the tree must be good, and consistent for the species in question. These trees should also generally be larger than 8" DBH for the reason listed above, but infrequent exceptions are made. Often the difference between condition 2 and 3 is form or growth habit.
Condition 3	**Average** – Tree has moderate amounts if deadwood, wounds, or other deficiencies, but is generally healthy. A wide variety of form is acceptable for this group, which is meant to define the middle ground around which better or worse trees can be defined and identified.
Condition 4	**Poor** – Tree has defects, deadwood, wounds, disease, etc. that pose imminent danger, therefor causing a need for removal. Very poor form or architecture can put an otherwise healthy tree in this category as well, though generally it is reserved for health defects.
Condition 5	**Very Poor** – Tree must be removed. Physical or Health defects have progressed to a point that the tree cannot be reasonably saved. Like condition 1 trees, these are relatively rare, as generally trees that have advanced to this level are removed prior to inventory.

MAINTENANCE RECOMMENDATION

Maintenance recommendations are provided to assist in managing the tree population. They are very general guidelines for pruning and care. Trees which are observed in the field as being imminently hazardous shall be reported immediately to City officials.

Routine Prune	Tree is in good health, and will require standard pruning or maintenance on a standard cycle.
Priority Prune	Tree has not been properly pruned during its developmental years, has suffered damage, are typically overgrown, and in need of pruning sooner than a 3-5-year standard cycle.
Remove	Tree must be removed. This is only utilized if removal is truly the only reasonable option. For trees that are on the borderline, the phrase "consider removal" will appear in the comments field.
Priority Remove	Tree must be removed in an expeditious manner due to defects, insects, or disease
Monitor	Tree must be monitored for further change or decline

Forestry or Pubic Works staff will be notified immediately with a phone call upon discovery of trees observed to present an imminent hazard requiring removal as soon as possible. Additional maintenance categories can be added by the discretion of Geneva staff prior to the beginning of data collection.

UTILITIES

The presence of overhead wires will be collected in the field at every tree location, and entered into the data per the City's specification of electric, cable, telephone, etc. when present.

POTENTIAL PLANTING SITES

Data will be collected on open Potential Planting Sites per the City's specification of Small, Medium, and large depending on specified distances between trees, lights, intersections, and the presence of overhead wires.

COMMENTS

Comments were included as a courtesy to denote any conditions worthy of note, such as included bark, interference with utilities or street lamps, need for sidewalk or street clearance, limited growth space, poor form, or any other information that may be valuable. These comments are standardized as much as possible, though certain situations exist where nonstandard comments were utilized.

ADDITIONAL DATA FIELDS

Additional data fields are available upon request. All of our data collection is completely customizable.

DATA QUALITY ASSURANCE / QUALITY CONTROL

All field-collected data from the inventory will be checked for geographic and tabular accuracy at the end of each week. All data fields in the tabular data will be queried in GIS for any null fields or inaccuracies, and will have individual records verified or corrected where discrepancies are noted. All spatial point locations will be verified using a combination of aerial photography and spatial query. If there are point locations which were subject to multipath errors (i.e. points which did not show up on the map where they were supposed to be) their locations will be corrected using aerial orthoimagery and the tabular data we collected for those points. Our GPS receivers are capable of recording data at sub-meter accuracy, and as such, we very rarely locate points whose true locations are off by more than a foot or so, but we have recourse to correct them quickly when found. Quality assurance is performed at the end of every week of data collection by our staff in order to correct any issues promptly.

SOFTWARE AND TRAINING

Data will be collected in a GIS database, customized to the exact needs of the City of Geneva. Upon completion of the inventory and completion of Quality Assurance and Quality Control, the data will be made available to the City through the City's existing GIS infrastructure. We have successfully implemented many systems such as this in the past. We make use of ESRI's ArcGIS suite of products, specifically Web Maps, Web Mapping Applications, and the Collector for ArcGIS mobile application for data management. The main interface, as shown below, will be a web based application where trees can be added, removed, edited, and work order history can be maintained. Our simple system uses a map based approach to work orders, and related tables can show what work has been completed in the past when each tree point on the map is accessed.

