



## CITY COUNCIL MEETING

### January 19, 2016 – Agenda

Mt. Si Senior Center, 411 Main Ave. S., North Bend, Washington

#### 7:00 P.M. – CALL TO ORDER, ROLL CALL, FLAG SALUTE

#### CONSENT AGENDA:

		Pg.#
1) Minutes	Council Meeting of January 5, 2016	1
2) Checks	December 31, 2015 – 62136 through 62239, in the amount of \$240,172.84 January 19, 2016 – 62240 through 62265, in the amount of \$325,037.91	
3) AB16-005	Ordinance – Amending NBMC 14.16 RE Surface Water Design Manual	Mr. Rigos 5
4) AB16-006	Motion – Authorizing Work Order with Golder for Annual Water Mitigation Report	Mr. Rigos 15
5) AB16-007	Motion – Authorizing Contract & Purchase Order with Keithly Electric	Mr. Rigos 23

**CITIZEN’S COMMENTS:** (Please restrict comments to 3 minutes)

#### COMMISSION AND COMMITTEE REPORTS:

Planning Commission	Community & Economic Development – Councilmember Pettersen
Parks Commission	Finance & Administration – Councilmember Rosen
Economic Development Commission	Public Health & Safety – Councilmember Gothelf
	Transportation & Public Works – Councilmember Loudenback
	Mayor Pro Tem – Councilmember Loudenback
	Eastside Fire & Rescue Board – Councilmember Gothelf

#### INTRODUCTIONS:

6) AB16-008	Resolution - Declaring Emergency & Authorizing Contracts RE WWTP UV System	Mr. Rigos 27
-------------	--	--------------

**MAYOR, COUNCIL & ADMINISTRATOR CONCERNS AND INITIATIVES:** (Business and general information presented that may be deliberated upon by the Council. Formal action may be deferred until a subsequent meeting; immediate action may be taken upon a vote of a majority of all members of the Council.)

**Executive Session** – To Discuss Real Estate Acquisition, pursuant to RCW 42.30.110(1)(i)

#### ADJOURNMENT:

**DRAFT**

**NORTH BEND CITY COUNCIL MINUTES**

**January 5, 2016**

Senior Center, 411 Main Ave. S., North Bend, Washington

**CALL TO ORDER, ROLL CALL:**

Mayor Hearing called the regular meeting to order at 7:00 p.m.

**SWEARING IN OF ELECTED OFFICIALS:**

King County Councilmember Kathy Lambert administered the oath of office to Mayor Hearing. Mayor Hearing administered the oath of office to Councilmembers Brenden Elwood, Trevor Kostanich, Jonathan Rosen, and Martin Volken.

**Councilmembers Present:** Elwood, Gothelf, Kostanich, Loudenback, Pettersen, Rosen and Volken.

Mayor Hearing recessed the meeting at 7:09 p.m. for a five minute break. The meeting was called back to order at 7:15 p.m.

**CONSENT AGENDA:**

**Minutes** – Special Council Meeting of December 8, 2015

**Payroll** – **December 4, 2015** – 27393 through 27400, in the amount of **\$144,361.49**

**December 18, 2015** – 27401 through 27407, in the amount of **\$159,321.59**

**December 31, 2015** – 27408 through 27415, in the amount of **\$205,121.05**

**Checks** – **December 15, 2015** – 62008 through 62080, in the amount of **\$191,231.90**

**December 30, 2015** – 62081 through 62125, in the amount of **\$188,289.65**

**January 5, 2016** – 62126 through 62135, in the amount of **\$90,862.91**

**AB16-001** – Motion Authorizing Agreement with WSDOT RE Bendigo Right Turn Lane Project

Councilmember Gothelf **MOVED**, seconded by Councilmember Elwood to approve the consent agenda as presented. The motion **PASSED** 7-0.

**CITIZEN'S COMMENTS:**

**Dave Olson**, 440 Main Ave S, provided a report on the 2015 Kiwanis Giving Tree fundraising campaign.

**DRAFT**

**ANNOUNCEMENTS, PRESENTATIONS, APPOINTMENTS:**

King County Councilmember Kathy Lambert provided a report on the upcoming legislative session, new King County Councilmembers, emergency preparedness safety plans, Best Starts for Kids program, and a bill she would be supporting which would offer mediation assistance to municipalities that experience difficulties during contract negotiations with other municipalities.

**Presentation – Police Services Update**

Police Chief McCulley provided a brief update on police services which included discussion on the following items: staffing, calls for service, and community oriented policing. He noted a more in-depth report would be provided at the February 2, 2016 City Council meeting.

**AB16-002 – 2016 Council Standing Committee Appointments**

**Audio: 25:11**

Mayor Pro Tem Loudenback proposed the following 2016 Council Committee appointments for Council's consideration:

**Community & Economic Development Committee:**

Chair – Councilmember Pettersen

Members – Councilmember Elwood, Councilmember Rosen

**Budget, Finance & Administration Committee:**

Chair – Councilmember Rosen

Members – Councilmember Gothelf, Councilmember Volken

**Public Health & Safety Committee:**

Chair – Councilmember Gothelf

Members – Councilmember Elwood, Councilmember Kostanich

**Transportation & Public Works Committee:**

Chair – Councilmember Loudenback

Members – Councilmember Kostanich, Councilmember Pettersen

Councilmember Loudenback **MOVED**, seconded by Councilmember Gothelf to approve AB16-002 confirming the 2016 appointments to the Council's Standing Committees. The motion **PASSED** 7-0.

**INTRODUCTIONS:**

**AB16-003 – Ordinance 1575 Amending NBMC 13.36 RE Onsite Septic Systems**

**Audio: 28:32**

**DRAFT**

Public Works Director Rigos provided the staff report.

Si View Metropolitan Parks District Executive Director Travis Stombaugh addressed the benefit passage of the ordinance would have on his organization and the general public.

King County Councilmember Kathy Lambert elaborated on King County grant funding that would be available for certain restoration projects including the historic Tollgate Farmhouse.

Councilmember Loudenback **MOVED**, seconded by Councilmember Pettersen to approve AB16-003, an ordinance amending Chapter 13.36 of the North Bend Municipal Code regarding onsite public septic drain fields, as a first and final reading. The motion **PASSED** 7-0.

**AB16-004** – Ordinance 1576 Amending NBMC Chapter 18 RE CLDR

**Audio: 35:01**

Community & Economic Development Director Estep provided the staff report.

Councilmember Pettersen **MOVED**, seconded by Councilmember Loudenback to approve AB16-004, an ordinance amending North Bend Municipal Code Chapter 18 relating to the Constrained Low-Density Residential Zone, as a first and final reading. The motion **PASSED** 7-0.

**MAYOR, COUNCIL, AND ADMINISTRATOR CONCERNS AND INITIATIVES:**

Councilmember Rosen wished everyone a Happy New Year and welcomed new Councilmembers Elwood, Kostanich and Volken.

Councilmember Gothelf echoed Councilmember Rosen's comments regarding the new Councilmembers. Additionally, he announced Eastside Fire & Rescue had hired Jeff Clark as their new fire chief and his first day with the organization would be February 2, 2016.

Councilmember Elwood thanked staff and fellow Councilmembers for their help and support during his first days in office and noted he looked forward to the coming year.

Councilmember Kostanich echoed Councilmember Elwood's comments and added he looked forward to the learning process involved as part of being a new Councilmember.

Councilmember Pettersen echoed Councilmember Rosen's comments regarding the new Councilmembers and congratulated them on running a successful campaign. She welcomed back reelected officials Mayor Hearing and Councilmember Rosen and commented she looked forward to the challenges ahead in the New Year.

