



Request for Proposals

Job No. 48-16-IT

Aerial Imagery, Orthophotography, and Aerial Mapping Services

City of Kirkland, WA

123 5th Avenue

Kirkland, WA 98033

Issue Date: October 3, 2016

Proposals Due: October 31, 2016 (3:00 p.m. PDT)

REQUEST FOR PROPOSALS

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

RFP # 48-16-IT
Aerial Imagery, Orthophotography, and Aerial Mapping Services

by filing with the Purchasing Agent, City Hall, 123 5th Avenue, Kirkland, WA, 98033 until:

Date: **Monday, October 31, 2016**
Time: **3:00 p.m. PDT**

Proposals received after the due date and time will not be considered. Respondents accept all risks of late delivery of mailed proposals regardless of fault.

Detailed Request for Proposals (RFP) information including general information, general terms and conditions, requested services, proposal requirements and evaluation process is available on the City’s website at http://www.kirklandwa.gov/depart/Finance_and_Administration/doingbusiness/BusinessOpportunities.htm under “Business (‘Doing Business With The City’).”

The City reserves the right to reject any and all submittals 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.

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. Dated this 3rd day of October, 2016

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TABLE OF CONTENTS

SECTION 1 – GENERAL INFORMATION	5
1.01 Introduction	5
1.02 Purpose of RFP.....	6
1.03 Definitions	6
1.04 General Project Plan	7
1.05 Project Manager/Communications	7
1.06 Preliminary Schedule	8
1.07 Response Format	8
1.08 Completeness of Proposal	8
1.09 Proposal Response Date and Location	8
1.10 Required Number of Proposals	9
1.11 Vendor’s Cost to Develop Proposals	9
SECTION 2 – KEY PROPOSAL REQUIREMENTS	9
2.01 Questions/clarifications Regarding the RFP	9
2.02 RFP Addenda	9
2.03 Withdrawal of Proposal	9
2.04 Rejection of Proposals	9
2.05 Proposal Modification and Clarifications	9
2.06 Proposal Validity Period	10
2.07 Proposal Signatures	10
2.08 Public Records	10
2.09 Professional Services Agreement Requirements	10
2.10 Non-endorsement	10
2.11 Cooperative Purchasing	10
SECTION 3 – OTHER PROPOSAL REQUIREMENTS	11
3.01 Duration of Services	11
3.02 Performance History	11
3.03 Timeline	11
3.04 Proposal Format	11
SECTION 4 – SCOPE OF WORK	13
4.01 Introduction	13
4.02 Project Management	13
4.03 Task 1 – Project Planning and Ramp-up	14
4.04 Task 2 – Flight Planning	14
4.05 Task 3 – Survey Control Plan	15
4.06 Task 4 – Flight(s); Imagery Collection	16
4.07 Task 5 – Imagery Review	16
4.08 Task 6 – Aerotriangulation	17
4.09 Task 7 – Pilot Test	17
4.10 Task 8 – DTM Update	17
4.11 Task 9 – Orthophoto Production	18

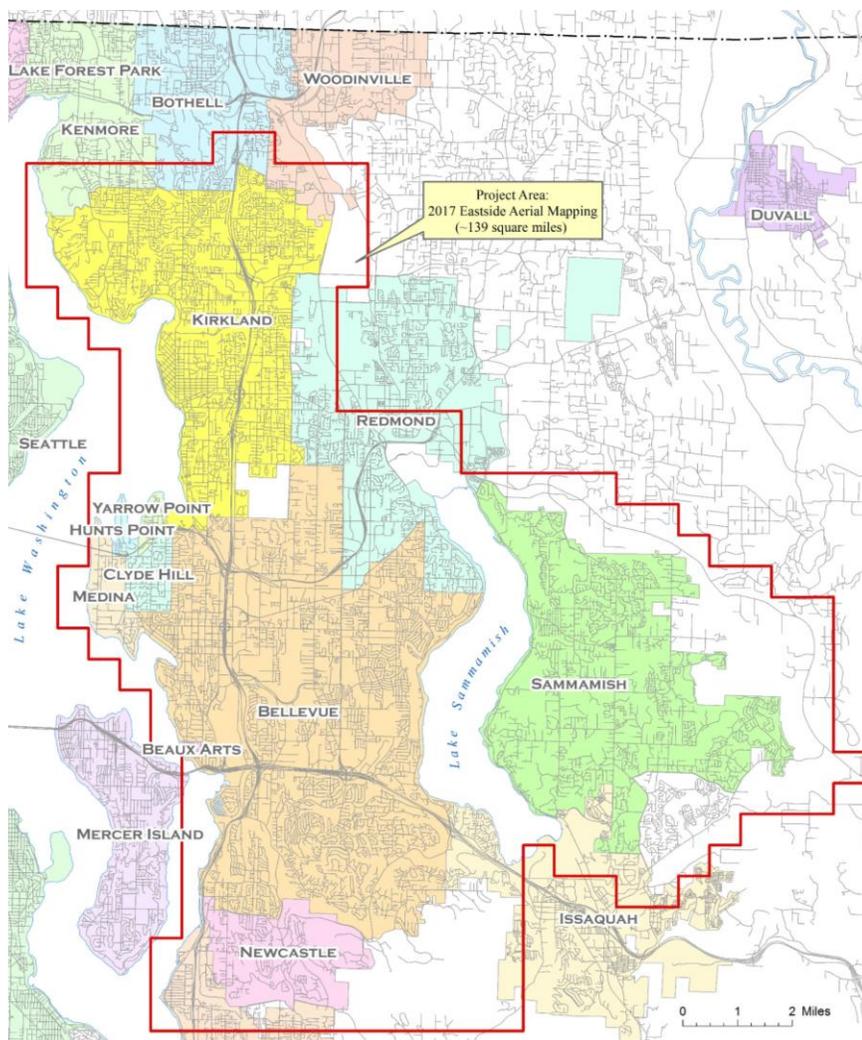
4.12	Task 10 – Contour Production	18
4.13	Task 11 – Impervious Feature Mapping	18
4.14	Task 12 – Deliverable Review/acceptance	19
4.15	Task 13 – Project Closeout	20
SECTION 5 – PROPOSAL EVALUATION		20
5.01	Evaluation Procedures	20
5.02	Scoring and Evaluation Factors	20
5.03	Vendor Presentation and/or Committee Interview	21
5.04	Contract Award and Execution	21
SECTION 6 – APPENDIX		21
6.01	Professional Services Agreement	21

