



# **City of Kirkland**

## **Request for Proposals**

### **2023 Public Tree Inventory Project**

**Job # 08-23-PB**

**Issue Date: March 31, 2023**

**Due Date: ~~April 21~~ April 28, 2023 – 4:00 p.m.  
(Pacific Time)**

## REQUEST FOR PROPOSALS

Notice is hereby given that proposals will be received by the City of Kirkland, Washington (City), for:

### **2023 Right of Way Tree Inventory Project Job # 08-23-PB**

File with Purchasing Agent, Finance Department, 123 - 5<sup>th</sup> Ave, Kirkland WA, 98033

Proposals received later than **4:00 p.m. PDT ~~April 24~~, April 28, 2023 will not be considered.**

A copy of this Request for Proposal (RFP) may be obtained from City's web site at <http://www.kirklandwa.gov/> . Click on the Business tab at the top of the page and then click on the Request for Proposals link found under "Doing Business with the City".

The City of Kirkland reserves the right to reject any and all proposals, and to waive irregularities and informalities in the submittal and evaluation process. This RFP does not obligate the City to pay any costs incurred by respondents in the preparation and submission of a proposal. Furthermore, the RFP does not obligate the City to accept or contract for any expressed or implied services.

A Service Provider response that indicates that any of the requested information in this RFP will only be provided if and when the Service Provider is selected as the apparently successful Service Provider is not acceptable, and, at the City's sole discretion, may disqualify the proposal from consideration.

The City of Kirkland assures that no person shall, on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. The City of Kirkland further assures that every effort will be made to ensure non-discrimination in all of its programs and activities, whether those programs are federally funded or not.

In addition to nondiscrimination compliance requirements, the Service Provider(s) ultimately awarded a contract shall comply with federal, state and local laws, statutes and ordinances relative to the execution of the work. This requirement includes, but is not limited to, protection of public and employee safety and health; environmental protection; waste reduction and recycling; the protection of natural resources; permits; fees; taxes; and similar subjects.

**Dated this 31<sup>st</sup> Day of March, 2023.**

Jay Gewin  
Purchasing Agent  
425-587-3123

**Published in the Daily Journal of Commerce – March 31<sup>st</sup> and April 7<sup>th</sup> of 2023**

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## **BACKGROUND INFORMATION**

The City of Kirkland is located on the eastern shore of Lake Washington. It is a suburban city, surrounded by other suburban cities and pockets of unincorporated King County, but is experiencing significant amounts of housing and employment growth, and redevelopment. The City is near several major transportation routes including Interstate 405, State Route 520, and Interstate 5. These routes connect the City economically and socially to the greater Seattle area.

At the time of incorporation in 1905, the City of Kirkland's population was approximately 530. The current estimated population is 93,570. Kirkland is the thirteenth largest city in the State of Washington and the sixth largest in King County.

Since its incorporation, Kirkland has grown in geographic size to eighteen square miles approximately twenty times its original size. This growth occurred primarily through the consolidation of the cities of Houghton and Kirkland in 1968, the annexations of Rose Hill and Juanita in 1988 and the annexation of North Juanita, Finn Hill, and Kingsgate areas in 2011.

Kirkland operates under a Council Manager form of government. The City Council is the policy making branch of Kirkland's government and consists of seven members elected at large to staggered, four year terms. The Mayor is elected from within the Council. The City Council is supported by several advisory boards and commissions and the City Manager. The City Manager is appointed by the City Council and serves as the professional administrator of the organization, coordinating its day to day activities.

## **SCOPE OF WORK**

The City of Kirkland invites requests for proposals from qualified firms who wish to conduct the public tree inventory, in accordance with ***Attachment A, Scope of Work***.

## **BUDGET AND LENGTH OF CONTRACT**

The total budget for this project is not to exceed \$200,000.

The City anticipates the project to be under contract by May 31, 2023 and completion of the data collection by October 31, 2023 with final deliverables available to the City by November 30, 2023. The City of Kirkland anticipates that all field mapping will be done prior to leaf drop in the 2023 season.

## **CONTRACT REQUIREMENTS AND FEES**

If your proposal is accepted, the following fees and requirements will be due upon award, prior to issuance of a contract.

### **1. Compliance with Law/City of Kirkland Business License**

- Contractor must obtain and provide a copy of a City of Kirkland Business License and otherwise comply with Kirkland Municipal Code Chapter 7.02.

- The Contractor shall comply with all applicable State, Federal and City laws, ordinances, regulations, and codes.

## 2. Insurance

- Contractor's insurance should be consistent with the requirements found in the sample agreement shown as "Attachment B".

## CONSULTANT MINIMUM QUALIFICATIONS

1. Contractor should be actively in business and have performed Tree Inventory Data Collection Services within the last three (3) years on projects of similar size.
2. All data collection shall be completed by arborists certified by the International Society of Arboriculture (ISA). Copies of each employee's Credentials are due at the time of the proposal for evaluations.

## SUBMITTAL REQUIREMENTS

The following format and content shall be adhered to by each firm and presented in the following order:

### **A. Executive Summary**

An executive summary letter should include the key elements of the respondent's proposal and an overview of the Consultant team. Indicate the address and telephone number of the office from which the project will be managed.

### **B. Approach**

1. **Technical Proposal/Work Plan:** This section should clearly describe the methodologies planned to accomplish this project and complete each task. Indicate all key deliverables and their contents. Explain your approach to meeting the technical requirements described above in the Scope of Work, including:
  - Proposed field mapping methodology
  - Staff/equipment resource logistics and management
  - Overall project timeline and interim data deliverables
  - Data quality control plan
  - Communication plan
  - **Integration with 2017/2018 data. See Attachment A – Technical Requirements**
2. **Project Management and Staffing:** Describe the approach and methods for managing the project. Provide an organization chart showing all proposed team members. Describe the responsibilities of each person on the project team. Identify the Project Director and/or Manager, and backup or deputy staff, and the key contact person for the City.
3. **Qualifications:** List committed project staff for all primary tasks, describing each individual as follows:

- Education and experience, including total career years, as well as years at present (proposer's or subcontractor's) employment
  - ISA Certified Arborist number (required) and duration. It is preferred that personnel collecting data in the field are Tree Risk Assessment Qualified (TRAQ)
  - Project role/responsibility
  - Resumes of the project manager, each task manager and key team members
  - If applicable, list the portion of the work to be subcontracted and information describing the qualifications and relative experience of any proposed subcontractors
4. **Project Schedule:** Provide a schedule for completing each task in the Scope of Work, including deadlines for preparing project deliverables. Demonstrate your team's ability to perform the work requested within an established budget and schedule.
  5. **Cost:** Provide a detailed estimate of cost and billing rationale by task and within the allocated budget. **In addition to costs of individual tasks, the proposer shall list individual costs by project Phase as described in Attachment A Scope of Work.**

### **C. Related Experience**

Provide three references for similar tree inventory projects conducted in the Pacific Northwest in the last ten years, as follows:

- Project name and brief descriptions (venue, metrics, timeline, budget, completion date)
- Client organization
- Client reference (current information): name, title, address, telephone number, email

The City reserves the right to contact any organizations or individuals listed. Please provide references that speak to the qualifications of the proposed project manager.