Councilmember Volken thanked everyone for their warm welcome and commented how much he looked forward to learning and being part of the process that being a new

**DRAFT**

Councilmember entailed.

Councilmember Loudenback noted he looked forward to working with the new Councilmembers in the upcoming year.

City Administrator Lindell welcomed the new Councilmembers and reelected officials Councilmember Rosen and Mayor Hearing. She reminded all of the upcoming January 20<sup>th</sup> Council Retreat and reported on possible discussion items for the meeting.

Mayor Hearing spoke regarding the following items:

- Mike McCarty, 2015 Employee of the Year
- 2016 Newly Elected and Reelected Councilmembers

**ADJOURNMENT:**

Councilmember Gothelf **MOVED** to adjourn, seconded by Councilmember Loudenback. The motion **PASSED** 7-0.

The meeting adjourned at 7:55 p.m.

ATTEST:

\_\_\_\_\_  
Kenneth G. Hearing, Mayor

\_\_\_\_\_  
Susie Oppedal, City Clerk



## City Council Agenda Bill

<b>SUBJECT:</b>		<b>Agenda Date: January 19, 2016</b>	<b>AB16-005</b>
<b>Ordinance Amending NBMC 14.16 to Delay Adoption of New (2016) King County Surface Water Design Manual (SWDM)</b>		Department/Committee/Individual	
		Mayor Ken Hearing	
		City Administrator - Londi Lindell	
		City Attorney - Mike Kenyon	
		City Clerk - Susie Oppedal	
		Community & Economic Development - Gina Estep	
		Finance - Dawn Masko	
		Public Works - Mark Rigos, P.E.	
Cost Impact: N/A			
Fund Source: N/A			
Timeline: Immediate			
<b>Attachments:</b> Ordinance (redline)			
<p><b>SUMMARY STATEMENT:</b></p> <p>The City of North Bend has adopted the King County Surface Water Design Manual (“SWDM” or “Manual”) as part of the City’s Stormwater Management Code (NBMC Chapter 14.16). The current version of the Manual is the 2005 edition with minor amendments made in 2008. During the past year or so, King County Water and Land Resources Division technical staff have been working on updating the SWDM and it is expected they will adopt the new 2016 Manual later this month.</p> <p>North Bend Public Works Department technical staff has not had a chance to review the proposed 2016 SWDM changes, consider the associated impacts, and understand the consequences, specifically upon both private development projects and City capital projects. Staff is requesting that the City delay adoption of the 2016 SWDM until they are ready to accept the changes.</p> <p>The North Bend Municipal Code (NBMC) provides that the City adopts the “current” SWDM or Manual and accordingly, without and the attached Ordinance, the City would automatically adopt the updated 2016 Manual. The attached Ordinance makes clear that the City’s preference is to continue to use the 2005 SWDM, with the 2008 Amendments, for private development projects and city capital projects.</p>			
<p><b>COMMITTEE REVIEW AND RECOMMENDATION:</b> This item was discussed at the January 13, 2016 Transportation &amp; Public Works Committee Meeting. The Committee recommended approval and placement on the Consent Agenda.</p>			
<p><b>RECOMMENDED ACTION:</b> <b>MOTION to approve AB16-005, an ordinance amending North Bend Municipal Code 14.16 regarding the new King County Surface Water Design Manual.</b></p>			
<b>RECORD OF COUNCIL ACTION</b>			
<i>Meeting Date</i>	<i>Action</i>	<i>Vote</i>	
January 19, 2016			



## ORDINANCE

### **AN ORDINANCE OF THE CITY OF NORTH BEND, WASHINGTON, AMENDING NORTH BEND MUNICIPAL CODE SECTIONS 14.16.030 AND 14.16.060 RELATING TO SURFACE WATER DESIGN STANDARDS FOR STORMWATER MANAGEMENT; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE**

**WHEREAS**, the City of North Bend has adopted the best management practices from the King County Surface Water Design Manual (“SWDM”) to regulate the design, construction, inspection and maintenance of stormwater facilities in order to prevent pollution, flooding, and other dangers related to stormwater and drainage problems; and

**WHEREAS**, the King County Council is expected to adopt a new version of the SWDM in early 2016; and

**WHEREAS**, the City of North Bend desires to review and assess the 2016 SWDM before adopting it as a City regulation, and will continue in the interim to use the 2005 SWDM including the 2008 amendments thereto;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:**

**Section 1. NBMC 14.16.030 (Definitions), Amended.** North Bend Municipal Code Section 14.16.030 (Definitions) is hereby amended to read as follows:

**14.16.030 Definitions.**

For the purposes of this chapter, the following definitions shall apply:

“Approval” means proposed or completed work conforms to this chapter in the opinion of the director.

“Best management practice (or BMP)” means a physical, structural, and/or managerial practice that, when used singly or in combination, prevents or reduces pollution of water. BMPs are listed and described in the manual.

“Clearing” means destruction or removal of vegetation by manual, mechanical or chemical methods.

“Commercial agriculture” means activities conducted on lands defined in RCW 84.34.020(2) and activities involved in the production of crops or livestock for wholesale trade. An activity ceases to be considered commercial agriculture when the area on which it is conducted is proposed for conversion to a nonagricultural use or has lain idle for more than five years, unless the idle land is registered in a federal or state soils conservation program, or unless the activity is maintenance of irrigation ditches, laterals, canals, or drainage ditches related to an existing and ongoing agricultural activity.

“Detention” means the release of stormwater runoff from the site at a slower rate than it is collected by the stormwater facility system, the difference being held in temporary storage.

“Detention facility” means an above or below ground facility, such as a pond or tank, that temporarily stores stormwater runoff and subsequently releases it at a slower rate than it is collected by the drainage facility system. There is little or no infiltration of stored stormwater.

“Director” means the city administrator or his or her designee.

“Earth material” means any rock, natural soil or fill and/or any combination thereof.

“Erosion” means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep. Detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

“Excavation” means the mechanical removal of earth material.

“Experimental BMP” means a BMP that has not been approved through a process of using an approved testing protocol.

“Fill” means a deposit of earth material placed by artificial means.

“Forest practice” means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting or processing timber, including but not limited to road and trail construction; harvesting, final and intermediate; precommercial thinning; reforestation; fertilization; prevention and suppression of diseases and insects; salvage of trees and brush control.

“Groundwater” means water in a saturated zone or stratum beneath the surface of land or a water body.

“Illicit discharge” means all nonstormwater discharges to stormwater drainage systems that cause or contribute to a violation of state water quality, sediment quality or groundwater quality standards, including but not limited to sanitary sewer connections, industrial process water, interior floor drains and gray water systems.

“Impervious surface” means a hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development, and/or a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered as impervious surfaces.

“Interflow” means that portion of precipitation that infiltrates into the soil and moves laterally through the upper soil horizons until intercepted by a stream channel or until it returns to the surface via a wetland, spring or seep.

“Land disturbing activity” means any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, demolition, construction, clearing, grading, filling and excavation.

“Large parcel erosion and sediment control (ESC) plan” means a plan to implement BMPs to control pollution

generated during land disturbing activity. Guidance for preparing a large parcel ESC plan is contained in the manual.

“Manual” means the 2005 King County Surface Water Design Manual, including the 2008 amendments thereto. The manual contains BMPs to prevent or reduce pollution, which are hereby adopted by reference.

Mitigation Order of Preference. From first to last:

- A. Avoid the impact altogether by not taking a certain action or part of an action;
- B. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
- C. Rectify the impact by repairing, rehabilitating or restoring the affected environment;
- D. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action; and
- E. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.