Trees can be sorted and filtered for attributes, and individual trees, groups of trees, or groups of maintenance records can be easily selected and exported to a spreadsheet for use by outside contractors. Multiple trees can be selected and edited at the same time as well, so that updates can be performed quickly and expediently. All of this is easily customizable to the specific needs of Geneva by Graf staff, or Geneva's in-house GIS staff.

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For an overview of the population, as well as real-time charts and statistics, an operations dashboard shall be created such as the one shown below. This can also be customized to show whatever information Geneva staff wish to see by either Graf staff, or in-house Geneva staff. Examples of data which can be shown include number if trees and planting spaces, charts and infographics on species diversity and condition, as well as number of open work orders

Finally, data can be accessed by field crews for instant editing and updating using the Collector for ArcGIS Application, shown the right. New maintenance records can be added, old maintenance records can be viewed, and the main tree records can be added, removed, or updated as necessary.

All of this comes at no additional cost to the City of Geneva, because it already maintains GIS software for its various other departments, and therefore has the infrastructure it needs. There are no additional software or licensing fees to be paid annually, and as time goes on, the software itself will constantly be upgraded by the manufacturer. Graf GIS staff will assist in creating these maps, apps, and dashboards as part of the bulk inventory pricing, and will always be available to assist the City in maintaining or updating its applications.

CONTINUING SUPPORT

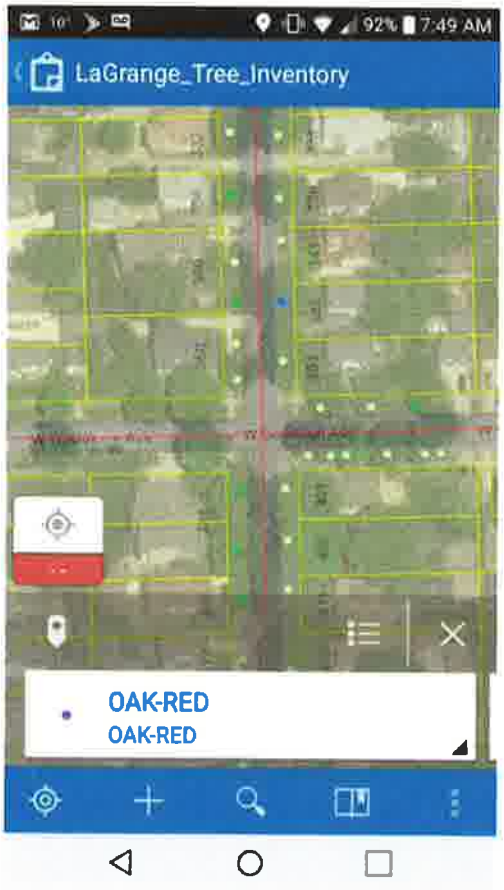
Because Geneva already has a maintenance agreement with ESRI (the GIS software manufacturer), we have no specific support or maintenance items which aren't covered under the ESRI license agreement. However, we do find that from time to time improvements may be made to the functionality of the software that may benefit our clients forestry programs. We stay abreast of these developments, and are happy to update City staff as these innovations are discovered. Finally, ESRI's ArcGIS suite of products is very flexible compared to tree inventory specific software, and we can always add, remove, or update data fields as necessary without needing to incur extra cost. We pride ourselves in supporting our client's forestry programs far beyond the boundaries of the initial inventory work as needed.

URBAN FORESTRY MANAGEMENT PLAN (UFMP)

Based on a complete analysis of the data collected for the Tree Inventory, Graf Tree Care will develop a comprehensive Urban Forestry Management Plan (UFMP) specifically designed to meet the Urban Forestry Management needs of the City of Geneva. Graf Tree Care does not utilize a one-size-fits-all approach when developing Management Plans, but rather works closely with the municipality to ensure that all specified objectives are met without including superfluous information or programs. Graf is very experienced in community outreach and public education programs that enhance management plan development, and accustomed to incorporating public and community input into plan formulation. The UFMP for the City of Geneva will include the following:

- A summary and analysis of the current tree population and species diversity of Geneva's Urban Forest
- Methodology describing how trees were collected and tree data was summarized
- Recommendations for current and ongoing maintenance requirements, planting opportunities, work scheduling, and tree ordinance review
- Forecast of future tree pruning, removals, maintenance, and plantings
- Creation of draft bid specifications for forestry activities such as pruning, removals, maintenance, etc
- Review of existing standards and practices for the City to follow, updating of those standards, and explanations of those standards for residents
- Tree planting recommendations in terms of species to be planted, and planting site analysis
- Establishment of short, medium, and long-term goals and milestones for the forestry program

- Short, medium and long-term cost projections for forestry initiatives based on market pricing and increases in Consumer Price Index
- Urban Tree Canopy Analysis of existing tree canopy, as well as goals for increasing tree canopy in Geneva
- Tree Risk Management Policy creation
- Standards for managing trees during construction
- Review existing tree and landscaping ordinances, assist on editing or drafting new supporting ordinances
- Innovative, tailored forestry programs as dictated by outreach to city staff and residents
- Definitions, glossary, and normative references
- Other information as specified by the City of Geneva



TIMELINE

January 2018	Order to proceed is given, consult with City staff on specific data collection parameters
Feb 2018-April 2018	Complete field portion of tree inventory
April 2018	Prepare Urban Forestry Management Plan / Integrate GIS data / Train staff
April 30th 2018	Submit final Urban Forestry Management Plan for board approval / final invoicing

DELIVERABLES

a. Web application, web map, Collector for ArcGIS application, and operations dashboard of tree data, implemented at Geneva GIS department
b. Training for staff on use of the inventory9
c. Geodatabase copy of all tree data as backup
d. Urban Forestry Management Plan (hardcopy and digital formats)
e. All Tabular data (Hardcopy, Microsoft Excel, and PDF digital)
f. 3D Rendering of the tree population for use in ArcGIS Pro
g. A backup CD and Flash Drive (jump drive) containing digital copies of all the above.

FEE SCHEDULE

Street Tree Inventory – Data collection, Training, and Deliverables	**$41,195.00**
Urban Forestry Management Plan	**$6,775.00**
Alternate Add – Tree Management Software (No Cost-See above)	***$0.00***
TOTAL	**$47,970**

- All items listed are "Not To Exceed" figures. No change orders or additional billing will be submitted

GRAF TREE CARE will consider your signing and returning one (1) original of this Agreement and an agreed upon General Terms and Conditions as our authorization to proceed. This offer to provide services will remain valid for a period of 30 days from the date of preparation by Graf Tree Care (as indicated below), after which time if it has not been accepted it will be subject to change. Thank you again for the opportunity to submit our proposal.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year below written.

CLIENT:	**CONSULTANT:**
CITY OF GENEVA	GRAF TREE CARE, INC.
BY: _____	BY: Philip M. Graf
TITLE: _____	TITLE: President
DATE: _____	DATE: January 26, 2018

RESOLUTION NO. 2018-08

RESOLUTION AUTHORIZING EXECUTION OF
[2018 Parkway Tree Inventory to Graf Tree Care Inc.]

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, the awarding of a contract to Graf Tree Care Inc, relating to the City of Geneva 2018 Parkway Tree Inventory

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this 20th day of February, 2018

AYES: __ NAYS: __ ABSENT: __ ABSTAINING: __ HOLDING OFFICE: __

Approved by me this ____ day of _____, 2018.

_____
Mayor

ATTEST:

_____
City Clerk

COPY

INDEPENDENT CONTRACTOR AGREEMENT
BY AND BETWEEN CITY OF GENEVA AND GRAFF TREE CARE

This Independent Contractor Agreement (Agreement) is between City of Geneva, an Illinois municipal corporation (hereinafter referred to as "Geneva" or "City of Geneva") and Graff Tree Care (hereinafter referred to as "Graff Tree Care" or "Contractor"). In consideration for the mutual promises set forth below, the parties agree as follows:

1. **Business**. The Graff Tree Care is engaged in the independent business and occupation as a landscape contractor Graff Tree Care represents that he is knowledgeable and skilled in the following:

2. **Services**. The Contractor agrees to provide the following services under this Agreement during the Contract Term, which shall commence on February 26, 2018 and terminate on April 30, 208: Parkway Tree Inventory.