### **D. Statement of Experience**

The Consultant is required to provide evidence of experience in managing similar projects, including working with public agencies. The experience listed must be that which was performed by the Consultant's staff and/or team's staff that will be assigned to this project. The City will be focusing on the experience of the Lead Consultant/Project Manager(s) who will be assigned to this project.

## **PROPOSAL SUBMITTAL INSTRUCTIONS**

Please note: The following general requirements are mandatory for all proposals. Proposals submitted after the deadline date and time or lacking on or more of the following requirements will not be accepted.

1. **Proposals must be submitted by email and be received no later than 4:00 p.m., April 21, April 28, 2023 (Pacific Time).**
2. Emailed proposals should include the title "2023 Public Tree Inventory Project – Job # 08 23 PB" in the subject line and be addressed to [purchasing@kirklandwa.gov](mailto:purchasing@kirklandwa.gov).
3. All proposal sent electronically must in the form of a PDF or MS Word document and cannot exceed 20 MB.

4. All proposals must include the legal name of the organization, firm, individual or partnership submitting the RFP. Include the address of the principal place of business, phone numbers, emails, and primary contact person.
5. To be evaluated, a proposal must address all requirements and instructions contained within.
6. Provide all references and materials required by the RFP instructions within.

## QUESTIONS

Upon release of this RFP, all Vendor communications concerning the RFP should be directed to the City's RFP Coordinator listed below via email. Unauthorized contact regarding this RFP with any other City employees may result in disqualification. Any oral communications will be considered unofficial and non binding on the City. Service Providers should rely only on written statements issued by the RFP Coordinator. The City RFP Coordinator for this project is:

Name: Katie Hogan, Environmental Program Coordinator  
Address: 123 5<sup>th</sup> Ave, Kirkland City Hall  
E mail: [khogan@kirklandwa.gov](mailto:khogan@kirklandwa.gov)  
Phone: 425 587 3289

Questions regarding the RFP process are to be addressed to Jay Gewin, Purchasing Agent, at [purchasing@kirklandwa.gov](mailto:purchasing@kirklandwa.gov) or (425) 587 3123.

## SUBMITTAL DEADLINES

The Department's schedule for review of the RFP submittals and final selection of the Contractor is tentatively as follows:

Action	Date
RFP Distributed	March 31, 2023
Questions Due	April 7, 2023
Questions Answered	April 11, 2023
<b>Proposals Due</b>	<b><del>April 21</del> April 28, 2023 – 4:00 p.m. (PDT)</b>
Proposals Scored	May 5, 2023
Interviews	TBD
Contract Awarded	May 31, 2023
Notice to Proceed/Kickoff Meeting	June 7, 2023
Data Collection Ends	October 31, 2023
Project Closeout/Deliverables Due	November 30, 2023

## SELECTION CRITERIA & PROCESS

A selection committee will review all proposals, select finalists and conduct interviews prior to making the final selection of the consultant.

The City will make a selection based on the evaluation of the written proposals. The City may also conduct an interview process with scoring used to determine the selected proposer. The City reserves the right to make a selection based only on the evaluation of the written proposals. Written proposals and interviews will be evaluated based on the following criteria and points:

<u>Proposal Section</u>	<u>Points</u>
Statement of understanding	10
Company background and prior experience	20
Expertise of assigned personnel	20
Scope of work approach	30
<u>Fees and schedule</u>	<u>20</u>
<b>Total</b>	<b>100</b>

## **CONTRACT**

The Consultant and the City will execute a standard City of Kirkland *Professional Services Agreement (Attachment B)*.

The contract shall consist of the following documents: The Request for Proposals (RFP), the accepted proposal, a Professional Services Agreement (see Attachment B), and any agreed upon written changes to any of the foregoing documents. The contract documents are complimentary and what is called for in any one document shall be binding as if called for by all.

## **TERMS AND CONDITIONS**

- A. The City reserves the right to reject any and all proposals, and to waive minor irregularities in any proposal.
- B. Proposers responding to this RFP must follow the procedures and requirements stated in the RFP document. Adherence to the procedures and requirements of this RFP will ensure a fair and objective analysis of your proposal. Failure to comply with or complete any part of this RFP may result in rejection of your proposal.
- C. The City reserves the right to request clarification of information submitted, and to request additional information on any proposal.
- D. The City reserves the right to award any contract to the next most qualified agency, if the successful agency does not execute a contract within 30 days of being notified of selection.
- E. Any proposal may be withdrawn up until the date and time set above for opening of the proposals. Any proposal not so timely withdrawn shall constitute an irrevocable offer, for a period of one hundred and twenty (120) days to sell to the City the services described in the



attached specifications, or until one or more of the proposals have been approved by the City administration, whichever occurs first.

- F. The contract resulting from acceptance of a proposal by the City shall be in a form supplied or approved by the City and shall reflect the specifications in this RFP. A copy of the City's standard Professional Services Agreement is available for review (see Attachment B). The City reserves the right to reject any proposed agreement or contract that does not conform to the specifications contained in this RFP and which is not approved by the City Attorney's office.
- G. The City shall not be responsible for any costs incurred by the agency in preparing, submitting or presenting its response to the RFP.
- H. Any material submitted by a proposer shall become the property of the City. Materials submitted after a contract is signed will be subject to the ownership provision of the executed contract.
- I. The firm and all applicable personnel must be legally qualified in the State of Washington (i.e. be appropriately licensed or certified) to practice the work proposed to be performed.
- J. The City reserves the right not to award any portion or all of the project if it finds that none of the proposals submitted meets the specific needs of the project. The City reserves the right to modify the scope of work and award portions of this RFP to the selected vendor. The City reserves the right to award this work to multiple vendors if the scope of work would be best completed by multiple vendors and their associated experience.