“New development” means land disturbing activities; structural development, including construction, installation or expansion of a building or other structure; creation of impervious surfaces; Class IV – general forest practices that are conversions from timber land to other uses; and subdivision and short subdivision of land as defined in RCW 58.17.020. All other forest practices and commercial agriculture are not considered new development.

“Person” means any individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, agency of the state, or local government unit, however designated.

“Pollution” means contamination or other alteration of the physical, chemical, or biological properties of waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate

beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

“Redevelopment” means, on an already developed site, the creation or addition of impervious surfaces, structural development including construction, installation or expansion of a building or other structure, and/or replacement of impervious surface that is not part of a routine maintenance activity, and land disturbing activities associated with structural or impervious redevelopment.

“Site” means a portion of property that is directly subject to development.

“Small parcel erosion and sediment control plan” or “small parcel ESC plan” means a plan for small sites to implement temporary BMPs to control pollution generated during the construction phase only, primarily erosion and sediment. Guidance for preparing a small parcel ESC plan is contained in the manual.

“Soil” means unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.

“Source control BMP” means a BMP that is intended to prevent pollutants from entering stormwater. Examples include erosion control practices, maintenance of stormwater facilities, roofing storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

“Stormwater” means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows overland, via interflow, or through channels or pipes into a defined surface water channel or constructed infiltration facility.

“Stormwater drainage system” means constructed and natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate, divert, treat or filter stormwater.

“Stormwater facility” means a constructed component of a stormwater drainage system, designed or constructed to perform a particular function or multiple functions.

Stormwater facilities include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention basins, retention basins, constructed wetlands, infiltration devices, catch basins, oil/water separators, sediment basins and modular pavement.

“Vegetation” means all organic plant life growing on the surface of the earth.

“Water body” means surface waters including rivers, streams, lakes, marine waters, estuaries and wetlands.

“Watershed” means a geographic region within which water drains to a particular river, stream or body of water as identified and numbered by the State of Washington Water Resource Inventory Areas (WRIAs) as defined in Chapter 173-500 WAC.

“Wetlands” means areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas, and areas created, restored or enhanced as part of a mitigation procedure. Constructed wetlands or the following surface waters of the state intentionally constructed from sites that are not wetlands are not included: irrigation and drainage ditches, grass-lined swales, canals, agricultural detention facilities, farm ponds, and landscape amenities.

**Section 2. NBMC 14.16.060 (Manual adopted), Amended.** North Bend Municipal Code Section 14.16.060 (Manual adopted) is hereby amended to read as follows:

**14.16.060 Manual adopted.**

The 2005 King County Surface Water Design Manual, including the 2008 amendments thereto, is hereby adopted by the City of North Bend and is hereinafter referred to as the “manual.”

**Section 3. Severability.** Should any section, paragraph, sentence, clause or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

**Section 4. Effective Date.** This ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

**ADOPTED BY THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 19<sup>TH</sup> DAY OF JANUARY, 2016.**

**CITY OF NORTH BEND:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
**Kenneth G. Hearing, Mayor**

\_\_\_\_\_  
**Michael R. Kenyon, City Attorney**

**ATTEST/AUTHENTICATED:**

Published:  
Effective:

\_\_\_\_\_  
**Susie Oppedal, City Clerk**





## City Council Agenda Bill

<b>SUBJECT:</b>		<b>Agenda Date: January 19, 2016</b>	<b>AB16-006</b>
<b>A Motion Authorizing a Work Order with Golder and Associates for Preparation of the City’s Annual Water Mitigation Report</b>		Department/Committee/Individual	
		Mayor Ken Hearing	
		City Administrator – Londi Lindell	
		City Attorney - Mike Kenyon	
		City Clerk – Susie Oppedal	
		Community & Economic Development – Gina Estep	
		Finance – Dawn Masko	
		Public Works – Mark Rigos, P.E.	
Cost Impact: \$12,040			
Fund Source: Water Operating Fund (401)			
Timeline: Immediate			
<b>Attachments:</b> Work Order Form including Scope of Work and Fee Estimate			
<b>SUMMARY STATEMENT:</b>  The City of North Bend’s Water Right requires the preparation and submittal of an annual report to several parties including the Department of Ecology, the Snoqualmie Tribe and the Tulalip Tribe. This report discusses the use of the Centennial Well and associated water mitigation activities for the previous year’s operation. The annual report is due no later than January 30th each year for the preceding year of operation.  The annual report is complex and it is crucial that it be accurate. City staff requested a proposal for the report preparation under the current On-Call Service Agreement with Golder & Associates, Inc (Golder). A copy of the proposal, which includes a work scope and fee estimate, is attached. Golder was selected for numerous reasons, some of which are noted below:			
<ol style="list-style-type: none"> <li>1. Several years ago, Golder developed the mitigation algorithms and designed the software that calculates each day’s mitigation requirements. They know our water system and are able to quickly download and analyze the necessary data.</li> <li>2. The City’s Supervisory Control and Data Acquisition (SCADA) system suffered several setbacks in 2015, creating numerous gaps in the data. Golder staff has the knowledge necessary to quickly and accurately fill in those gaps with other information supplied by the City.</li> <li>3. Golder played a critical role in helping the City obtain the new water right for the Centennial Well in 2000 through 2010. They are known and trusted by the entities receiving the report.</li> <li>4. Golder has prepared two previous annual reports for the City. None of the recipients had any questions or comments about either of those reports, indicating they provide quality work.</li> <li>5. Golder’s employee billing rates are reasonable.</li> </ol>			
Golder will prepare the 2015 Annual Mitigation Report as required per the City’s Water Right. The 2015 annual report is due by January 30, 2016. The work order is based on a Time & Material rate with a Not to Exceed limit of \$12,040.00.			
<b>COMMITTEE REVIEW AND RECOMMENDATION:</b> This item was reviewed by the Transportation and Public Works Committee at the January 13, 2016 meeting and was recommended for approval and placement on the consent agenda.			
<b>RECOMMENDED ACTION: MOTION to approve AB16-006, authorizing a work order with Golder and Associates for the preparation of the City’s Annual Water Mitigation Report, in an amount not to exceed \$12,040.00.</b>			
<b>RECORD OF COUNCIL ACTION</b>			
<i>Meeting Date</i>	<i>Action</i>	<i>Vote</i>	
January 19, 2016			



**CITY OF NORTH BEND  
WORK ORDER  
2016-1**

This work order dated the 19<sup>th</sup> day of January 2016 is to specify services to be provided under the On-Call Professional Services contract which has been entered into by the CITY OF NORTH BEND (City) and Golder and Associates (Consultant). This work order is for the below mentioned project/scope of work.

Work Order No.: 2016-1

Project Name: Annual Mitigation Report

Project No.: N/A Amount: \$ 12,040

City Project Lead: Donald DeBerg, PE  
City Engineer (Authorized cost of work not to be exceeded without written authorization)

**SCOPE OF WORK:**

This is an annual mitigation report that is required to be submitted by January 30<sup>th</sup> of each year per the City of North Bend's water right. Staff is unable to dedicate time to completion of this report and has used Golder and Associates in previous years for this work. The scope of work and fee estimate are attached.

This work included in this work order is described in detail in the attached scope of work. The compensation will be on a time and materials basis, not to exceed the above amount.