SECTION 1 – GENERAL INFORMATION

1.01 Introduction

The City of Kirkland, Washington (“City”; <http://www.kirklandwa.gov/>) is seeking a qualified vendor or vendor team to perform photogrammetric services in support of its ongoing enterprise GIS program. Following the prescribed solicitation process, the City intends to contract with the successful respondent (“Vendor”) to finalize a project plan, including delivery schedule, in preparation for a Spring, 2017 Eastside Aerial mapping project (“Project”). The Project area, as shown in Map 1 (below), includes the City of Kirkland and adjoining areas totaling approximately 139 square miles. The Project includes much of the suburban Seattle area known as the Eastside, immediately east of Lake Washington.

The Project will emphasize a streamlined and standardized approach to collecting area-wide aerial mapping products, utilizing past project work and industry best practices to achieve a highly successful outcome. The four distinct final deliverables are 1) updated digital terrain model (DTM), 2) .25-foot pixel resolution color orthophotography, 3) updated 2-foot interval topographic contours, and 4) updated impervious features (building rooflines, pavement edges, etc.). Interim products from the Project, as detailed in Section 4 – Scope of Work, are also considered deliverables. Existing GIS data covering the planned Project area will be available for use by the selected 2017 Vendor. This includes aerial mapping products from the 2015 (Puget Sound Regional) Aerials Project, and high-resolution lidar data from the 2016 Puget Sound Lidar Consortium (PSLC) Project.



Map 1 – 2017 Eastside Aerial Mapping Project Area

1.02 Purpose of RFP

This request for proposals (RFP) is the City’s solicitation for photogrammetric mapping services to support the Project. This RFP describes the Project scope and identifies specific Vendor submittal requirements. This document also discusses evaluation criteria that the City will utilize in selecting a Vendor, and includes proposal content and format requirements. The City will make every effort to clarify background information to assist respondents in preparing satisfactory proposals. However, each proposer assumes full responsibility for its submittal’s content and compliance with this RFP’s requirements.

In particular, vendors considering submitting proposals for the Project are advised of the following:

1. The City expects to meet a firm Project completion date of December 31, 2017.
2. Aerial imagery collection will require sufficient aircraft, equipment, and staffing logistics to address the Project area within this time frame
3. While this RFP identifies the City’s basic mapping requirements for the Project, it expects respondents to clearly state their assumptions in regard to mapping accuracy and other key metrics.
4. Vendor selection criteria will emphasize timeliness and quality of deliverables, with pricing a far less important factor.
5. Proposals should emphasize brevity and clarity, and be confined to the specific information requested in this RFP (Section 2 – Key Proposal Requirements, and Section 3 – Other Proposal Requirements).

1.03 Definitions

City	The City of Kirkland, including its executives, directors, and staff
Contract	The agreement to be entered into for services between the City and the apparent successful Vendor resulting from this solicitation
Project	The 2017 Eastside Aerial Mapping Project
Project Manager	The individual assigned by the City to coordinate the selection of a Vendor for the Project, as well as to manage the ongoing tasks within the Project
Project Team	The committee that together works toward a positive project outcome, including the City project Manager, selected City staff, the Vendor/Vendor team, and potentially other agencies.
RFP	This request for proposals, including any amendments or other addenda hereto
Selection Committee	The group comprising the Project Manager and representatives of selected City of Kirkland business units and other agencies, if any, participating in the Project
Vendor	The person, firm, or team submitting a proposal and/or the person, firm, or team awarded the Contract

Vendor Project Manager

The individual assigned by the Vendor to be the primary point of contact for the Project Manager

1.04 General Project Plan

The remainder of 2016 has been allocated for this solicitation, selection of a qualified Vendor, and finalizing a mutually agreeable Contract. With a Vendor Contract in place, the City intends to follow the general Project plan outlined below, including interim deliverables and milestones. While the Vendor clearly will be in complete control of its own production logistics, the City expects to receive regular, specific, and accurate milestone reports on Vendor progress, resource issues, deliverable quality, and other issues potentially impacting a successful project outcome. In particular, such reporting must disclose Vendor load leveling that affects Vendor staff assigned to the Project, as well as recommended solutions.