## **COOPERATIVE PURCHASING**

Chapter 39.34 RCW allows cooperative purchasing between public agencies in the State of Washington. Public agencies which have filed an Intergovernmental Cooperative Purchasing Agreement with the City may purchase from City contracts, provided that the consultant agrees to participate. The City does not accept any responsibility for contracts issued by other public agencies, however.

## **PUBLIC DISCLOSURE**

Once submitted to the City, proposals shall become the property of the City, and all proposals shall be deemed a public record as defined in "The Public Records Act," chapter 42 section 56 of the RCW. Any proposal containing language which copyrights the proposal, declares the entire proposal to be confidential, declares that the document is the exclusive property of the proposer, or is any way contrary to state public disclosure laws or this RFP, could be removed from consideration. The City will not accept the liability of determining what the proposer considers proprietary or not. Therefore, any information in the proposal that the proposer claims as proprietary and exempt from disclosure under the provisions of RCW 42.56.270 must be clearly designated as described in the "Proprietary Material Submitted" section above. It must also include the exemption(s) from disclosure upon which the

proposer is making the claim, and the page it is found on must be identified. With the exception of lists of prospective proposers, the City will not disclose RFP proposals until a bid selection is made. At that time, all information about the competitive procurement will be available with the exception of: proprietary/confidential portion(s) of the proposal(s), until the proposer has an adequate opportunity to seek a court order preventing disclosure. The City will consider a proposer's request for exemption from disclosure; however, the City will make a decision predicated upon RCW 42.56.

### **DBE PARTICIPATION**

The City encourages DBE firms to submit qualifications and encourages all firms to team with DBE firms in their pursuit of this project.

### **FEDERAL DEBARMENT**

The Bidder shall not currently be debarred or suspended by the Federal government. The Bidder shall not be listed as having an "active exclusion" on the U.S. government's "System for Award Management" database ( [www.sam.gov](http://www.sam.gov) ).

## ATTACHMENT A

### City of Kirkland 2023 Public Tree Inventory Project Scope of Work

#### PROJECT DESCRIPTION

With this Request For Proposals (RFP), the City of Kirkland, Washington, is soliciting responses from qualified firms to conduct a new limited tree inventory of public trees in 2023. The purpose of this inventory is to identify the health, condition, and maintenance needs of existing trees located on public property and to identify potential planting sites in areas with low canopy cover. Results of the tree inventory will be used to set objectives for tree planting to increase the diversity and overall health of the urban forest; address potential hazards; and prepare work plans and budgets for removal, planting, and pruning.

The budget ceiling for the work covered by this RFP is not to exceed \$200,000. The expected start date for this Project is as soon as possible upon execution of the contract with final deliverables provided to the City no later than November 30, 2023.

The selected Consultant or consultant team is expected to provide labor, transportation, materials, equipment, expenses, and technical expertise to perform this project using best industry practices, such as those promoted by the International Society of Arboriculture (ISA). Firms submitting proposals for this work should clearly identify all relevant staff credentials, including ISA certification, for those individuals who will be assigned to this work.

The selected Consultant will maintain communication with City staff throughout the project, including a kickoff meeting, customization of deliverables, and opportunities for staff to review final products. Before award of this project, the selected Consultant and the City shall agree upon software usage and access for data collection.

#### Existing Tree Data

The City conducted its last right of way (ROW) tree inventory in 2017/18, which included all trees located along main arterial and collector streets. Prior to this inventory, the last inventory was conducted in 2004/5 which covered all City owned ROW within Kirkland's corporate limits at the time. In 2011, the City annexed the Juanita Finn Hill Kingsgate (JFK) neighborhoods, a seven square mile adjacent area, and later completed a ROW tree location inventory within that area (tree locations without feature attributes). This data layer has not been maintained to any significant degree.

Currently, the City has data associated with approximately 35,000 ROW Trees. Of these trees, approximately 20,000 have feature attributes such as species, size, and condition. The remaining trees are located in newly annexed areas of the City and only have location data.

## SCOPE OF WORK

### **Task 1: Update Tree Inventory Data Collection**

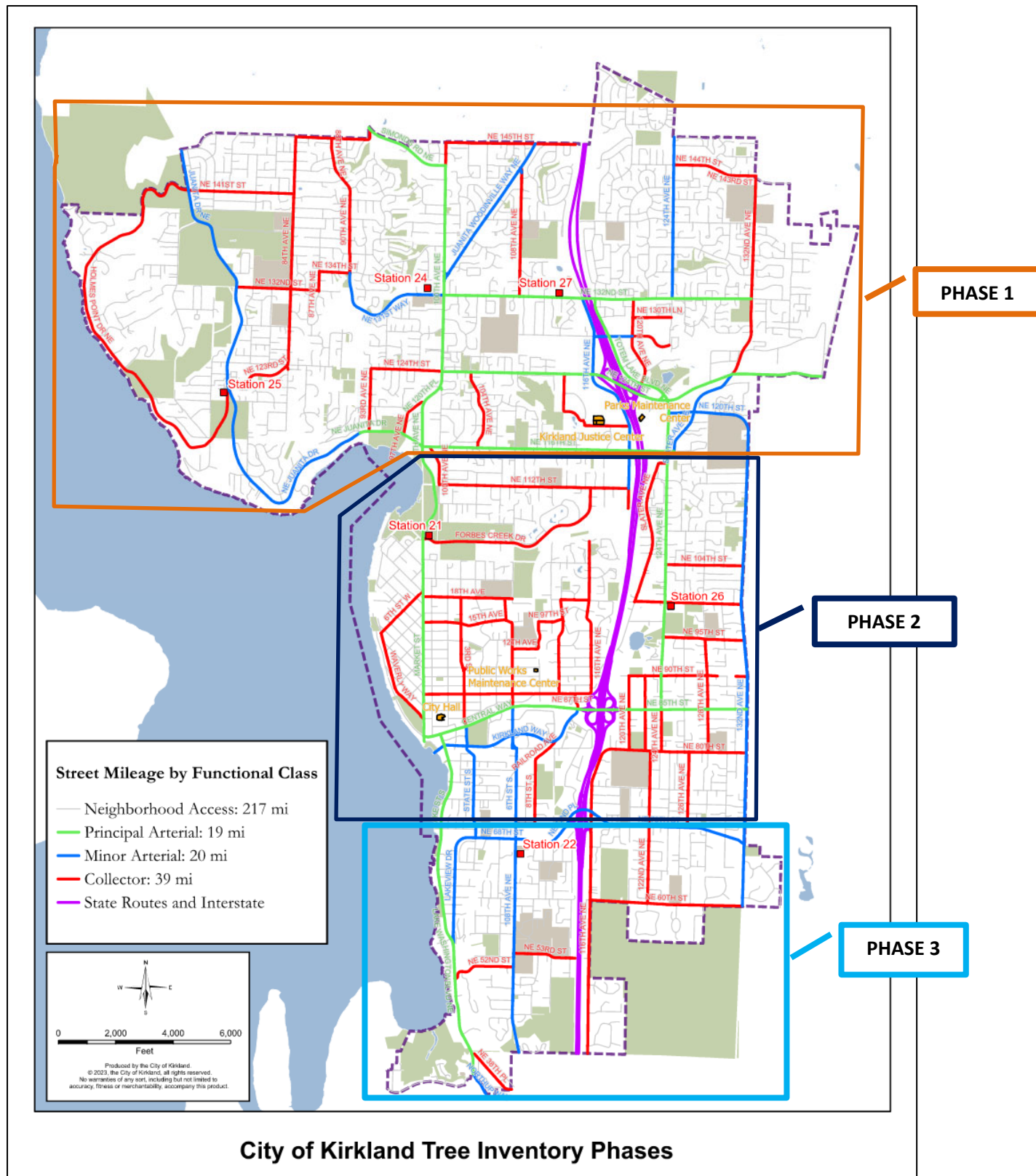
The Consultant will utilize mobile GIS software (ESRI ArcGIS Collector or similar software) to inventory an estimated 35,000 45,000 trees located on public property that are equal to or greater than two inches (2”) diameter at breast height (DBH). The Consultant will collect locational data using Global Positioning Satellite (GPS) and will record agreed upon attributes (see Table 1) for all trees inventoried and enter those into the City’s existing tree inventory data base. For trees in the City’s existing inventory, locations will be confirmed, and attributes updated. The Consultant will be responsible for the collection of the following information.