**CONSULTING FIRM:**

**CITY OF NORTH BEND:**

Authorized Signature	Date	Authorized by	Date
----------------------	------	---------------	------

**NOTE:** *The City of North Bend will not be liable for charges for services not authorized by a fully executed work order.*

**FOR INTERNAL USE ONLY**

Funds for work available through the following account:

401-000-000-534-20-41 Water Professional Services

**Distribution:** *Original:* City Clerk    *Copies:* Project Lead, Consultant, Accounting Coordinator





December 21, 2015

Project No.13-00218

Don DeBerg, PE  
 City of North Bend  
 PO Box 896  
 1155 East North Bend Way  
 North Bend, WA 98045

**RE: PROPOSAL FOR ANNUAL REPORT FOR WATER RIGHT IMPLEMENTATION**

Dear Don:

This letter presents a scope of work and budget for completing the annual report required as part of the City of North Bend's (City) water right and documenting the process for completing annual reports. The 2015 annual report is due to Department of Ecology (Ecology), the Tulalip Tribes, and the Snoqualmie Tribe by January 30, 2016 (within 30 days of the end of the year).

**1.0 TASK 1: DATA COMPILATION AND QUALITY ASSURANCE/QUALITY CONTROL**

Task 1 of this scope of work includes compiling and validating the City's water use and mitigation data from January 1, 2015 to December 31, 2015. Most of the information required for the annual report is available in the City's Municipal Water Mitigation System (MWMS) database and can be queried with the pre-programmed report generation. However, some data required by the Record of Examination (ROE) have not been captured by the telemetry system and must be manually incorporated into the report. The parameters not currently available in the database include:

- Sallal intertie: Not applicable during this time period, so we will assume a value of "0" for this parameter

Golder Associates Inc. (Golder) will perform the database query for the other data needed for the annual report and manually incorporate the missing data into the annual report. Additionally, Golder will perform an analysis of the data to ensure that no water system events were overlooked when the telemetry data were not available to the database algorithms designed to capture the events. As required by the ROE, Golder will summarize all of the event reports as reported in the database and through the data analysis specified above. We understand that there were a number of events during the year that resulted in data not being reported to the database. Therefore, we have added time to work with the City to fill in the data gaps and summarize the event reports. We would like to receive the following data from the City to help fill in the data gaps:

- Scanned copies of the Well NB-3 (Centennial Well) totalizer log from December 31, 2014 to January 1, 2016.
- A zipped file with the DailyReport.csv files from January 1, 2015 through December 31, 2015.

This additional data review and analysis is necessary in order to verify the mitigation water supplied by the City when the City's Supervisory Control and Data Acquisition (SCADA) system data was not available to the database. Hobo Springs flows were very low during 2015, so Golder will review those data and the Masonry Pool data as well to put them into context within the historic data record.

122115 2015 Annual Report Scope Docx

Golder Associates Inc.  
 18300 NE Union Hill Road, Suite 200  
 Redmond, WA 98052 USA  
 Tel: (425) 883-0777 Fax: (425) 882-5498 www.golder.com



**Golder Associates: Operations in Africa, Asia, Australasia, Europe, North America and South America**

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation

Golder will also need information from the City regarding any changes to the mitigation system and an update on the status of the availability of the mitigation sources. We propose a short conference call to discuss these topics.

**2.0 TASK 2: 2014 ANNUAL REPORT**

Task 2 of this scope of work includes preparation of the City's 2015 annual report for submission to Ecology, the Tulalip Tribes, and the Snoqualmie Tribe by January 30, 2016. The annual report will include data from January 1, 2015 to December 31, 2015. The content of the annual report, per the City's water right ROE includes:

- Water production at Well NB-3
- Daily Mitigation Requirement (mitigation algorithm results)
- Delivery of Mitigation Water
- Evaluation of the performance of the mitigation system
- Any changes to the mitigation system
- Brief status update of the availability of the mitigation sources

Golder will prepare a draft annual report to be reviewed by the City by January 22, 2016. The City will provide any comments on the report by January 27, 2016. Golder will revise the report based on the City's comments and provide a final report to the City by January 29, 2016. Golder will provide one hardcopy of the annual report to the City and an electronic report. Table 1-1 shows the proposed budget for the Task 2 work.

**Table 1-1: Budget**

Task	Cost
<b>Task 1: Data Compilation and QA/QC</b>	
Compile and QA/QC the data	\$7,060
<b>Task 1 Sub-Total</b>	<b>\$7,060</b>
<b>Task 2: Prepare Annual Report</b>	
Prepare draft quarterly report	\$3,630
Prepare final quarterly report	\$710
Other direct costs	\$10
<b>Task 2 Sub-Total</b>	<b>\$4,350</b>
<b>Task 3: Project Management</b>	
Task 1 conference call	\$550
Invoicing	\$80
<b>Task 3 Sub-Total</b>	<b>\$630</b>
<b>Total Cost</b>	<b>\$12,040</b>

Notes:

1. North Bend will provide written authorization to proceed by January 4, 2016.
2. No more than one hard copy will be provided to the City.

**3.0 TASK 3: PROJECT MANAGEMENT**

Task 3 of the scope of work includes time for the Task 1 conference call and invoicing for the project. Table 1-1 shows the proposed budget for the Task 3 work.

We look forward to continuing to support the City. Please contact us as soon as possible with any questions or concerns.

**GOLDER ASSOCIATES INC.**



Nicole M. DeNovio  
Associate



Alyssa Neir  
Senior Project Environmental Planner

NMD/AN/km





## City Council Agenda Bill

<b>SUBJECT:</b>		<b>Agenda Date: January 19, 2016</b>	<b>AB16-007</b>	
<b>A Motion Authorizing a Small Works Contract with Keithly Electric for Maintenance and Repair of City Facilities including Water and Wastewater Facilities &amp; Purchase Order #16-01</b> Cost Impact: \$20,000 maximum annually Fund Source: \$9,500 sewer operating, \$9,500 water operating, \$1,000 general fund Timeline: Immediate		Department/Committee/Individual		
		Mayor Ken Hearing		
		City Administrator – Londi Lindell		
		City Attorney - Mike Kenyon		
		City Clerk – Susie Oppedal		
		Community & Economic Development – Gina Estep		
		Finance – Dawn Masko		
		Public Works – Mark Rigos, P.E.		X
<b>Attachments:</b> Purchase Order				
<p><b>SUMMARY STATEMENT:</b></p> <p>Currently, the City of North Bend does not have an on-call electrician company that can maintain, troubleshoot and repair electrical problems at important public facilities including the Wastewater Treatment Plant, Mt. Si Springs, Centennial Well, sewer lift stations, and other City facilities. Due to aging infrastructure, the need for an on-call electrician is crucial, especially when emergencies occur. Many electrical components at the treatment plant are nearing or are past their life expectancy. This on-call service is needed to maintain current operations at the treatment plant. The City’s Public Works Department does not have a licensed electrician on staff.</p> <p>Keithly Electric is a company based out of Seattle, but with employee support from Issaquah. The City has not used Keithly before, but they come with strong recommendations from the City of Snoqualmie and Golder and Associates. Keithly is willing to provide 24/7 on-call support for electrical work during normal working hours, after normal working hours and even during holidays.</p> <p>Costs for this electrical on-call “Purchase Order” are not anticipated to exceed \$20,000 this year.</p>				
<p><b>COMMITTEE REVIEW AND RECOMMENDATION:</b> This item was reviewed by the Transportation and Public Works Committee at the January 13, 2016 meeting and was recommended for approval and placement on the consent agenda.</p>				
<p><b>RECOMMENDED ACTION:</b> <b>MOTION to approve AB16-007, authorizing a Small Works Contract with Keithly Electric for maintenance, troubleshooting and repair of City facilities, including water and wastewater facilities, in form approved by the City Attorney, and approval of Purchase Order 16-01.</b></p>				
<b>RECORD OF COUNCIL ACTION</b>				
<i>Meeting Date</i>	<i>Action</i>	<i>Vote</i>		
January 19, 2016				