Following the selection of a Vendor or Vendor team for the Project, the City expects to follow this general task sequence:

1. Task 1 – Project Planning and Ramp-up
2. Task 2 – Flight Planning
3. Task 3 – Survey Control Plan
4. Task 4 – Flight(s); Imagery Collection
5. Task 5 – Imagery Review
6. Task 6 – Aerotriangulation
7. Task 7 – Pilot Test
8. Task 8 – DTM Update
9. Task 9 – Orthophoto Production
10. Task 10 – Contour Production
11. Task 11 – Impervious Feature Mapping
12. Task 12 – Deliverable Review/acceptance
13. Task 13 – Project Closeout

Once full production is underway following the successful completion of the Pilot Test, the City expects product delivery on a monthly basis, if not more often. In addition, the City requests that orthophotography deliverables be made the top priority, the delivery sequence of which will be identified in the Task 1 Project Planning and Ramp-up activities.

Obviously, many of the tasks above can be done in parallel once full production commences.

1.05 Project Manager/Communications

Upon release of this RFP, all Vendor communications up to the point of Vendor selection are to be directed in writing to the Project Manager listed below. Unauthorized contact regarding this RFP with other City staff or participating agencies may result in disqualification. Any oral communications will be considered unofficial and non-binding on the City.

<i>Project Manager:</i>	Ms. Xiaoning Jiang
<i>Address:</i>	City of Kirkland Information Technology Department 123 5 th Avenue City of Kirkland, WA 98033
<i>E-mail:</i>	xjiang@kirklandwa.gov

1.06 Preliminary Schedule

These dates are estimates and are subject to change by the City.

Event	Date
Release RFP	October 3, 2016
Vendor questions (if any) due	October 24, 2016
Answers to Vendor RFP questions released	October 12-24, 2016
Proposals due	October 31, 2016
Proposal evaluation complete	November 7, 2008
Interview of short list (if needed)	Week of November 14, 2016
Vendor selected	November 21, 2016
Contract signed	No Later Than December 30, 2016
Implementation Begins	January 5, 2017
Project Completion	December 31, 2017

1.07 Response Format

Proposals should be prepared simply, providing a straightforward, concise description of the approach and capabilities necessary to satisfy the requirements of the RFP. Supplemental technical literature and elaborate promotional materials are not necessary. Proposals should emphasize completeness, clarity of content and focus on the Project requirements and presentation structure required by this RFP. Vendor proposals must be submitted in the specified format, or potentially be considered non-responsive.

1.08 Completeness of Proposal

Submitters must include in their proposal a cover letter signed by a company representative authorized to bind the proposing firm contractually (see Section 3 – Other Proposal Requirements/3.04 Proposal Format)

1.09 Proposal Response Date and Location

Proposals must be received at the City of Kirkland by the date and time shown below.

Date: **Monday, October 31, 2016**
Time: **3:00 p.m. PDT**

Proposals may be submitted as PDF or MS Word email attachments to purchasing@kirklandwa.gov (Cannot exceed 20 mb)

Sealed paper proposals are to be addressed to:

City of Kirkland
Attn: Purchasing Agent-Job #48-16-IT
123 Fifth Ave
Kirkland, WA 98033

All proposals and accompanying documentation will become the property of the City and will not be returned. Faxed proposals will not be accepted. Vendors accept all risks of late delivery, regardless of fault.

1.10 Required Number of Proposals

The City prefers electronic submission of proposals – for example, as an attachment to an e-mail. Firms wishing to submit paper copies should package and clearly label four (4) copies, and deliver to the site address specified above. The City, at its discretion, may make additional copies of the proposal for the purpose of evaluation only. Each original proposal must include required signature(s), in ink, by authorized personnel, as indicated in this RFP.

1.11 Vendor’s Cost to Develop Proposals

Costs for developing proposals in response to this RFP are entirely the obligation of the Vendor and are not chargeable in any manner to the City.

SECTION 2 – KEY PROPOSAL REQUIREMENTS

2.01 Questions/clarifications Regarding the RFP

No oral interpretation or clarification will be made to any Vendor as to the meaning of this RFP except as provided for in Sections 1.05 and 1.06 (above). Written requests for interpretation/clarification shall be addressed to the Project Manager at the address/e-mail indicated in Section 1.05. All questions and answers will be published in the time frame indicated in 1.06, above.

2.02 RFP Addenda

The City reserves the right to change the RFP schedule or issue addenda to the RFP at any time. All such addenda will become part of the RFP. The City also reserves the right to cancel or reissue the RFP. In the event that it becomes necessary to revise any part of this RFP, the City will issue the addenda on its website (http://www.kirklandwa.gov/depart/Finance_and_Administration/doingbusiness/BusinessOpportunities.htm) under “Business (‘Doing Business With The City’).”

2.03 Withdrawal of Proposal

Proposals may be withdrawn at any time prior to the submission deadline specified in Section 1.09, provided the City receives notification of this in writing prior to that same time.

2.04 Rejection of Proposals

The City reserves the right to reject any or all proposals, to waive any minor informalities or irregularities contained in any proposal, and to accept any proposal deemed to be in the best interest of the City.

2.05 Proposal Modification and Clarifications

The City reserves the right to request that any Vendor clarify its proposal or to supply any additional material deemed necessary to assist in the evaluation of the proposal. Modification of a proposal already received will be considered only if the Vendor’s request for this is received prior to the submittal deadline. All modifications must be made in writing, executed and submitted in the same form and manner as the original proposal.

2.06 Proposal Validity Period

Submission of a proposal will signify the Vendor's agreement that its proposal and the content thereof are valid for 180 days following the submission deadline unless otherwise agreed to in writing by both the City and the vendor. The proposal will become part of the Contract that is negotiated between the City and the successful Vendor.