1. Trees shall be inventoried in the following locations:
  - a. Street Functional Classifications: Principal Arterial, Minor Arterial, Collectors, and Neighborhood Access.
  - b. City Facilities: City Hall, Maintenance Centers (2), Fire Stations (6), Justice Center.
2. Trees shall be inventoried in the following phases listed in order of priority as budget allows (see Figure 1). **Proposals shall provide separate estimates for each phase of data collection (see Figure 1, below):**
  - c. Phase 1: North of NE 116<sup>th</sup> St.
  - d. Phase 2: South of NE 116<sup>th</sup> St and north of NE 70<sup>th</sup> St.
  - e. Phase 3: South of NE 70<sup>th</sup> St.
3. The Project excludes trees located in the following locations:
  - Other public properties such as parks or greenspaces
  - Cross Kirkland Corridor (CKC)
  - State Routes and Interstate

**TABLE 1. REQUIRED FIELDS FOR TREE INVENTORY**

<b>Required Fields for Tree Inventory</b>		
<b>Attribute Fields Needed</b>	<b>Domain Values</b>	<b>Notes on Field</b>
Tree ID	N/A	Trees inventoried are to be accurately mapped at a minimum accuracy of two foot horizontal at the 95% confidence level and a number assigned to the tree if one does not currently exist. If trees have existing ID numbers, these numbers shall be used
Street Number	Free Text Field	
Street Name	Free Text Field	
Status	<div>Alive</div> <div>Dead</div> <div>Removed</div> <div>Stump</div>	
Species	*Species Listing*	Trees are identified by genus and species using both botanical and common names and by cultivars where appropriate. <b>The species list provided by the City of Kirkland must be used</b>
DBH	Free Text Field	Diameter of a tree measured at 4.5 feet above the ground, measured to the nearest inch
Number of Stems	Free Text Field	Number of stems forming below 1 (one) foot above grade
Condition	<div>Excellent (100%)</div> <div>Good (80%)</div> <div>Fair (60%)</div> <div>Poor (40%)</div> <div>Critical (20%)</div> <div>Dead (0%)</div>	The general condition of each tree is rated according to the following categories adapted from the International Society of Arboriculture's rating system
Observations	<div>Cavity/Decay</div> <div>Crown dieback</div> <div>Girdling Roots</div> <div>Grate/Guard</div> <div>Hardscape Damage</div> <div>Nutrient Deficiency</div> <div>Pests/Disease</div> <div>Mechanical Damage</div> <div>Overhead Conductor</div> <div>Included Bark</div> <div>Codominant stems</div>	General observations warranting recognition using Visual Tree Assessment (VTA) methodologies and site observations
Primary Maintenance Needs	<div>None</div> <div>Pruning</div> <div>Removal</div> <div>Monitoring</div>	

Attribute Fields Needed	Domain Values	Notes on Field
Maintenance Priority	High	<b>High</b> – obvious issues or observations that warrant attention and should be addressed as soon as possible <b>Medium</b> – issues or observations that are notable but do not require immediate action and should be addressed as time allows <b>Low</b> – issues or observations that warrant noting but do not require immediate action and should be addressed after other priorities are finished
	Medium	
	Low	
Pruning Type	Clearance Road/Sidewalk	
	Clearance Utility	
	Structural	
	Thinning	
	Crown Clean	
	Sprouts	
	Roots	
Additional Maintenance	Add Mulch	Clarification on attributes: <b>Increase Space:</b> increase planting area by removing hardscapes or widening planting area  <b>Repair Damage:</b> repair damage to sidewalk or road that may result in a tripping hazard or damage to vehicles
	Grate Widening	
	Increase Space	
	Inspect/Monitor	
	Remove Stakes	
	Repair Damage	
	Stake Tree	
Notes	Water Tree	
	Free Text Field	Additional notes that do not fall within attribute fields



