December 14, 2016

Kennewick School District Attn: Keith Colee, Maintenance and Operations Manager 622 North Kellogg Kennewick, Washington 99336

RE: Kennewick School District, Drinking Water Sampling Proposal

Dear Keith:

Thank you for the opportunity to prepare this professional services proposal to complete drinking and cooking, inclusive of food preparation, water fixture sampling for the Kennewick School District (District). Current pending regulations, Washington Administrative Code (WAC) 246-366A-130 and -135, Environmental Health and Safety Standards for Primary and Secondary Schools require school districts to test drinking and cooking water for lead and copper. While the pending regulation may take effect in July 2017, the District has elected to complete sampling as a manner of best practices at this time.

Fulcrum Environmental Consulting, Inc. (Fulcrum) has completed sampling for a number of school districts in central and eastern Washington. Given the size of the Kennewick School District and expected implementation of pending Washington State regulations, rather than simple representative sampling of a large percentage of fixtures, focused planning and fixture selection is important. Fulcrum has been working in conjunction with the District for the past several months to develop a sampling and analysis plan and quality assurance project plan (SAP/QAPP) that meets the District's desire to evaluate drinking water.

Sampling Rationale

To assist with project planning, the District prepared building maps with the location and general use of all water fixtures in the District's buildings. These drawings and associated fixture counts were reviewed by Fulcrum to calculate the minimum percentage and recommended number of samples to be collected.

More than 1,500 fixtures "used for cooking or drinking water use" are present in the District. These fixtures include drinking water fountains, sinks in classrooms, building kitchen faucets, work rooms, lounges, etc. A summary is provided in Table 1.

Under the pending regulation, select buildings, including the District's high schools and middle schools, would be sampled a lower frequency (25%) than elementary schools. Given the frequent consumption from these fixtures, Fulcrum recommends sampling at a rate greater than the minimum provided in the pending regulation.

In addition, Fulcrum estimates that up to 5% of fixtures may not have been located during the previously completed survey. As a result, Fulcrum has generally estimated three to five additional samples per building to address this shortfall.

Fulcrum recommends that a total of 1,061 samples be collected and submitted for lead and copper analysis, including 1,001 samples collected from the District's buildings, and 30 blank samples and 30 spiked samples for quality control purposes.

Fixture Type	Elementary Schools	High Schools	Middle Schools	Administrative and Sports Buildings	Totals
Drinking Fountains	360	93	199	6	658
Kitchen, Life Science Classrooms, Food Labs, etc.	72	34	26	8	140
Staff Work Rooms, Lounges, and Nurses' Rooms	52	23	19	5	99
Classroom Sinks	397	84	203	1	685
Total Fixtures Present	881	234	447	20	1,582
Minimum WAC 366A Rate	50%	25%	25%	25%	-
Minimum WAC 366A Samples	441	59	112	5	617
Recommended Samples	584	174	174	20	952
With Contingency of 5%	613	183	183	22	1,001
Recommended Blank or Spike Samples	34	12	10	4	60
Total Samples	647	195	193	26	1,061

Table 1: Fixture Type, Building Type, and Minimum and Recommended Sampling Rate

The District has selected RJ Lee Group's Columbia Basin Analytical Laboratory, a Washington State Department of Ecology accredited water quality laboratory, to complete analysis of collected water samples for lead and copper.

Scope of Work

Fulcrum proposes to assist Kennewick School District with drinking water sample collection and delivery for analysis. As a portion of these tasks, Fulcrum has prepared a Sampling and Analysis Plan/Quality Assurance Project Plan (SAP/QAPP), assisted in pre-project planning, and reviewed project objectives with the Benton-Franklin Health District.

Fulcrum's remaining tasks include the following:

Sample Collection

Fulcrum's two-part sampling will consist of an initial site visit to locate and flush each water sampling location. Following flushing for about one minute, a labeled plastic bag will be secured to the fixture. The plastic bags are marked with signage that indicates testing is in progress and the fixture should not be disturbed.

Returning after a period of about 14 hours, Fulcrum will collect the drinking water samples. Each sample will consist of the "first draw" and total 250-milliliter (mL) of water. This water volume is intended to represent

the water quality in the fixture, tubing connecting the fixture to the building piping, and potentially a portion of the building piping.