**PURCHASE ORDER**

CITY OF NORTH BEND  
 P.O. BOX 896  
 NORTH BEND, WA 98045  
 (425) 888-1211

TO:  
**Keithly Electric**  
 827 South Director Street  
 Seattle, WA 98108  
 (206) 763-6875

SHIP TO:  
**City of North Bend**  
 Attn: MARK FOGLE  
 400 Bendigo Avenue N  
 North Bend, WA 98045  
 (425) 888-1211

P.O. NUMBER:  
**No. 16-01**  
*[The P.O. number must appear on all related correspondence, shipping papers, and invoices]*

P.O DATE	REQUISITIONER	SHIPPED VIA	F.O.B. POINT	TERMS
1/14/2016				Net 30 Days

QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
		On-call Commercial Electrician for various tasks including maintenance, Troubleshooting, & repair of electrical issues at public buildings including The WWTP, Mt Si Spring, Centennial Well, sewer lift stations & other City Facilities. Not to exceed \$20,000 in 2016.		
List three bids, sole source explanation, and/or contract information (If required):				

SUBTOTAL	
SALES TAX 8.9%	
SHIPPING AND HANDLING	
OTHER	
<b>TOTAL NOT TO EXCEED</b>	<b>\$20,000.00</b>

1. Please send two copies of your invoice.
2. Enter this order in accordance with the prices, terms, delivery method, and specifications listed above.
3. Please notify us immediately if you are unable to ship as specified.
4. Send all correspondence and invoices to:  
 City of North Bend  
 P.O. Box 896  
 North Bend, WA 98045  
 425-888-1211  
 425-831-6200

Budget Account Code:

*Authorized by*

1/14/2016

## City of North Bend – Purchase Order Terms and Conditions

The following terms and conditions are applicable to all purchase orders issued to a Vendor and entered into by and between the City of North Bend, Washington, referred to as City, and Vendor which are included by reference herein.

1. **Acceptance:** Vendor's acceptance of this order will be presumed unless Vendor acknowledges exception, in writing, to the City within ten (10) calendar days after the date of order.
2. **Anti-Discrimination:** Vendors doing business with the City are prohibited from discriminating against any employee, applicant for employment, or client because of race, color, religion, creed, sex, age, national origin, marital status, or presence of any sensory, mental or physical handicap.
3. **Assignment:** Vendor cannot assign or subcontract any part of this order without prior written consent of City.
4. **Compliance with Laws:** Vendor shall comply with all applicable federal, state, and City regulations, codes, and laws; and be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and city taxes.
5. **Default:** In the event of default by the Vendor, the City may procure the goods or services covered by the purchase order from other sources and hold the Vendor responsible for any excess costs and may seek other remedies under law or equity.
6. **Deliveries:** Deliveries are to be made during hours 8:00 a.m. to 4:30 p.m. Monday through Thursday, and 8:00 a.m. to Noon on Friday, excluding holidays, unless otherwise stipulated. Vendor shall notify the City of deliveries that require special handling and/or assistance for off-loading. Failure to notify the City concerning this type of delivery will result in the billing to Vendor of any add-on redelivery, storage, or handling charges.
7. **Excusable Delays:** The City may grant additional time for any delay or failure to perform hereunder if the delay will not adversely impact the best interest of the City and is due to causes beyond the control of the Vendor. The Vendor must provide the City with prompt notification of such delays and the reason for same on or before the time set for performance.
8. **Indemnification:** To the fullest extent permitted by law, the Vendor shall indemnify, defend and hold harmless the City, its agents, officers, employees and volunteers, from and against any and all claims, injuries, damages, losses, suits or liability, (including but not limited to attorney fees and costs of litigation), relating to, arising out of or in connection with the acts, errors, mistakes, omissions, work or services of the Vendor, its employees, agents, subcontractors or assignees in performance of and pursuant to the terms of the purchase order. Should a court of competent jurisdiction determine that this purchase order 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 Vendor and the City, its officers, officials, employees, and volunteers, the Vendor's liability hereunder shall be only to the extent of the Vendor's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Vendor'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 purchase order.
9. **Independent Contractor:** The Vendor shall be and act as an independent contractor, and under no circumstances shall this purchase order be construed as one of agency, partnership, joint venture or employment between the Parties.
10. **Insurance:** If the Vendor is required to go on City property to perform work or services, the Vendor shall assume full responsibility and incur expense to obtain all necessary insurance as required by the City. The Vendor must have secured, maintained and provide the required amount of \$1,000,000 General Liability and \$500,000 Automobile Liability limits and must list the City as an additional insured. The Vendor must have Worker's Compensation coverage as required by law. Any exception to the above stated limits or other requirements must be endorsed and approved by the City Administrator.
11. **Invoice:** Vendor must provide to the City an original invoice in duplicate to the Finance Department. The invoice shall contain the invoice number, item descriptions, quantities, unit prices, and extended totals in addition to any other information specified elsewhere herein. If invoices subject to cash discount are not mailed on the date of shipment, discount period will be calculated from the date the invoice is received.
12. **Jurisdiction:** This purchase order shall be governed, construed and interpreted by, through and under the laws of the State of Washington.
13. **Liability-copyright/patent/trademark:** Vendor shall save and hold harmless the City, its employees and agents from liability for infringement of any United States patent, trademark or copyright for or on account of the use of any product sold to the City or used in the performance of this purchase order.
14. **Litigation Venue:** In the event of any litigation between them, the parties specifically understand and agree that venue shall take be properly laid in King County, Washington. The prevailing party in any such action shall be entitled to its attorney's fees and costs of suit.
15. **Modifications/Changes:** No modifications, substitutions, and/or changes shall be binding upon the City unless approved in writing by the City through a revised purchase order.
16. **Payment:** The City shall pay to the Vendor the price or prices specified in the purchase order upon delivery of the materials, equipment, or supplies and acceptance thereof by the City, or upon completion of the work to be performed and the acceptance thereof, as specified in the purchase order.
17. **Payment Changes:** Payments will only be made to the Vendor at the address as set forth on the invoice unless the Vendor has requested a change thereto on official company letterhead, signed by an authorized officer of the company and approved by an authorized City official.
18. **Price:** Vendor shall charge the City the lowest and best price. If prices decline before receipt of shipment, the revised prices shall govern. Otherwise, invoices shall be approved for payment only at the prices of quotations agreed upon or prevailing at the time the order was placed, unless the City is notified immediately upon receipt of the purchase order and prior to shipment or any increase in price, whereupon the City shall have the right and privilege to cancel the order.
19. **Purchase Order Number:** The purchase order number must appear on all invoices, packing slips, shipping notices, freight bills and correspondence concerning the purchase order.
20. **Quantities:** Quantities specified in the order cannot be changed without City approval. Goods shipped in excess of quantity designated may be returned at Vendor's expense.
21. **Rejections/Reimbursements:** If, within a reasonable time after delivery, the City finds the goods ordered to be defective in workmanship or material or otherwise not in conformity herewith, the City may, in addition to other rights, reject and return such goods at Vendor's expense and such goods may not be replaced by Vendor without written authorization from the City.
22. **Recurring Purchase Order:** If the purchase order is continuing in nature, the City shall pay to the Vendor after receipt of invoices for material, equipment or supplies furnished, or work completed and accepted, as herein provided. The purchase order shall remain open until the not to exceed authorized amount has been depleted.
23. **Severability:** If any part of this purchase order is found by a court to be unenforceable, the remaining provisions shall nonetheless be enforceable to the extent allowed by law.
24. **Shipping and Handling:** All invoices shall include all freight, packing and handling charges. All goods delivered and services shall be free from all liens. Vendor is required to prepay charges and list such on the invoice.
25. **Terms:** By accepting the purchase order, the Vendor agrees that payment terms shall be Net 30 days unless otherwise stated. Payment will be made in accordance with the City's policies and procedures.
26. **Title:** Title for goods and materials shall pass when the goods and materials are inspected and accepted by the City.
27. **Waiver:** Any waiver by the Vendor or the City of a condition in any shipment or breach of any provision of this purchase order by the other party will not be considered a waiver of any other terms of this purchase order or that condition for subsequent shipments or subsequent breach by either party or prevent either party from enforcing any such provision.
28. **Warranty:** For a minimum of one (1) year after delivery to and acceptance by the City, the Vendor warrants that the goods and services furnished hereunder shall conform to the requirements and specifications of this order and shall be of good workmanship and quality, free of all defects and fit for the purpose for which they are intended. Disclaimers of express or implied warranties and limitations of liability from or in connections with Vendor's products ordered hereby will be of no effect unless assented to in writing by City.