**FIGURE 1. PUBLIC LOCATIONS TO BE INCLUDED IN THE TREE INVENTORY**

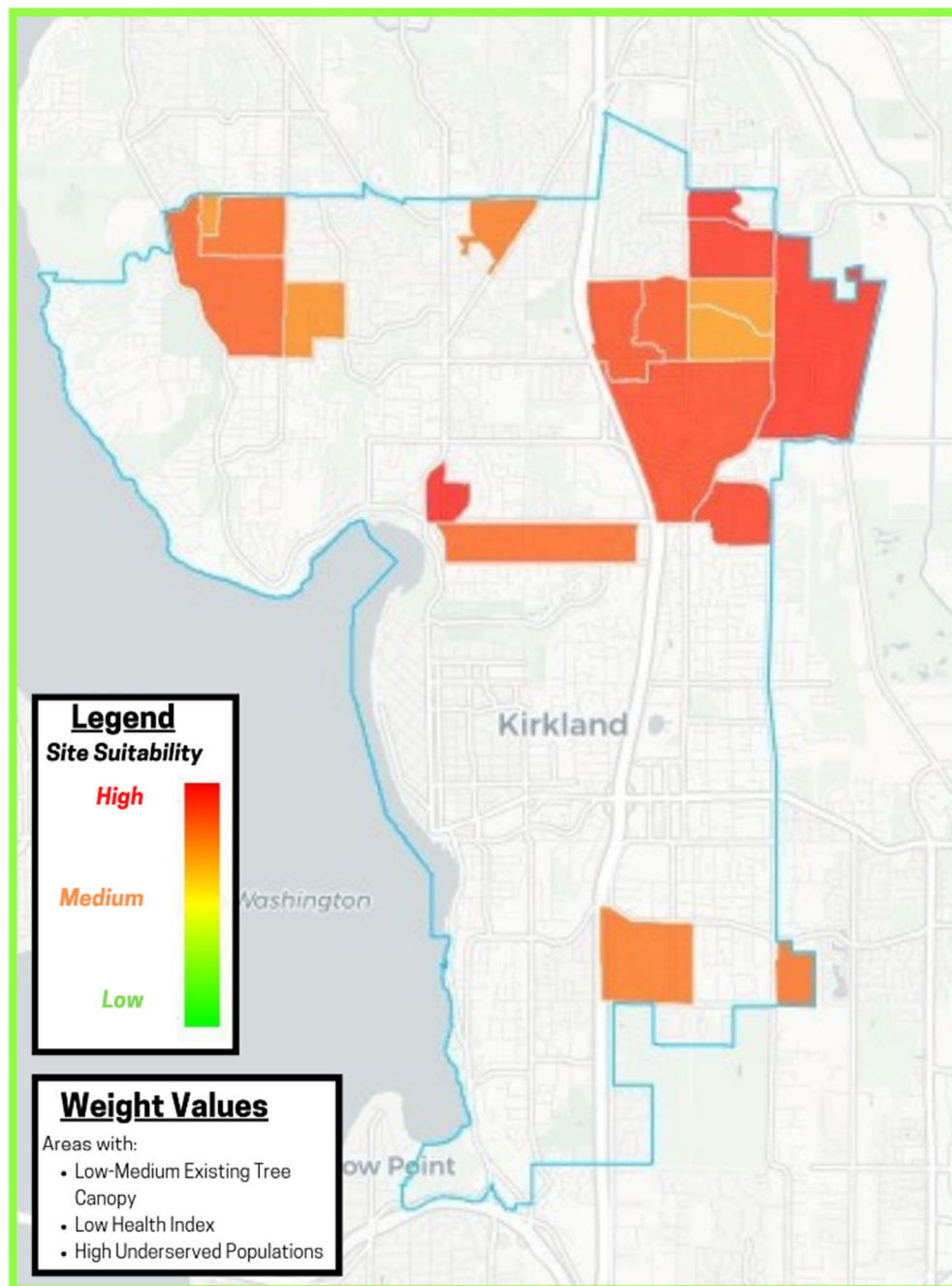
## **Task 2: Identify Potential Planting Sites**

Identify vacant or underutilized planting sites throughout the City right of way that are suitable for new tree planting (see Figure 2). **Resources and time spent on this task shall not exceed 15% of the overall project budget (\$30,000).**

1. Available new tree planting sites shall be mapped using GPS and assessed for suitability using the following parameters:
  - a. Minimum 4.5 foot wide planting strip
  - b. Located more than 3 feet from a road
  - c. Located 5 feet from underground utility lines
  - d. Located 20 feet from street lights or other existing trees
  - e. Located 30 feet from street intersections – 50 feet if it has a stop sign
2. The Consultant shall prioritize data collection in the Census Block Groups displayed in Figure 2.
3. The Consultant shall not spend extraneous amounts of time trying to determine whether a planting site is located in the public ROW. If the Consultant team cannot easily determine whether a site is located in the public ROW, continue on to the next location. If the potential planting site is located less than 3 feet from a road, do not consider it to be a potential planting site.
4. For all other locations in the City not identified in Figure 2, the Consultant will note areas of low street tree populations with adequate planting space, either through field verification or post processing computer analysis, that should be made a priority for replanting. The goal is to identify segments available for broader scale tree planting efforts.
  - a. Sites identified through this process shall be compared against the following parameters and prioritized based on site suitability if they meet the following requirements:
    - i. Required Parameters:
      1. Areas with low existing Urban Tree Canopy (UTC)
      2. Areas with high impervious surface area (resulting in high Urban Heat Island Effect)
      3. Areas with high percentages of residents living beneath the poverty level (i.e. underserved populations per Figure 2)
    - ii. Optional Parameters:
      1. Areas with high percentages of road area (resulting in poor air quality)
      2. Areas with low existing tree canopy adjacent to streams and water bodies (potentially resulting in decreased water quality)



## Tree Planting Prioritization Map



**Health Index:** Created from self-reported poor mental health, poor physical health, asthma, and coronary heart disease equally weighted and combined to create a score from 0-10. This index was calculated with the CDC PLACES dataset.

**Underserved Populations:** The percentage of residents living below the poverty level.

**FIGURE 2. PRIORITY AREAS FOR IDENTIFYING POTENTIAL PLANTING SITES**

### **Task 3: Resource Analysis Summary Report**

The following deliverables shall be provided to the City no later than November 30, 2023.