Sample Delivery

Fulcrum will prepare a chain-of-custody for samples collected in each building and deliver samples to RJ Lee Group's Columbia Basin Analytical Laboratory in Pasco, Washington for analysis.

Data Review

Fulcrum will complete a review of laboratory analysis following receipt of each batch from the laboratory. Fulcrum's review will focus on comparison of blank and spike results and the laboratory's provided internal quality assurance/quality control (QA/QC) calculations.

District Notification

Upon receipt of the laboratory results, Fulcrum will review and notify the District of any detectable results in excess of the U.S. EPA's 15 parts per billion (ppb) action level for lead and 1,300 parts per million (ppm) for copper. Note, while WAC 246-366A-130 establishes a limit of 20 ppb for lead, this is contrary to current federal regulations which establish an acceptable level of only 15 ppb Fulcrum will provide an initial recommendation to the District for resampling, fixture use cessation, etc. as is warranted.

Report Preparation

For each building, Fulcrum will prepare an individual letter report presenting sample collection methodology, laboratory results, and recommendations. The final report for each building will be prepared within 10 business days of receipt of laboratory analysis.

Database Preparation

To assist with the District's long term fixture management, Fulcrum will prepare a spreadsheet for each building with the location, apparent use, fixture description, type, and where applicable the results of testing. These spreadsheets will be provided to the District for review by building facilities or custodial staff prior to delivery to the District. As fixture replacement is completed as part of the District's routine maintenance, the spreadsheet can be updated through the work order process to assist with fixture tracking.

Results Communication

On an as-needed basis, Fulcrum will assist the District with communications and public meetings related to the results of the sampling and analysis.

Schedule

Fulcrum estimates that about 240 hours of time will be required to accomplish flushing, sample collection, chains-of-custody, and sample delivery of the approximate 1,000 water samples. To accomplish the most rapid sample collection and analysis, Fulcrum proposes to complete flushing beginning on Tuesday, December 20th and concluding on Thursday, December 22th. During this period Fulcrum will work a shift beginning about 6:00 am and concluding about 10:00 pm to accomplish the majority of the sample collection.

Fee Estimate

Fulcrum proposes to complete project tasks on a time and materials basis for a fee as shown in Table 2. A 2016 Standard Rate Schedule for select staff to be utilized during completion of project tasks is attached. Additional fees will be accrued for unanticipated delays in access to the school, etc.

Table 2: Project Fee Estimate

Task	Fee
General project meetings and Project Management	\$3,000
SAP/QAPP	\$3,000 to \$4,000
Flushing and Sample Collection	\$18,000 \$22,000
Field supplies, Per Diem, Mileage, etc.	\$4,000
Reporting and Technical Review	\$10,500 \$11,500
Results Communications	_ 1
Total Project Fee Estimate	\$38,500 to \$44,500

¹ Project tasks will be established during the project and will be invoiced on a time and materials basis.

If this scope of work and fee estimate is acceptable to you, please sign below, as well as the attached Consulting Services Agreement, and return a copy by email to <u>rmathews@efulcrum.net</u> as notice to proceed. Please contact me at 509.728.2424 if you have any questions.

Sincerely,

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Ryan K. Mathews, CIH, CHMM Principal

Acceptance of Proposal:

The above prices, scope of work, and conditions are satisfactory and are hereby accepted. You are authorized to complete the work as specified. Any alteration or deviation from above scope of work involving extra costs will be completed upon orders, and will become an extra charge over and above the estimate. I have reviewed the attached Consulting Services Agreement and agree to the conditions presented therein.

Signature:	Date:	
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Name:	Title:	
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CONSULTING SERVICES AGREEMENT ("CSA")

PROFESSIONAL SERVICES – Fulcrum Environmental Consulting, Inc. (hereinafter "Fulcrum") agrees to provide Client, for Client's sole benefit and exclusive use, the consulting services identified in Fulcrum's proposal. This Consulting Services Agreement (hereafter "CSA") gives no rights or benefits to any party other than Client and Fulcrum. Unless otherwise agreed to in writing, fees billed will be for technical, professional, clerical services, including travel time. The fees will be based on Fulcrum's Rate Schedule of hourly service fees in addition to any specific fees presented in the proposal.