2.07 Proposal Signatures

- 1) An authorized Vendor representative must sign its original proposal cover letter, with the Vendor's address, telephone and e-mail information also provided. Unsigned proposals will not be considered.
- 2) If the proposal is made by an individual, the name, mailing address and signature of the individual must be shown.
- 3) If the proposal is made by a firm or partnership, the name and mailing address of the firm or partnership and the signature of at least one of the general partners must be shown.
- 4) If the proposal is made by a corporation, the name and mailing address of the corporation and the signature and title of the person who signs on behalf of the corporation must be shown.

2.08 Public Records

Under Washington state law, the documents (including but not limited to written, printed, graphic, electronic, photographic or voice mail materials and/or transcriptions, recordings or reproductions thereof) submitted in response to this RFP (the "documents") become a public record upon submission to the City, subject to mandatory disclosure upon request by any person, unless the documents are exempted from public disclosure by a specific provision of law. If the City receives a request for inspection or copying of any such documents it will promptly notify the person submitting the documents to the City (by U.S. mail and by fax if the person has provided a fax number) and upon the written request of such person, received by the City within five (5) days of the mailing of such notice, will postpone disclosure of the documents for a reasonable period of time as permitted by law to enable such person to seek a court order prohibiting or conditioning the release of the documents. The City assumes no contractual obligation to enforce any exemption.

2.09 Professional Services Agreement Requirements

Respondents must comply with all City requirements identified in the attached Professional Services Agreement (Section 6 – Appendix) including insurance, nondiscrimination, business license, ownership of documents, applicable laws, etc.

2.10 Non-endorsement

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

2.11 Cooperative Purchasing

RCW 39.34 allows cooperative purchasing between public agencies (political subdivisions) in the State of Washington. Public agencies which have an active Intergovernmental Cooperative Purchasing Agreement with the City may purchase from City contracts. Those public agencies who have complied

with these requirements are eligible to use this Contract. The City does not accept any responsibility for purchase orders or contracts issued by other public agencies. Any such agency accepts responsibility for compliance with any additional or varying laws and regulations which may apply on such a purchase. The City accepts no responsibility for the performance of any non-City purchasing contract by the Vendor, including payment for same.

SECTION 3 – OTHER PROPOSAL REQUIREMENTS

3.01 Duration of Services

The term of the Contract with the selected Vendor shall be from the date of execution of the Contract to completion of the work defined in the Contract's Scope of Work.

3.02 Performance History

If the Vendor has had any contract terminated for default during the past five (5) years, please disclose this. "Termination for default" is defined as notice to stop performance due to the Vendor's non-performance or poor performance, regardless of final resolution.

Submit full details of all terminations for default experienced by the Vendor during the past five (5) years, if any, including the other party's name, address and telephone number. Present the Vendor's position on the matter. The City will evaluate the facts and may, at its sole discretion, reject the Vendor's proposal if the facts discovered indicate a significant liability for the City.

If the Vendor during the past five (5) years, has had a contract terminated for convenience, non-performance, non-allocation of funds or any other reason, which termination occurred before completion of the contract, describe fully all such terminations, including the name, address and telephone number of the other contracting party.

3.03 Timeline

The Vendor's proposal must include a timeline identifying major milestones. The tasks identified in the following section, or an expanded variation thereof, may be used in developing this Project schedule.

3.04 Proposal Format

A. COVER LETTER

The cover letter, limited to one page¹, must be signed by an individual legally authorized to bind the submitter to both its proposal and proposed pricing. NOTE: The cover letter is not intended to be a summary of the proposal itself; this is accomplished in B. (below).

The cover letter must contain the following statements and information:

1. "This proposal may be released in total as public information in accordance with the requirements of the laws covering same." (Any proprietary information must be clearly marked.)

¹ "Page" refers to one sheet of paper printed one side. A sheet printed on both sides is two pages.

2. “This proposal and proposed pricing shall be valid and binding for ONE HUNDRED EIGHTY (180) days following proposal due date and will become part of the contract that is negotiated with the City.”

3. Name, title, address, e-mail address, and telephone number of the person (or persons) to contact who is authorized to represent the firm and to whom correspondence should be directed.

4. The submitter’s federal and state taxpayer identification numbers.

B. PROPOSAL SUMMARY

Summarize your proposal and your firm’s qualifications to do this work. Please limit this section to two pages.

C. TECHNICAL APPROACH

Address in detail the methodology you will use to meet or exceed the technical specifications of the Project as described in Section 4 – Scope of Work (below). Include quality control procedures and suggested acceptance criteria. Please limit this section to four pages. Note: use Section E. Other Information (below) to list up to five projects similar to this project, begun and/or completed in the last five years.

D. PROJECT COMPLETION SCHEDULE

Provide a schedule or timeline for completion of the various phases of this project as described in Section 4 – Scope of Work (below). Please limit this section to one page.

E. OTHER INFORMATION (Please limit this section to four pages):

1. COMPANY INFORMATION

- a. Company name, home office address, contact person (name/title), contact information
- b. Parent company name (if any), address, contact person (name/title), contact information
- c. Person to contact in regard to the proposal (name/title), contact information
- d. Subcontractors, if any; company name, home office address, contact person (name/title), contact information
- e. City business license? (Required if Vendor is selected for Project)

2. CLIENT REFERENCES (please list up to five that have occurred in the last five years)

- a. Client name, contact person, contact information
- b. Name and/or description of project
- c. Approximate budget
- d. Approximate timeline

3. ACCEPTANCE OF TERMS AND CONDITIONS

- a. If your firm takes no exception to the specifications, terms, and conditions of this RFP and the attached Professional Services Agreement template, please so indicate.
- b. If your firm takes exception to the specifications, terms, and conditions of this RFP and the attached Professional Services Agreement template, please clearly state this, including each exception, reason, and suggested substitute wording, if any.