1. **Urban Forest Health Assessment and Recommendations:** Provide an overview of general Urban Forest health, species, age, and diversity and provide recommendations for sustainability, including:
  - a. **Forest Stand Analysis.** Breakdown by species diversity and age diversity.
  - b. **Urban Forest Pests & Pathogens.** Summary of potential pest or pathogen susceptibility of street tree population using i Tree Eco modeling software or similar. The following information shall be provided:
    - Total percentage of street tree population potentially susceptible to pests and pathogens.
    - Total monetary value of potential risk in dollar amount.
    - Summary of pests and pathogens identified as most relevant to Kirkland.
    - Pest management recommendations using Integrated Pest Management (IPM) protocol.
  - c. **Tree Benefit Analysis.** Conduct a resource analysis of the economic value of the benefits from the inventoried trees with the goal to make effective resource management decisions, develop policy, and set priorities. The resource analysis shall utilize the i Tree Eco benefit cost modeling software or similar to generate a robust resource analysis. The resource and benefit analysis shall include, at a minimum, the following information:
    - Cumulative annual benefits of Kirkland’s public trees including the replacement value.
    - Annual environmental benefits including, at a minimum, the following:
      - Carbon: total stored carbon and sequestered carbon
      - Air Pollution & Quality: total pollutants absorbed, reduced, and intercepted
      - Hydrological: total avoided runoff, evaporation, interception, transpiration and total potential evaporation and evapotranspiration based on available planting space
  - d. **Summary of Maintenance Needs.** Total number of inventoried trees and percentage of those trees recommended for maintenance sorted into the following categories:
    - i. Removal needs categorized by the following size classes to assist with work order management:
      - (1) 0 6” DBH
      - (2) 7 12” DBH
      - (3) 13 25” DBH
      - (4) >26” DBH
    - ii. Pruning needs delineated by the following categories:
      - (1) Clearance
      - (2) Structural
      - (3) Thinning
      - (4) Crown Clean

- (5) Sprouts
  - (6) Roots
- iii. Additional maintenance treatments prescribed for the street tree population using the following attributes:
  - (1) Add Mulch
  - (2) Grate Widening
  - (3) Increase Space
  - (4) Inspect/Monitor
  - (5) Remove Stakes
  - (6) Repair Damage
  - (7) Stake Tree
  - (8) Water Tree
- iv. Priority for Maintenance using the following attributes:
  - (1) High
  - (2) Medium
  - (3) Low

## TECHNICAL REQUIREMENTS

### A. General Requirements

The Consultant and/or consultant team selected for this project will utilize subject expertise and digital mapping techniques to inventory trees and related features in the specified project area. Proposers may suggest data collection options, including use of GPS devices or other mobile technology. The City will provide any enterprise GIS data layers that will assist the Consultant in the field mapping effort. Proposals shall offer a detailed solution to seamlessly integrating field collected GIS data into the City of Kirkland's enterprise data infrastructure

#### Use of Existing Tree Inventory Data

As part of this project, the City is interested in understanding whether the more recently collected 2017/18 data can integrate seamlessly with the 2023 proposed schema and whether the Consultant is able to conduct an analysis of the 2017/18 data to be incorporated into the final Deliverables (Task 3) without requiring re collection. In particular, the deliverables the City is interested in obtaining from the existing 2017/18 data include; 1) Summary of Maintenance Needs and; 2) Tree Benefit Analysis. In order to assess this compatibility, please refer to the [City's GIS data portal](#), download the Environmental dataset, and refer to the ENV\_Tree layer (<http://inter.kirklandwa.gov/gisdata/AllData/Environmental/>). The following GIS\_ID ranges correspond with the 2017/2018 data.

- 2017 Inventory: GIS\_ID range between 40,136 47,189
- 2018 Inventory: GIS\_ID range between 47,318 48,225

If this level of analysis is not possible and re collection of these trees is recommended, the scope of work will remain as described above under Task 1. If this level of analysis is possible using the existing 2017/18 data and re collection of attributes is not required, the City will provide additional locations throughout the City to inventory.

Other than the above discussed exception, this Project is a new tree inventory and existing City GIS tree data is only provided for general reference but is not to be copied or otherwise used in the 2023 inventory without field verification and updated attributes.

#### **B. Quality Control**

The City is expecting that an early data deliverable – within the first month – will be used as a pilot consisting of a few linear miles within the project area. This pilot will provide an opportunity to identify issues, refine field mapping procedures, and revisit the project schedule. The City also expects to receive data deliverables from its vendor on a monthly basis; this will avoid full data delivery at the project end, helps manage resources, and will be used as the basis for the vendor to invoice for work completed/accepted. Upon successful negotiations with the Consultant team, a schedule of payments will be developed based on schedule and completion of deliverables.

The City will conduct quality control (QC) procedures on all data deliverables. The successful Consultant will be expected to communicate with and receive QC recommendations from the City's Project Team throughout the Project. The expectation is that the final product accepted by the City will be at least 95% accurate. This standard will be based on several measures, as follows:

1. 1:1 correspondence between tree features and database records. A missing tree record where a feature exists, or a tree record where no feature exists, are both errors.
2. Horizontal accuracy of +/- 2 feet. Except for obstructed lines of sight, this standard is attainable given proper map display zoom levels and use of the City's ortho photography. Errors will be flagged if mapped features exceed this measure.
3. Attributes are to be coded for all Required Fields (Table 1), except where null values are specifically allowed. Incorrect or missing attribute values constitute errors.
4. All field data must be collected by Certified Arborists.

#### **C. Attributes & Data Collection**

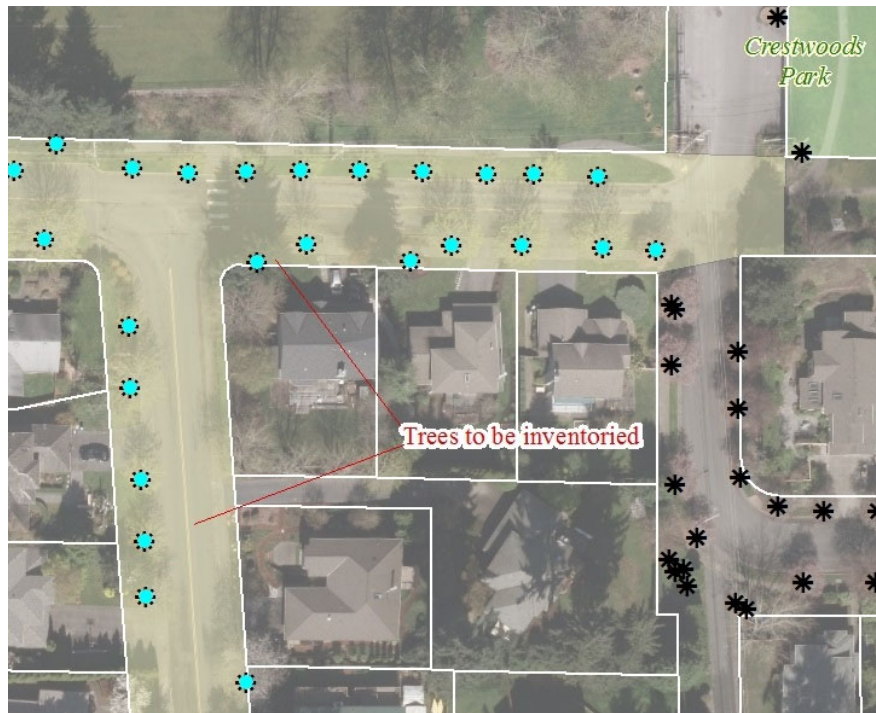
Proposers should review the City's proposed Tree Inventory Geodatabase schema above in regard to the feature attributes that are to be collected. These are termed "Required Fields" and generally do not allow null values. Fields other than Required Fields can be ignored in the field mapping task, since these will be dealt with in later production steps by City staff.