3. **Independent Contractor**. The Contractor acknowledges and agrees that the contractor is an independent contractor and not an agent or employee of the City of Geneva. The City of Geneva has sole discretion to determine when, contractor will perform services as well as the methods and techniques which will best accomplish the services to be provided under this Agreement. However, the contractor warrants that such methods and techniques will be in accordance with ethical and reputable business practices and that the contractor has the requisite expertise, ability, and skill to render the service required by this Agreement.

4. **Conflicts**. Nothing in this Agreement is intended to preclude the contractor from performing services for other entities and individuals. However, the contractor agrees not to engage in any activity that conflicts with the Geneva's business interests or interferes with the independent exercise of the City of Geneva's judgment in the best interests of the City of Geneva.

5. **Compensation.**

a. For the services to be rendered under Paragraph 2 above, Geneva will pay the Contractor the sum $47, 970.00

b. Contractor will submit his request for payment to Geneva at the end of each month.

6. **Taxes.** Neither federal, state, nor local payroll taxes of any kind or state disability insurance will be paid or withheld on behalf of the contractor. The contractor will not be treated as an employee with respect to the services performed under this Agreement for federal or state tax purposes. The contractor understands that if it is not a corporation, he may be liable for self-employment (social security) tax to be paid as required by law.

7. **Benefits**. Because the contractor is engaged in his own independently established business, the contractor is not eligible for, and shall not participate in, any employee fringe benefit plan provided by the City of Geneva to its employees, including but not limited to sick pay, vacation pay, group medical and dental coverage, pension, and profit-sharing. No workers' compensation insurance will be provided by the Geneva for the contractor or any of its employees. The contractor agrees to obtain workers' compensation insurance for all of his employees and to provide the City of Geneva with a certificate of workers' compensation insurance coverage, as permitted by applicable law.

8. **Agency.** The contractor has no authority to bind the City of Geneva, to enter into any contracts or agreements on behalf of the City of Geneva, or to represent that it has the authority to do so. This Agreement does not create a partnership, joint venture, or loaned servant arrangement between the parties.

9. **Indemnification**. The City of Geneva shall not be responsible for any action or failure to act by the contractor. The contractor agrees to indemnify and hold harmless the City of Geneva, its officers, directors, employees, agents, assigns, and successors against any claims, demands, or liability related to or arising out of the contractor's breach of any representation in this Agreement, failure to properly perform any obligations under this Agreement, and for any violations of law.

10. **City of Geneva Property.** Upon termination of the contractor's relationship with the City of Geneva, the contractor agrees to return all Geneva equipment to the City of Geneva.

11. **Statements.** The contractor agrees to refrain from making any public or private statement about the City of Geneva or its officers, Members or employees that would be injurious to the City of Geneva's business or reputation or which would, directly or indirectly, interfere with the business of the City of Geneva.

12. **Termination.** Either party may terminate this Agreement upon 60 days' written notice to the other.

13. **Successors.** This Agreement shall be binding on and run to the benefit of the parties and their heirs, successors, and assigns.

14. **Applicable Law.** This Agreement shall be governed by and interpreted under Illinois law.

15. **Severability.** If any provision of this Agreement is held to be invalid or unenforceable, that provision shall be severable, and the remaining provisions of this Agreement will be fully enforceable.

16. **Nonwaiver.** The failure of either party at any time to require the performance by the other party of any provision of this Agreement shall in no way affect that party's right to subsequently enforce that provision.

17. **Survival.** The provisions of paragraph 11 of this Agreement shall survive the termination of the business relationship between the parties.

18. **Entire Agreement.** This Agreement embodies the entire agreement between the parties with respect to its subject matter, and it supersedes all prior agreements, whether written or oral. No amendment of this Agreement shall be effective unless in writing and signed by both parties.

CONTRACTOR:

By: _____

Date: 2/26/18

CITY OF GENEVA:

By: _____
City Administrator

Date: 02/26/2018