F. PROPOSED PRICING

Please provide a fixed fee total for all services included within this RFP’s scope of work (Section 4, below).

The pricing should be inclusive of all Project tasks including project management, travel, and incidental expenses as well as actual production, and accommodate a fixed fee Contract that the City will negotiate at the completion of the selection process. Please limit this section to one page.

SECTION 4 – SCOPE OF WORK

4.01 Introduction

This project involves all photogrammetric processes necessary to create high quality color orthophotography, as well as certain other aerial mapping products. The project scope will be described here as a sequence of tasks, each with deliverables and specifications. The City considers effective Vendor project management to be a key, overarching task that will receive significant weight in the Vendor selection process. This is especially true in regard to how a Vendor proposes to achieve Project timeline and deliverable quality requirements. It is emphasized that the City will apply extensive quality control reviews and approvals at key milestones, upon which authorization for subsequent tasks will depend. Submitters are welcome to expand or alter this task sequence if it more clearly or accurately reflects how the project will be conducted. The primary deliverables for this Project are:

PRODUCT	EXTENT	FORMAT
1. Orthophotography (0.25’ pixel resolution; 8 bit color)	3,000’ x 3,000’ tiles	.TIFF, GeoTIFF, MrSID
2. New or updated Digital Terrain Model (DTM)	1-piece project-wide	Esri ArcMap Geodatabase (v. 10.x)
3. New 2’ contour lines	1-piece project-wide	Esri ArcMap Geodatabase (v. 10.x)
4. New or updated impervious features (building rooflines, pavement edge, sidewalks, etc.)	1-piece project-wide	Esri ArcMap Geodatabase (v. 10.x)

Notes:

- The City will provide a sample ArcGIS (v. 10.3) geodatabase whose format should be followed for deliverables. DTM feature classes will be confined to only those features, such as mass points, breaklines, waterbodies, etc., needed to create satisfactory contours, TINs, etc.
- Data deliverables must include metadata, specifications of which will be jointly developed by the Vendor and Project Manager in the Task 1 project planning phase.

4.02 Project Management

The City expects that the successful Vendor will assign a highly competent and technically expert Vendor Project Manager to ensure a successful outcome for the Project. At a minimum, the Vendor and its designated Vendor Project Manager will implement the following for the duration of the project:

- A collaborative Project Team approach
- Bi-weekly status reports or other progress tracking mechanism
- Progress billing based on actual work accomplished

- Change management techniques, as needed
- Accurate, complete documentation
- Strict adherence to agreed-upon budget and schedule
- Proven methodology for delivering consistently superior quality orthophotography and photogrammetric vector products
- Use of photogrammetric industry best practices for large-scale, urban mapping products
- Specific, timely issue/resolution summaries as needed

4.03 Task 1 – Project Planning and Ramp-up

In this task, the Vendor (at a minimum the Vendor Project Manager) will attend a kickoff meeting with the City to review the Vendor project plan. At this juncture it is expected that the contracted scope of work will be detailed and complete, with few exceptions. This meeting will be an opportunity to clarify any remaining questions or issues about the Project and how it is to proceed. The goal is to finalize the entire body of work to be completed, roles and responsibilities, timeline, and critical quality metrics. Specifically, the City Project Manager, Vendor Project Manager, and City staff will review:

- Accuracy requirements
- Imagery acquisition
- Survey control
- Project area map
- Imagery quality parameters
- Acceptance criteria: orthophotography and vector data
- Entire scope of work as contracted
- Choice of pilot area(s)
- Remaining questions or issues, such as those that may emerge and require resolution during tasks late in the production sequence.
- Task-specific quality control specifications, procedures, and milestones
- Production sequence
- Schedule
- Budget and invoicing
- Communication plan
- Vendor resource commitment (project management, staff, equipment, etc.)

At the conclusion of this task, the Project Manager will summarize the kickoff meeting addressing all open issues and critical path items. The Project Manager will circulate this summary to the Project Team and authorize Task 2 to begin.

Vendor Deliverables: City/Vendor meeting, Vendor project plan

City Deliverables: City/Vendor meeting, meeting notes

4.04 Task 2 – Flight Planning

In this task, the Vendor will develop a flight plan for collecting digital imagery for the Project. The optimal leaf-free flight window in the Puget Sound area is very short due to sun angle and unpredictable spring weather conditions. The Flight Planning task is a critical project milestone in that the Vendor must commit aircraft, equipment, and staff resources to a data collection window that is uncertain at best. The selected Vendor must commit to perform the aerial mission in its entirety at the first opportunity after March 18, 2017 that meets the required aerial photography mission requirements.

The scope of work is the acquisition of aerial imagery suitable for production of high quality digital elevation data, high-resolution color orthophotography, and map compilation for the project area delineated in Map 1 (Page 5). The Project extent is approximately 139 square miles and subject to minimal changes prior to beginning this task. The full extent of the Project area including water areas and applicable overlaps must be collected. The City will provide digital files delineating these areal extents for the Vendor's use in Project planning.