Three issues dealing with positional accuracy are noted here:

- 1) RFP respondents who propose using GPS for data capture should describe in detail their quality assurance (QA) for optimizing this technique, for example: by post processing, field verification against known control points, etc.
- 2) The City recognizes that accurate trace digitizing of trunk locations from color ortho photography is only feasible where there are no overhead obstructions. In situations of heavy canopy, ground shadows, intervening buildings, etc., tree locations may have to be approximated.
- 3) The Project is to include, to the degree possible, only those trees that are within City owned property, the boundaries of which are sometimes difficult to ascertain in the field, particularly within the public right of way (ROW). Within reason, trees that may be on, or very close to the ROW margin, should be mapped rather than spending significant resources attempting to determine the actual ROW edge.

#### D. Project Area

Figure 1 (above) identifies the complete scope of the limits of the 2023 Public Tree Inventory Project. Figure 3 (below) is a map enlargement that illustrates the ROW polygon within which the tree inventory is to take place. For illustration purposes, the City’s existing GIS tree layer has been superimposed on this map. As stated previously, only trees within specified street/road ROW are to be mapped. Following Figure 3, Table 2 indicates the estimated number of tree sites by type that will be encountered in the survey.



**FIGURE 3. RIGHT OF WAY POLYGON LIMITS, TYPICAL**

Existing City of Kirkland GIS Tree Layer	
Detailed Attributes:	19,752
Location Only:	15,675
Total:	<b>35,427*</b>

**\*Does not include trees located on City Facility sites**

**TABLE 2. ESTIMATED TREES IN INVENTORY**

#### E. Data Deliverables

- 1) Deliver the final inventory database as a geodatabase or shapefile
- 2) Metadata, including detailed citations describing field data collection practices, equipment settings, post processing procedures, base stations used for differential correction and expected accuracy, are to be submitted with interim and final data deliveries

**ATTACHMENT B**



**PROFESSIONAL SERVICES AGREEMENT  
PSA 6/30/2020**

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The City of Kirkland, Washington, a municipal corporation ("City") and \_\_\_\_\_, whose address is \_\_\_\_\_ ("Consultant"), agree and contract as follows.

In consideration of the mutual benefits and conditions set forth below, the parties agree as follows:

**I. SERVICES BY CONSULTANT**

- A. The Consultant agrees to perform the services described in Attachment \_to this Agreement, which attachment is incorporated herein by reference.
- B. All services and duties shall be conducted and performed diligently, completely and in accordance with professional standards of conduct and performance.

**II. COMPENSATION**

- A. The total compensation to be paid to Consultant for these services shall not exceed \$\_\_\_\_\_, as detailed in Attachment \_\_\_\_\_.
- B. Payment to Consultant by the City in accordance with the payment ceiling specified above shall be the total compensation for all services performed under this Agreement and supporting documents hereto as well as all subcontractors' fees and expenses, supervision, labor, supplies, materials, equipment or the use thereof, reimbursable expenses, and other necessary incidentals.
- C. The Consultant shall be paid on the basis of invoices submitted. Invoicing will be on the basis of percentage complete or on the basis of time, whichever is applicable in accordance with the terms of this Agreement.
- D. The City shall have the right to withhold payment to Consultant for any services not completed in a satisfactory manner until such time as Consultant modifies such services to the satisfaction of the City.
- E. Unless otherwise specified in this Agreement, any payment shall be considered timely if a warrant is mailed or is available within 45 days of the date of actual receipt by the City of an invoice conforming in all respects to the terms of this Agreement.

**III. TERMINATION OF AGREEMENT**

The City or the Consultant may terminate or suspend this Agreement at any time, with or without cause, by giving ten (10) days' notice to the other in writing. In the event of termination, all finished or unfinished reports, or other material prepared by the Consultant pursuant to this Agreement, shall be provided to the City. In the event the City terminates prior to completion without cause, consultant may complete such analyses and records as may be necessary to place its files in order. Consultant shall

be entitled to receive just and equitable compensation for any satisfactory services completed on the project prior to the date of termination, not to exceed the payment ceiling set forth above.

#### **IV. OWNERSHIP OF WORK PRODUCT**

- A. Ownership of the originals of any reports, data, studies, surveys, charts, maps, drawings, specifications, figures, photographs, memoranda, and any other documents which are developed, compiled or produced as a result of this Agreement, whether or not completed, shall be vested in the City. Any reuse of these materials by the City for projects or purposes other than those which fall within the scope of this Agreement or the project to which it relates, without written concurrence by the Consultant will be at the sole risk of the City.
- B. The City acknowledges the Consultant's plans and specifications as instruments of professional service. Nevertheless, the plans and specifications prepared under this Agreement shall become the property of the City upon completion of the services. The City agrees to hold harmless and indemnify consultant against all claims made against Consultant for damage or injury, including defense costs, arising out of any reuse of such plans and specifications by any third party without the written authorization of the Consultant.
- C. Methodology, materials, software, logic, and systems developed under this Agreement are the property of the Consultant and the City, and may be used as either the consultant or the City sees fit, including the right to revise or publish the same without limitation.
- D. The Consultant at such times and in such forms as the City may require, shall furnish to the City such statements, records, reports, data, and information as the City may request pertaining to matters covered by this Agreement. All of the reports, information, data, and other related materials, prepared or assembled by the Consultant under this Agreement and any information relating to personal, medical, and financial data will be treated as confidential only as allowed by Washington State laws regarding disclosure of public information, Chapter 42.56 RCW

The Consultant shall at any time during normal business hours and as often as the City may deem necessary, make available for examination all of its records and data with respect to all matters covered, directly or indirectly, by this Agreement and shall permit the City or its designated authorized representative to audit and inspect other data relating to all matters covered by this Agreement. The City shall receive a copy of all audit reports made by the agency or firm as to the Consultant's activities. The City may, at its discretion, conduct an audit, at its expense, using its own or outside auditors, of the Consultant's activities which relate, directly or indirectly, to the Agreement.