REIMBURSABLE EXPENSES, SUBCONTRACTOR, VENDOR, AND LABORATORY ANALYSIS FEES – Reimbursable expenses, including but not limited to: analytical fees, subcontractor fees, shipping costs, reproduction costs, mileage, meals, lodging and other travel costs will be charged at cost plus fifteen (15) percent. Equipment and supplies will be charged at a rate based on Fulcrum's Standard Rate Schedule in addition to any specific fees presented in the proposal.

CLIENT FURNISHED INFORMATION – Client shall provide to Fulcrum the following: 1) all information regarding the property including but not limited to, the location of any buried utilities or structures, 2) any requirements for right of entry or work permits, security clearances, licenses or any other required permissions. Client hereby releases Fulcrum from all liability for damage or injury arising from damage to subterranean structures (pipes, tanks, pipelines, etc.) not identified in writing by Client.

OWNERSHIP OF DOCUMENTS – Unless otherwise agreed, all documents prepared by Fulcrum are the property of Fulcrum. Client is responsible for appropriate use of the information and recommendations provided by Fulcrum. Any and all such information and recommendations are accurate only as to the specific designated project. Client hereby agrees that any reuse of such information or deviation from Fulcrum's recommendations, shall release Fulcrum from all liability.

SCOPE OF WORK/CHANGE ORDERS – All information contained in reports produced by Fulcrum are time and project-specific, and are not intended for any other project design. Any changes must be approved in writing by both parties.

STANDARD OF CARE AND RELEASE OF LIABILITY – Fulcrum's services will be performed with a reasonable degree of skill and diligence such as normally employed by professionals performing such services in Eastern Washington/Northern Idaho. No other warranty or representation, either expressed or implied, is included or intended in Fulcrum's proposals, contracts, reports, and communications. Notwithstanding any other statement in this CSA or made by Fulcrum elsewhere, Client hereby releases and holds Fulcrum (and its agents) harmless from any claim, damage, or cost which is not the result of Fulcrum's sole negligence.

To the fullest extent permitted by law, Client expressly agrees to limit any and all claims of Client, including but not limited to claims alleging negligence, breach of contract or breach of warranty against Fulcrum and/or its employees, for all losses of any kind, including economic and consequential losses to an amount not to exceed either the total fee paid under this CSA. In the event Client makes a claim against Fulcrum, at law or otherwise, for alleged negligence, error, omission, breach or other act, and Client fails to enter judgment against Fulcrum, Client shall pay all costs and attorney fees incurred by Fulcrum in defending itself against the claim.

CLIENT INDEMNIFICATION – Client acknowledges that Fulcrum is not responsible for the creation or presence of contamination/pollution at the property. Client agrees to indemnify, defend, and hold harmless Fulcrum and its officers and employees from and against any claim, suit, action, or liability due to or related to conditions at the property except to the extent such claim, suit, action, or liability is caused solely by the negligence of Fulcrum. If client is obligated to provide a defense to Fulcrum, Fulcrum has the right to select which counsel will be used for such a defense. For the purposes of this clause, conditions shall include the actual, alleged or claimed existence, discharge, release, or escape of any



irritant, pollutant, contaminant, or hazardous substance into or upon the atmosphere, land, groundwater, surface water, or sediment at or near the property.

SITE SUPERVISION – Client agrees that Fulcrum has no supervisory authority or responsibility for: 1) the specific working conditions at the site, 2) the safety precautions at a site, and/or for any hazards resulting from the actions of any contractor or third party. Client agrees Fulcrum has no duty to inspect, supervise, note, correct or report any health or safety deficiencies of Client, contractors or third parties at the site.