## City Council Agenda Bill

<b>SUBJECT:</b>	<b>Agenda Date: January 19, 2016</b>	<b>AB16-008</b>
<b>A Resolution Declaring an Emergency at the Wastewater Treatment Plant and Authorizing the Purchase of Equipment from Aquionics and a Small Works Contract with Keithly Electric</b>	Department/Committee/Individual	
	Mayor Ken Hearing	
	City Administrator – Londi Lindell	
	City Attorney - Mike Kenyon	
	City Clerk – Susie Oppedal	
	Community & Economic Development – Gina Estep	
	Finance – Dawn Masko	
	Public Works – Mark Rigos, P.E.	X
Cost Impact: \$246,453.77 w/ tax (Aquionics) 10,345.50 w/tax (Keithly)		
Grand Total: <b>\$246,453.77 with sales tax</b>		
Fund Source: Sewer Operating Fund (402)		
Timeline: Immediate		

**Attachments:** Resolution; Aquionics Quote; Keithly Electric Quote

**SUMMARY STATEMENT:**

**Background**

In 2001 the City of North Bend performed a project at the wastewater treatment plant (WWTP) to replace the then-existing chlorine disinfection system with an ultraviolet (UV) disinfection system manufactured by Aquionics, headquartered in Erlanger, Kentucky. The UV system is comprised of two individual vessels rated to treat up to 1,700 gallons per minute (gpm) each for a total treatment capacity of 3,400 gpm, or approximately 5 million gallons per day (MGD). Due to heavy rainfall, elevated groundwater tables, and a high Inflow & Infiltration (I&I) ratio in our sewer conveyance system, peak inflows to our WWTP in November and December 2015 reached as high as 2,600 gpm (approximately 3.8 MGD), requiring both vessels to be in operation, leaving the City with no backup in the event of a UV failure.

**Problems With UV System**

The UV system operated relatively well for 13 years until 2014 when a transformer overheated and failed, requiring replacement. Since then it has become more problematic, requiring work on a regular basis, including troubleshooting of false alarms and lack of alarms, repair of broken and heat damaged hardware, replacement of weak breakers, and replacement of severely corroded wiring. The portion of the system that sends alarms is currently non-functional, thus requiring the plant to be staffed 24/7 to monitor the system and respond in the case of a UV failure. This is resulting in additional overtime labor costs to the sewer utility.

Systems Interface (on-call professional services provider for SCADA) and Keithly Electric (commercial electricians) have both performed troubleshooting on the existing system and have recommended very short-term improvements to repair the alarm problem. An Aquionics representative visited the WWTP in September 2015 and informed staff that the system has an expected useful life of 7 to 10 years and that they no longer manufacture many replacement parts. All have cautioned that the system is antiquated and at high risk of catastrophic failure.

**Solution and Costs**

Aquionics is recommending replacement of the power and control panels for both units and rebuilding the vessels that house the bulbs. Tetra Tech (our WWTP consultant) has also strongly recommended the same work, in addition to adding a third unit for redundancy and reliability.

Aquionics has supplied a quote for equipment for multiple options. The equipment costs for the preferred option are \$246,453.77, including tax. A small works contract is also necessary to immediately replace corroded wiring, failed sensors, and troublesome circuit boards in the existing UV system. Staff

## City Council Agenda Bill

has chosen Keithly Electric from the Small Works Roster to perform this work based on excellent reviews from the City of Snoqualmie and Golder and Associates and their immediate availability. Their bid for this work is \$10,345.50, including tax.

In addition to the foregoing UV equipment purchase and electrical work, Tetra Tech is currently working on preparing estimates for design engineering, construction management, and the installation of the new units and is currently anticipating costs for such work to not exceed \$550,000.00. We are not seeking Council's approval for award of the design or construction work associated with the UV equipment installation tonight as we have not finalized those bids at the time of the Agenda Bill preparation. We are only seeking Council's approval to purchase the UV equipment and retain the electrician associated with the installation of the equipment at this time.

The necessary design work will include, but not be limited to evaluating the existing power feeds to the units, evaluating the layout of the panels for compatibility with the ultimate buildout, evaluating the need to replace/install additional wiring conduits for the systems, etc. Construction work may include replacing power feeds into the building, constructing an "island" in the center of the UV room to provide panel mounting space, replacing existing electrical conduit, adding new electrical conduit, etc.

### **Ultimate Plan**

Currently, Tetra Tech is working on developing a Comprehensive Sewer Plan and Capital Facilities Plan for the City and has presented some very preliminary costs for three options that are being evaluated for the WWTP. One option is to build a new plant at a different location in North Bend. This cost is estimated to be a minimum of \$50 million, not including the purchase of real estate or piping to/from the new WWTP location to either the outfall to the South Fork or Middle Fork of the Snoqualmie River.

A second option is to provide a regional treatment solution in which North Bend sewage would be piped to the City of Snoqualmie WWTP. Preliminary estimates for this option are a minimum of \$35 million to construct the pipeline and build necessary expansion and improvements at the Snoqualmie WWTP. Additionally, under this option, North Bend would lose control of the sewer rates. The City of Snoqualmie currently charges an additional 50% "out of City" surcharge rate.

A third option is to make major repairs at the existing WWTP and expand it for needed future capacity. Preliminary estimates for this option are approximately \$25 million to gain enough capacity to treat the waste from anticipated City buildout in 2036. Near-term projects identified thus far include pump station upgrades, construction of a new clarifier, installation of a larger centrifuge, additional backup power supply, temperature mitigation measures, and more. Near-term improvements are anticipated to cost approximately \$12 million, not including I&I reduction measures. Long-term improvements may include construction of a new oxidation ditch, a second headworks, a revised outfall structure, and more, anticipated to cost approximately \$13 million.

If upon completion of the Capital Facilities Plan, the City Council chooses the third option, our consultant Tetra Tech has assured us that the design of this UV system will be compatible with the third option

### **Alternative Disinfection Options**

Tetra Tech performed a Temperature Reduction Study in 2015 in which they analyzed heat sources contributing to effluent temperatures that are higher than the South Fork into which the effluent flows. In that study they identified the existing UV system as a source of heat. They also analyzed three alternative means of disinfection, rating them based on multiple criteria, including their effectiveness, safety, footprint, complexity, cost, etc. Ultimately, they recommended no change to the disinfection

## City Council Agenda Bill

system based on this analysis. They continue to recommend using the updated Aquionics systems for the ultimate buildout of the plant, with the final configuration consisting of four UV reactor vessels.