The Vendor flight plan should address:

- Project area flight line and premarking requirements
- Coverage to the full extent of Project area tiles regardless of land/water boundary
- Sensor make and model with current USGS certification
- Type of aircraft, camera mount, and airborne GPS configuration
- Use of airborne GPS with ground control stations
- Image overlap including treatment at project edge
- Additional image overlap on all major freeway interchanges to minimize "lean" on elevated structures.
- Use of NAD83 (1991) horizontal datum², NAVD88 vertical datum, and U.S. Survey Foot mapping units
- Timeline identifying critical path tasks such as premarking
- Quality assurance/quality control procedures to be used in imagery collection
- ASPRS accuracy standards at 1:480 (1" – 40') mapping scale and NGS standards as they pertain to digital terrain model with 2' contour interval accuracy , as well as 0.25'-pixel color orthophotography at 1:480 (1" – 40') mapping scale
- Specific Vendor-City communication protocol
- Contingency options for weather, aircraft, and/or equipment issues

Vendor Deliverables: Vendor flight plan

City Deliverables: Vendor flight plan review and summary

4.05 Task 3 – Survey Control Plan

In this task, the Vendor will develop a survey control plan that will meet or exceed the Project's technical requirements. The City will provide existing survey data, which the Vendor will review and recommend the amount and distribution of *supplementary* horizontal and vertical ground control required to meet the Project's requirements. It is the Vendor's responsibility to verify both the existence and suitability of existing ground control. The Vendor will then determine which of the existing control monuments can be utilized as ground control, select locations for additional ground control that will be needed (if any), and establish additional control points.

Survey control requiring premarks will be indicated on the Flight Plan map as well as in a MS Excel spreadsheet, and delivered to the City no later than February 15, 2017. The Vendor should also furnish point names and documentation for any additional Vendor-supplied Airborne GPS ground control stations.

Vendor Deliverables: Survey control plan; survey control points (if needed)

City Deliverables: Vendor survey control plan review and summary

4.06 Task 4 – Flight(s); Imagery Collection

² As part of their proposals, Vendors should address alternative horizontal datums, if applicable

In this task, the Vendor will conduct the aerial imagery collection mission as set out in the Task 2 Flight Plan. The Vendor will schedule and execute the aerial mission(s) per the plan, utilizing the first opportunity after March 15, 2017 that meets basic aerial imagery requirements (satisfactory weather, sun angle, etc.). Imagery must not be collected when the ground is obscured by haze, snow, smoke, dust, floodwaters or other environmental factors that may hide ground detail. Clouds and/or shadows of clouds shall not appear in the imagery. To minimize ground object shadows, the sun angle/altitude will not be less than 40° above the horizon when the imagery is collected.

The Vendor will gather extra aerial imagery utilizing additional overlap to minimize feature “lean” within specified areas shown on Map 1.

The Vendor Project Manager is to communicate on a daily basis with the Project Manager with specific status information in regard to which flight lines have been completed, problems (if any) encountered, and estimated time of task completion. Within two weeks of completion of the aerial imagery flight(s), the Vendor is to process and quality check the imagery, and report the results to the Project Manager. This report is to include:

- Tabular listing and digital map (compatible with Flight Plan map) of final AGPS photo centers
- Dates and times of flights (by flight line)
- Names and contact information of individuals responsible for processing and review of imagery
- Summary of imagery geometry (overlap, crab, etc.)
- Summary of imagery quality (density, defects, consistency, etc.)
- Equipment and procedures used in evaluating imagery geometry and quality
- Description of reflights needed (if any; reference photo centers from Flight Plan map)

Vendor Deliverables: Imagery files; summary report (document); adjusted AGPS photo center positions with standard deviations (map and MS Excel spreadsheet)

City Deliverables: Vendor flight plan review and summary

4.07 Task 5 – Imagery Review

As flight(s) are completed and aerial imagery is available, Vendor will proceed to review the imagery including those spot exposures covering areas of elevated structures, in accordance with the agreed upon specifications. The imagery must support the production of high quality orthophotography and other deliverables listed earlier. The goal of this task is to identify unacceptable imagery, if any, so that reflights can be scheduled with all due haste. The Vendor will utilize the production environment, equipment, procedures, trained staff, and specifications agreed to in the Task 1 kickoff meeting. If specifications must be adjusted, the Vendor will fully disclose this to, and obtain concurrence from, the City before proceeding. Of particular importance are any quality issues pertaining to radiometry, geometry, cleanliness, image coverage, file naming, and usability for analytical aerotriangulation (AAT) as well as orthophotography production. Rework will be identified and scheduled as necessary. The City expects that the imagery collection task will be substantially complete before AAT begins.

Vendor Deliverables: Raw image files (georeferenced to ABGPS photo center coordinates), quality control reports

City Deliverables: None

4.08 Task 6 – Aerotriangulation

The Vendor will utilize the reviewed/accepted imagery, survey control, airborne GPS (photo center positions), and state of the art software solutions to complete this task. At the conclusion of this task, the Vendor Project Manager will brief the Project Manager on the task outcome, including the incidence of errant, discarded, or anomalous network points, and the resolution of these gaps. The mapping specifications to be used in this and all subsequent production are:

Datums/Units

NAD83 (1991) - Horizontal Datum

NAVD88 - Vertical Datum

U.S. Survey Feet

Projection/Coordinate system

Washington State Coordinates (North Zone)

Vendor Deliverables: AAT Report, AAT solution (electronic format), quality control summary

City Deliverables: Historic AAT data; if requested

4.09 Task 7 – Pilot Test

The City requires that the Vendor conduct a limited pilot test with actual orthophoto production to demonstrate the quality that will be achieved throughout the Project area. To expedite this task, the City will choose one test area for which suitable surface elevation data already exists, crossing at least two tiles and multiple image frames. The City participants, the Project Manager, and the Vendor Project Manager will review the pilot and jointly develop the acceptance criteria that will be utilized in the review and acceptance of all remaining orthophotography deliverables. Vendors should note that treatment of seams, color balance, image sharpness, detail in shadow and highlight areas, and elevated structure “lean” are all criteria that the City will examine closely (Please see Task 12 - Deliverable Review/acceptance, Page 19).