INVOICING AND COLLECTION - Invoices for Fulcrum's services will be issued monthly, payable upon receipt. Client agrees to notify Fulcrum in writing of any billing errors within fifteen (15) days of the date of the invoice. Invoices are due upon receipt. Customized invoices, full backup, or manual backup of project expenses and related information can be provided for an additional charge. If payment is not received within thirty (30) days of the invoice date, whether disputed or not, a guaranteed interest rate on these amounts will be charged at one percent (1 %) on the unpaid balance. In the event that Fulcrum must seek legal services to collect the compensation due Fulcrum, Client agrees to pay Fulcrum all attorney fees and costs incurred to collect the invoice and penalties, whether or not suit is instituted. If a legal action and/or arbitration occur, attorney fees shall be awarded to the party in whose favor judgment is entered. In the event Client fails to compensate Fulcrum pursuant to this CSA, Fulcrum shall charge a contingent collection fee of 35% of the debt as provided in RCW 19.16.250 (18). Fulcrum reserves the right to withhold deliverables and/or suspend work on projects for late or non-payment.

SUSPENSION OR TERMINATION – Client and Fulcrum retain the right to terminate this CSA. If Client requests suspension or termination of Fulcrum services prior to completion, Fulcrum has the right to complete such work as is necessary to place the files in order, and to complete a report on the services provided. If termination occurs, Client shall compensate Fulcrum for all fees and expenses required to accomplish such closing. If a project is delayed, Fulcrum reserves the right to schedule the requested services within existing commitments.

MEDIATION, ARBITRATION AND TIME TO PRESENT NOTICE OF CLAIM OF LEGAL ACTION- Any dispute arising out of Fulcrum's services shall be mediated unless both parties agree otherwise. The parties to this CSA agree that prior to any legal action being filed in regard to Fulcrum's services, a notice of claim must be presented 60 days prior to any legal action being filed. Any such notice of claim must be received by the party against whom a claim is to be made within 2 years of the date of Fulcrum's final invoice. All disputes under this contract or in any way relating to Fulcrum's services must be filed in Spokane County, Washington and are governed by Washington state law. Client and Fulcrum hereby agree that any legal action filed shall be subject to Mandatory Arbitration regardless of the amount in controversy. The parties further hereby agree to waive their rights to "de novo" any arbitration award, in regard to matters pertaining to less than \$25,000 (including counterclaims). The parties explicitly acknowledge that this provision waives their right to jury trial in regard to matters of less than \$25,000. This \$25,000 amount referenced above includes any and all counterclaims.

SEVERABILITY AND SURVIVAL – In the event that any provision of this CSA shall be held invalid and unenforceable by a decision of a court of competent jurisdiction, the remaining provisions shall be valid and binding. All terms of this CSA allocating or limiting liability shall survive the completion of the services hereunder and/or the termination of this CSA.

ENTIRE AGREEMENT – This Consulting Services Agreement (CSA) and the proposal constitutes the whole agreement between Client and Fulcrum and supersedes all prior agreements.

Client Signature



STANDARD RATE SCHEDULE

Issue Date July 1, 2016

Compensation will be determined on the basis of time and expenses in accordance with the following rate schedule unless a fixed fee amount is so indicated in the proposal or services agreement.

Professional Services

Personnel Principal Project Manager Project Scientist Field Manager	Hourly Rate \$150 to \$200 \$120 to \$150 \$110 to \$140 \$100 to \$120
Environmental Scientist	\$90 to \$100
Environmental Technician	\$75 to \$85
Administrator and Project Staff	\$60 to \$90

Equipment and Materials Fee Schedule

Equipment and Materials	Unit Rate
Niton 306 XLP XRF Analyzer	per day \$300
Fluke TIR1 Thermal Imaging Camera	per day \$150
Photo Ionization Detector and Four Gas Monitor	per day \$150
Particle Meter (Lighthouse 3600 or similar)	per day \$100
Horiba U-22 Multi-parameter with flow through cell	per day \$150
Nikon/Canon dSLR	per day \$100
Field Microscope Kit for onsite PCM Analysis	per day \$100
Specialized Sampling Equipment	per day \$100
PCM Analysis – Standard Turn-Around-Time/Rush	per sample \$30/\$60
Mileage	per mile \$0.70

Software ArcGIS AutoCAD InspectManager Hourly Rate per day \$30 per day \$30 per day \$25

All other costs and expenses shall be billed with 15% markup for administration and handling. Overtime, rush, holiday and weekend work necessitated by Client's directive is billed in addition to the fees quoted. Expert witness scope and fee are agreed on a project specific basis. Fulcrum reserves the right to periodically change billing rates and fees.