**Recommendation**

Staff recommends authorizing the Small Works Contract with Keithly Electric and authorizing the purchase of equipment from Aquionics, specifically Option 1 with “Optional Adder” 2 (both identified in the attached Aquionics quote), rebuilding the two existing UV units and adding a third unit for reliability, in addition to providing for Ethernet communication for numerous reasons, stated below:

1. The existing systems are not functioning properly, requiring the plant to be staffed 24/7.
2. The existing systems are past their useful life and are in danger of catastrophic failure.
3. During moderate to large storm events, both units are needed to adequately treat the high flows, leaving no back-up in case of failure. These high flows often cause material that has accumulated in the pipes to break loose, breaking UV bulbs. This requires staff to back-up the plant while repairs are being made, putting the City at high risk of having a raw sewage spill.
4. This recommendation is the most cost-effective means of disinfecting the effluent before it enters the river.
5. This recommendation will be compatible with the ultimate build-out scenario in the year 2036 if the City elects to rebuild the existing WWTP.
6. The timeline and cost required to implement this improvement is far less than that of any of the other alternative disinfection means evaluated.

COMMITTEE REVIEW AND RECOMMENDATION: This item was reviewed by the Transportation and Public Works Committee at the January 13, 2016 meeting and was recommended for approval.

RECOMMENDED ACTION: **MOTION to approve AB16-008, A resolution declaring an emergency at the Wastewater Treatment Plant and authorizing the purchase of equipment from Aquionics and a Small Works Contract with Keithly Electric, in a form approved by the City Attorney.**

**RECORD OF COUNCIL ACTION**

<i>Meeting Date</i>	<i>Action</i>	<i>Vote</i>
January 19, 2016		



## RESOLUTION

### **A RESOLUTION OF THE CITY OF NORTH BEND, WASHINGTON, DECLARING AN EMERGENCY, WAIVING BIDDING REQUIREMENTS, AND AUTHORIZING THE PURCHASE OF EQUIPMENT AND AWARD OF CONSTRUCTION CONTRACTS TO MAKE EMERGENCY IMPROVEMENTS TO THE UV SYSTEM AT THE WASTEWATER TREATMENT PLANT**

**WHEREAS**, the City of North Bend operates a 2.58 million gallon per day wastewater treatment plant that discharges treated effluent to the South Fork of the Snoqualmie River (“WWTP”); and

**WHEREAS**, the UV units at the WWTP have unexpectedly experienced operational deficiencies that currently impair operation of the treatment system; and

**WHEREAS**, temporary repairs have failed to correct the deficiencies of the UV units, and the City is currently staffing the WWTP twenty-four hours a day, seven days a week to monitor the treatment system; and

**WHEREAS**, Systems Interface, Inc., a control systems integrator, and Keithly Electric, a licensed electrician, inspected the UV units and recommended both interim adjustments and long-term critical and high-priority improvements in order to avoid environmental risks including possible discharge of inadequately treated wastewater into the South Fork of the Snoqualmie River in violation of the City’s National Pollution Discharge Elimination System (“NPDES”) Permit issued by the Washington State Department of Ecology; and

**WHEREAS**, to address the immediate threats to the public health and safety caused by the operational deficiencies of the UV units at the WWTP, the following critically important improvements must be made (the “Improvements”):

1. Replace wiring from control cabinet to the UV bulbs, replace signal wires from control cabinet to the UV sensors, replace UV sensors, replace main circuit board in control cabinet; and
2. System start-up

**WHEREAS**, the Improvements require the purchase of equipment that can only be purchased through Goble Sampson Associates, Inc., the local manufacturer’s representative for Aquionics, a UV systems manufacturer; and

**WHEREAS**, RCW 39.04.280 specifically authorizes the North Bend City Council to waive competitive bidding requirements “in the event of an emergency” and for purchases that are “limited to a single source of supply;” and

**WHEREAS**, in order to avoid adverse environmental impacts, and to remain in compliance with all applicable laws, including the City’s NPDES Permit and Washington State Department of Ecology regulations, and to protect the public health, safety, and welfare of the people, the City must take immediate action to proceed with the Improvements;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, DOES RESOLVE AS FOLLOWS:**

**Section 1. Emergency Finding.** The North Bend City Council hereby finds that the UV system operational deficiencies that have arisen at the WWTP are the result of unforeseen circumstances beyond the control of the City that present both a real and immediate threat to the proper performance of the WWTP and a risk of material damage to the environment and to the South Fork of the Snoqualmie River if immediate action is not taken to construct the Improvements. The City Council, therefore, declares that an emergency exists related to the WWTP. In addition, the foregoing “Whereas” clauses shall constitute additional North Bend City Council findings of an emergency.

**Section 2. Waiver of Bidding Requirements and Contract Awards.** As a result of the emergency declared in Section 1 of this Resolution, the North Bend City Council hereby waives all bidding requirements consistent with Chapter 39.04 RCW, awards the contracts to the entities listed below in a form and with content approved by the City Attorney, and authorizes the Mayor to enter into said contracts:

Aquionics	\$ 246,453.77
Keithly Electric	\$ 10,345.50

**PASSED BY THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 19<sup>TH</sup> DAY OF JANUARY, 2016.**

**CITY OF NORTH BEND:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
**Kenneth G. Hearing, Mayor**

\_\_\_\_\_  
**Michael R. Kenyon, City Attorney**

**ATTEST/AUTHENTICATED:**

Effective:  
Posted:

\_\_\_\_\_  
**Susie Oppedal, City Clerk**



<b>Project Name:</b>	North Bend, WA - Upgrade Proposal for existing Aquionics UV systems	
<b>Contact Info:</b>	Bree Trembly Jared Alder  Aquionics Inc.  P: 859-341-0710 E: <a href="mailto:bree.trembly@aquionics.com">bree.trembly@aquionics.com</a> <a href="mailto:Jared.alder@aquionics.com">Jared.alder@aquionics.com</a>	Doug Allie  Goble Sampson Associates  P: 425-392-0491 E: <a href="mailto:dallie@goblesampson.com">dallie@goblesampson.com</a>
<b>Quote:</b>	16-01-BT2	
<b>Date:</b>	January 7, 2016	

**Project Scope of Supply:**

The scope of work is intended to upgrade the existing Aquionics InLine 4250 UV systems (Serial numbers 6067 and 6068) in order to enhance the functionality of the existing systems while addressing reliability and environmental issues with power and controls.

Included in this revised scope of supply are several options:

**Option 1 - (New Cabinets with Refurbished UV Vessels + One additional completely new System)**

Provide two new combined power and controller cabinets with electronic lamp drivers to work with existing UV reactor bodies. . The existing UV disinfection reactors will be rebuilt with new Wiper Yokes, Wipers, Wiper Drive Motors, Quartz Sleeves, UV Lamps, and updated dry UV sensors. This would effectively give you a new system using the older reactor body but with the latest controls and lamp driver technology.

An additional new third unit (vessel and cabinet) shall be supplied for increased capacity. New vessel shall be a newer version with small changes in overall laying length compared to original units.

A master controller will also be supplied for interfacing with plant SCADA. The master controller will control all three UV units as well as the automated outlet valves for each UV unit providing a duty/standby control strategy. The valve control strategy will consist of a hardwire open/close signal from master controller with

an open/close switch back to controller. An open/close switch from the manual inlet valves back to the controller is also desired.