Consultant will provide all original operation and maintenance manuals, along with all warranties, from the manufacturer for any equipment or items installed or supplied to the City has part of this contracted project.

The Consultant shall maintain accounts and records, including personnel, property, financial, and programmatic records, which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed pursuant to this Agreement. The Consultant shall also maintain such

other records as may be deemed necessary by the City to ensure proper accounting of all funds contributed by the City to the performance of this Agreement.

The foregoing records shall be maintained for a period of seven years after termination of this Agreement unless permission to destroy them is granted by the Office of the Archivist in accordance with RCW Chapter 40.14 and by the City.

**V. GENERAL ADMINISTRATION AND MANAGEMENT**

The Planning and Building Department for the City of Kirkland shall review and approve the Consultant's invoices to the City under this Agreement, shall have primary responsibility for overseeing and approving services to be performed by the Consultant, and shall coordinate all communications with the Consultant from the City.

**VI. COMPLETION DATE**

The estimated completion date for the Consultant's performance of the services specified in Section I is \_\_\_\_\_.

Consultant will diligently proceed with the services contracted for, but consultant shall not be held responsible for delays occasioned by factors beyond its control which could not reasonably have been foreseen at the time of the execution of this Agreement. If such a delay arises, Consultant shall forthwith notify the City.

**VII. SUCCESSORS AND ASSIGNS**

The Consultant shall not assign, transfer, convey, pledge, or otherwise dispose of this Agreement or any part of this Agreement without prior written consent of the City.

**VIII. NONDISCRIMINATION**

Consultant shall, in employment made possible or resulting from this Agreement, ensure that there shall be no unlawful discrimination against any employee or applicant for employment in violation of RCW 49.60.180, as currently written or hereafter amended, or other applicable law prohibiting discrimination, unless based upon a bona fide occupational qualification as provided in RCW 49.60.180 or as otherwise permitted by other applicable law. Further, no person shall be denied or subjected to discrimination in receipt of the benefit of any services or activities made possible by or resulting from this Agreement in violation of RCW 49.60.215 or other applicable law prohibiting discrimination.

**IX. HOLD HARMLESS/INDEMNIFICATION**

To the greatest extent allowed by law the Contractor shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees, arising out of or in connection with performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.



Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purpose of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

## **X. LIABILITY INSURANCE COVERAGE**

The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees. A failure to obtain and maintain such insurance or to file required certificates and endorsements shall be a material breach of this Agreement.

Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

### **A. Minimum Scope of Insurance**

Consultant shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be as least as broad as Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be as least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City using an additional insured endorsement at least as broad as ISO CG 20 26.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
4. Professional Liability insurance appropriate to the Consultant's profession.

### **B. Minimum Amounts of Insurance**

Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

**C. Other Insurance Provisions**

The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability and Commercial General Liability insurance:

1. The Consultant's insurance coverage shall be primary insurance as respects the City. Any insurance, self-insurance, or self-insured pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.
2. The Consultant shall provide the City and all Additional Insureds for this services with written notice of any policy cancellation, within two business days of their receipt of such notice.

**D. Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

**E. Verification of Coverage**

Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the services.

**F. Failure to Maintain Insurance**

Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of agreement, upon which the City may, after giving five business days' notice to the Consultant to correct the breach, immediately terminate the agreement or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

**G. City Full Availability of Consultant Limits**

If the Consultant maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Consultant, irrespective of whether such limits maintained by the Consultant are greater than those required by this agreement or whether any certificate of insurance

furnished to the City evidences limits of liability lower than those maintained by the Consultant.

**XI. COMPLIANCE WITH LAWS/BUSINESS LICENSE**

The Consultant shall comply with all applicable State, Federal, and City laws, ordinances, regulations, and codes. Consultant must obtain a City of Kirkland business license or otherwise comply with Kirkland Municipal Code Chapter 7.02.

**XII. FUTURE SUPPORT**

The City makes no commitment and assumes no obligations for the support of Consultant activities except as set forth in this Agreement.

**XIII. INDEPENDENT CONTRACTOR**

Consultant is and shall be at all times during the term of this Agreement an independent contractor and not an employee of the City. Consultant agrees that he or she is solely responsible for the payment of taxes applicable to the services performed under this Agreement and agrees to comply with all federal, state, and local laws regarding the reporting of taxes, maintenance of insurance and records, and all other requirements and obligations imposed on him or her as a result of his or her status as an independent contractor. Consultant is responsible for providing the office space and clerical support necessary for the performance of services under this Agreement. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or for contributing to the state industrial insurance or unemployment compensation programs or otherwise assuming the duties of an employer with respect to the Consultant or any employee of Consultant.

**XIV. EXTENT OF AGREEMENT/MODIFICATION**

This Agreement, together with all attachments and addenda, represents the final and completely integrated Agreement between the parties regarding its subject matter and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by written instrument properly signed by both parties.

**XV. ADDITIONAL WORK**

The City may desire to have the Consultant perform work or render services in connection with the project other than provided for by the express intent of this Agreement. Any such work or services shall be considered as additional work, supplemental to this Agreement. This Agreement may be amended only by written instrument properly signed by both parties.

**XVI. NON-ENDORSEMENT**

As a result of the selection of a consultant to supply services to the City, the consultant agrees to make no reference to the City in any literature, promotional material, brochures, sales presentation or the like without the express written consent of the City.

**XVII. NON-COLLUSION**

By signature below, the Consultant acknowledges that the person, firm, association, co-partnership or corporation herein named, has not either directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in the preparation or submission of a proposal to the City for consideration in the award of a contract on the specifications contained in this Agreement.

**XVIII. WAIVER**

Waiver by the City of any breach of any term or condition of this Agreement shall not be construed as a waiver of any other breach.

**XIX. ASSIGNMENT AND SUBCONTRACT**

The Consultant shall not assign or subcontract any portion of the services contemplated by this Agreement without the prior written consent of the City.

**XX. DEBARMENT**

Recipient certifies that it is not suspended, debarred, proposed for debarment, declared ineligible or otherwise excluded from contracting with the federal government, or from receiving contracts paid for with federal funds.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates written below:

CONSULTANT:

CITY OF KIRKLAND:

By: \_\_\_\_\_

By: \_\_\_\_\_  
Beth Goldberg, Deputy City Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_