Vendor Deliverables: Orthophoto sample

City Deliverables: Elevation data for pilot test area

4.10 Task 8 – DTM Update

In this task, the Vendor will create and/or update the City’s digital terrain model (DTM), revising elevation (mass) points and breaklines for the Project area as shown on Map 1. Vendors responding to this RFP should discuss the technical issues surrounding the updating of DTM data from a variety of historical sources including 2016 lidar data collected for this area, and propose an approach to effectively deal with these issues. The City requires that updates to the DTM – i.e., all new, revised, or deleted features - are to be coded or otherwise flagged so that they can be easily located and reviewed by City staff in superimposition with existing data.

Vendor Deliverables: New or updated project-wide DTM, quality control reports

City Deliverables: Existing Project area DTM and lidar data

4.11 Task 9 – Orthophoto Production

In this task, the final orthophotography production will be completed, including all rectification, mosaicking, graphic editing, and clipping of final tiles. This mapping within the Project area will include those areas shown on Map 1. Resampled orthophotography should not enter production until project-wide high-resolution (0.25-foot pixel) orthophotography products are done, delivered, and accepted by the City. The optimal center portion from all original images will be used in the final production process. Spot imagery as shown on Map 1 is to be used appropriately to minimize “lean” on elevated structures such as bridges.

Final orthoimagery products are to be organized and identified by using the tile naming convention currently in use by the City. The Vendor Project Manager will ensure that the production sequence agreed upon in the Task 1 kickoff meeting is followed, and also provide advance notification of product delivery to the Project Manager.

Seam lines created in the orthophotography mosaicking process are to be saved as a project-wide polygon shapefile, in the same coordinate space as the final products, and attributed with the original image identifier for each polygon.

The City is seeking as orthophoto deliverables only the highest image quality reasonably attainable through current photogrammetric industry best practices. This includes such parameters as image sharpness, color balance, detail visibility in shadow and highlight areas, treatment of buildings and elevated structures, defects and blemishes, geometry (including edgematching between adjacent images), and treatment of seam lines. Regardless of the somewhat subjective nature of orthophotography quality control, the City expects that the selected Vendor will propose, implement, and achieve a uniformly high standard of orthophoto quality on this Project. The City will work closely with the selected Vendor at the beginning of the Project to establish clear product acceptance criteria.

Vendor Deliverables: Orthophotography, mosaic seam line data, quality control reports

City Deliverables: Deliverable reviews

4.12 Task 10 – Contour Production

This task involves using the updated DTM to create topographic contour lines with 2-foot intervals. This mapping is to be done within the Project area shown on Map 1. The Vendor must utilize topology checks and other automated techniques to insure that contour lines do not intersect with others or themselves, do not contain gaps, and if closed are longer than the minimum agreed upon at the beginning of the project. If the Vendor is proposing a tiled approach to contour production, features must connect properly at tile boundaries. The City will provide size/length specifications for closed contour inclusion.

Vendor Deliverables: As per table, Page 13

City Deliverables: Deliverable reviews, existing Project area vector data

4.13 Task 11 – Impervious Feature Mapping

This task involves creating new or updated impervious features as follows:

- Building rooflines
- Decks

- Driveways
- Sidewalks
- Streets
- Parking lots

The Vendor should also ensure that all new or revised polygon are closed, can be clearly differentiated in donut (courtyard) situations, and do not overlap themselves or adjacent outlines. Spot elevation attributes are to be collected for all new or revised building rooflines.

Vendor Deliverables: As per table, Page 13

City Deliverables: Deliverable reviews, parcel permit activity shapefile, existing Project area vector data

4.14 Task 12 – Deliverable Review/acceptance

This task extends throughout the Project and involves the systematic quality checking by City staff of all Vendor deliverables; the notification by the Project Manager of product shortcomings, if any; the timely reworking/redelivery of rejected Vendor deliverables, as necessary; and the final City acceptance of each deliverable. In light of the project timeline, the City’s Vendor selection process will place special emphasis on 1) Vendors’ demonstrated ability to meet project schedules, and 2) superior Vendor product quality. Vendor deliverables are of three types and will be reviewed/accepted as follows:

1. Meetings, plan documents, communications: These are typical of any major project and are primarily for progress tracking and overall project documentation purposes. The Project Manager will review these promptly, notify and distribute to Project Team participants, contact the Vendor Project Manager as necessary for clarifications or corrections, accept, and archive.
2. Interim data products: These include digital components of the production process that are used in creating the final products. Examples are the raw imagery, photo center GPS coordinates, the AAT solution/report, and mosaic seam lines. The City requires these as project deliverables for its internal QC efforts, as well as for potential use in future work. The Project Manager along with a photogrammetric industry expert will review these promptly, notify and distribute to Project participants, contact the Vendor Project Manager as necessary for clarifications or corrections, accept on behalf of the City, and archive.
3. Final data products: These include the items noted in the Page 13 table at the beginning of this section. The following acceptance criteria, plus any other criteria established in the Task 7 pilot test, will be used:
 - Deliverables without correct identification or spatial extents will be immediately returned for Vendor rework.
 - Deliverables will undergo a random (spot) check, and if this review reveals 10% or more incidence of defects, the products will without further review be returned to the Vendor.
 - Deliverables passing the spot check will undergo a thorough check, and if this review reveals 10% or more incidence of defects, the products will without further review be returned to the Vendor for correction. The Project Manager and City staff may reduce the amount of quality checks if the overall quality of deliverables appears to be high.

Vendor Deliverables: Table (Page 13) items

City Deliverables: Deliverable reviews, QC documentation

4.15 Task 13 – Project Closeout

In this task, the Vendor will organize and return all project materials to the City, and meet to resolve any remaining project issues. The Vendor will submit with the final invoice a brief summary of the project. The City will complete all final product reviews and expedite final payment to the Vendor.

Vendor Deliverables: Project materials, final project report, City/Vendor meeting

City Deliverables: Deliverable reviews, contract closeout, City/Vendor meeting, meeting notes

SECTION 5 – PROPOSAL EVALUATION

5.01 Evaluation Procedures

Proposals will be evaluated by the Selection Committee. The Selection Committee will consider the completeness of a Vendor’s proposal and how well the proposal meets the needs of the City. All proposals will be evaluated using the criteria outlined in 5.02 (below).

5.02 Scoring and Evaluation Factors

The evaluation factors reflect the critical priorities of both product quality and project schedule, as discussed throughout this RFP. Pricing will only be considered after an initial ranking of proposals, and possibly after interviews, if any. Receiving high quality deliverables in their entirety by the end of 2017 is the main Project priority. The objective is to select a Vendor capable of providing quality services in the specified time frame within the City’s available budget. Evaluations of all proposals will be based on criteria as defined below.

Evaluation Criteria	Possible Points
Responsiveness/Completeness of Proposal (i.e., was each required section completed and everything included that was required by the RFP)	15
Experience/Qualifications/Resource Plan (i.e., Vendor’s experience working within the requested services arena; Vendor’s experience working with local government; Vendor’s ability to meet the production schedule; Vendor’s ability to successfully complete the scope of services on time and on budget; Vendor’s ability to successfully work with client staff; Vendor’s proven success in recent projects)	35
Technical Approach and Scope of Services (i.e., does the Vendor understand what it will take to successfully achieve the goals and objectives of the requested services; does the Vendor understand the City’s quality and timeline expectations; merit of proposed technical approach)	40
Pricing	10
Total Points Possible	100

5.03 Vendor Presentation and/or Committee Interview

After the proposals are evaluated, the Selection Committee will determine whether formal presentations and interviews are necessary, and if so, which Vendors may be invited to make a formal presentation and/or participate in a panel interview with the Selection Committee. The City may choose not to require formal presentations or interviews. The City may choose to contact officials from other jurisdictions regarding the Vendor, their prior work experience and their ability to successfully complete the scope of services. The City may request clarification or additional information from a specific Vendor in order to assist in the City's evaluation of a proposal. Finally, the City may require changes in the scope of services as deemed necessary by the City, before execution of the Contract.

5.04 Contract Award and Execution

The City reserves the right to make an award without further discussion of the proposal submitted. Therefore, the proposal should be initially submitted on the most favorable terms the Vendor can offer.

The City shall not be bound or in any way obligated until both parties have executed the City's Contract.

The Vendor selected as the apparently successful Vendor will be expected to enter into a contract with the City. The existing City Professional Services Agreement is included as an attachment to this RFP. Please review contract language prior to submitting a proposal. This document is for informational purposes only and is not part of the submittal requirements.

The general conditions and specifications of this RFP and the successful Vendor's response, as amended by Contract between the City and the successful Vendor, including e-mail or written correspondence relative to the RFP, will become part of the Contract documents. Either party may propose additional Contract terms and conditions during negotiation of the final Contract.

If the selected Vendor fails to sign the Contract within five (5) business days of delivery of the final Contract, the City may elect to cancel the award and award the Contract to the next-highest ranked Vendor.

No cost is chargeable for any Vendor activity that occurs *prior to* the Contract execution date.

SECTION 6 – APPENDIX

6.01 Professional Services Agreement



PROFESSIONAL SERVICES AGREEMENT

Job Name and Number

The City of Kirkland, Washington, a municipal corporation ("City") and _____, whose address is _____ ("Consultant"), agree and contract 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 work 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 monthly 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 work not completed in a satisfactory manner until such time as Consultant modifies such work 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 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 work 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 contract 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 work. 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 contract 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.

V. GENERAL ADMINISTRATION AND MANAGEMENT

The _____ 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 work 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

Consultant 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 resulting from its negligence or breach of any of its obligations in performance of this Agreement.

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 Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes 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 written on 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 written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, 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.
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 insurance 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 work 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 work.

F. Occurrence Basis

Any policy of required insurance shall be written on an occurrence basis.

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 of 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 contract. Any such work or services shall be considered as additional work, supplemental to this contract. Such work may include, but shall not be limited to, _____ . Additional work shall not proceed unless so authorized in writing by the City.

Authorized additional work will be compensated for in accordance with a written supplemental contract between the Consultant and the City.

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

CONSULTANT:

CITY OF KIRKLAND:

By: _____

By: _____
Marilynne Beard, Deputy City Manager

Date: _____

Date: _____