An Aquionics Service Technician will be on-site to provide direction and technical support for the electrical and mechanical contractors performing the equipment removal and replacement. The technician will do the servicing/rebuilding of the UV disinfection chambers and provide system start-up/commissioning and training.

**Option 2 - (New Cabinets with Refurbished UV Vessels)**

Provide two new combined power and controller cabinets with electronic lamp drivers to work with existing UV reactor bodies. . The existing UV disinfection reactors will be rebuilt with new Wiper Yokes, Wipers, Wiper Drive Motors, Quartz Sleeves, UV Lamps, and updated dry UV sensors. This would effectively give you a new system using the older reactor body but with the latest controls and lamp driver technology.

A master controller will also be supplied for interfacing with plant SCADA. The master controller will control both UV units as well as the automated outlet valves for each UV unit providing a duty/standby control strategy. The valve control strategy will consist of a hardwire open/close signal from master controller with an open/close switch back to controller. An open/close switch from the manual inlet valves back to the controller is also desired.

An Aquionics Service Technician will be on-site to provide direction and technical support for the electrical and mechanical contractors performing the equipment removal and replacement. The technician will do the servicing/rebuilding of the UV disinfection chambers and provide system start-up/commissioning and training.

**Option 3 - (One completely new InLine 4250+ complete with UV vessel and cabinet)**

Provide one new InLine 4250+ to be installed parallel to existing UV units. New vessel shall be a newer version with small changes in overall laying length compared to original units.

The master controller will provide interfacing with plant SCADA. The master controller will control all UV units as well as the automated outlet valves for each UV unit providing a duty/standby control strategy.

An Aquionics Service Technician will be on-site to provide direction and technical support for the electrical and mechanical contractors. The technician will provide system start-up/commissioning and training.

Item Number	Option 1 – New Cabinets with Updated Chambers & Additional UV Vessel	Quantity
1	<ul style="list-style-type: none"> <li>• InLine W 4250+</li> <li>• Six (6) medium pressure B4035E+ lamps per unit</li> <li>• Six (6) Quartz Sleeves</li> <li>• Air Release Valves</li> </ul>	1



	<ul style="list-style-type: none"> <li>• Access Hatch</li> <li>• Temperature Sensor</li> <li>• 14" ANSI Connections</li> <li>• Drain Port</li> <li>• Automatic Wiping System</li> </ul>	
2	<p>Free standing Combined Control/Power Cabinet</p> <ul style="list-style-type: none"> <li>• Epoxy Coated Steel NEMA 12 with air conditioning</li> <li>• ECTronic Omega Controller</li> <li>• Electronic Lamp Drivers (35-100% output)</li> <li>• Display/HMI menu</li> <li>• Includes: manual wipe button, alarms, warnings</li> <li>• 480/277V, 3 Ph+N, 60 Hz</li> <li>• Modbus Communication RS 485 or RS232</li> </ul>	3
3	<p>Master Controller</p> <ul style="list-style-type: none"> <li>• Epoxy Coated Steel NEMA 12</li> <li>• Allen Bradley Compact Logix PLC</li> <li>• Display/HMI menu</li> <li>• Valve Control for both existing units and 3<sup>rd</sup> unit to automate duty/standby control configuration</li> </ul>	1
4	<p>Cabling from UV vessels to cabinets</p> <ul style="list-style-type: none"> <li>• 10 meters includes the following cables: lamp, wiper limit switch, UV sensor, and temperature sensor</li> </ul>	1
5	<p>Renew the existing UV Disinfection Chambers</p> <ul style="list-style-type: none"> <li>• Install new lamps, quartz sleeves and seals</li> <li>• Install new Wiper Yoke Assembly with new Wipers</li> <li>• Install new Wiper Drive Motor</li> <li>• Install new Absolute dry UV Intensity Sensor</li> <li>• Check that all mechanical and electrical components are in good serviceable condition that will be warranted for one year</li> </ul>	2
6	<p>On-site Service - 3 Trips of 15 days total includes System Commissioning</p> <ul style="list-style-type: none"> <li>• Functional Testing</li> <li>• Training</li> </ul>	Included
7	<p>Freight to jobsite incl. packaging of all the components supplied by Aquionics</p>	Included



Item Number	Option 2 – New Cabinets with Updated Chambers	Quantity
1	Free standing Combined Control/Power Cabinet <ul style="list-style-type: none"> <li>• Epoxy Coated Steel NEMA 12 with air conditioning</li> <li>• ECTronic Omega Controller</li> <li>• Electronic Lamp Drivers (35-100% output)</li> <li>• Display/HMI menu</li> <li>• Includes: manual wipe button, alarms, warnings</li> <li>• 480/277V, 3 Ph+N, 60 Hz</li> <li>• Modbus Communication RS 485 or RS232</li> </ul>	2
2	Master Controller <ul style="list-style-type: none"> <li>• Epoxy Coated Steel NEMA 12</li> <li>• Allen Bradley Compact Logix PLC</li> <li>• Display/HMI menu</li> <li>• Valve Control for both existing units to automate duty/standby control configuration</li> </ul>	1
3	Cabling from UV vessels to cabinets <ul style="list-style-type: none"> <li>• 10 meters includes the following cables: lamp, wiper limit switch, UV sensor, and temperature sensor</li> </ul>	1
4	Renew the existing UV Disinfection Chambers <ul style="list-style-type: none"> <li>• Install new lamps, quartz sleeves and seals</li> <li>• Install new Wiper Yoke Assembly with new Wipers</li> <li>• Install new Wiper Drive Motor</li> <li>• Install new Absolute dry UV Intensity Sensor</li> <li>• Check that all mechanical and electrical components are in good serviceable condition that will be warranted for one year</li> </ul>	2
5	On-site Service - 2 Trips of 10 days total includes System Commissioning <ul style="list-style-type: none"> <li>• Functional Testing</li> <li>• Training</li> </ul>	Included
6	Freight to jobsite incl. packaging of all the components supplied by Aquionics	Included



Item Number	Option 3 – New UV Vessel & Cabinet	Quantity
1	<ul style="list-style-type: none"> <li>• InLine W 4250+</li> <li>• Six (6) medium pressure B4035E+ lamps per unit</li> <li>• Six (6) Quartz Sleeves</li> <li>• Air Release Valves</li> <li>• Access Hatch</li> <li>• Temperature Sensor</li> <li>• 14" ANSI Connections</li> <li>• Drain Port</li> <li>• Automatic Wiping System</li> </ul>	1
2	Free standing Combined Control/Power Cabinet <ul style="list-style-type: none"> <li>• Epoxy Coated Steel NEMA 12 with air conditioning</li> <li>• ETronic Omega Controller</li> <li>• Electronic Lamp Drivers (35-100% output)</li> <li>• Display/HMI menu</li> <li>• Includes: manual wipe button, alarms, warnings</li> <li>• 480/277V, 3 Ph+N, 60 Hz</li> <li>• Modbus Communication RS 485 or RS232</li> </ul>	1
3	Cabling from UV vessel to cabinet <ul style="list-style-type: none"> <li>• 10 meters includes the following cables: lamp, wiper limit switch, UV sensor, and temperature sensor</li> </ul>	2
4	On-site Service - 1 Trips of 5 days total includes System Commissioning <ul style="list-style-type: none"> <li>• Functional Testing</li> <li>• Training</li> </ul>	Included
5	Freight to jobsite incl. packaging of all the components supplied by Aquionics	

**SCOPE OF SUPPLY – Provided by Contractor/Owner**

Item Number	Description
1	<ul style="list-style-type: none"> <li>• Modification and preparation of civil structures</li> </ul>
2	<ul style="list-style-type: none"> <li>• Concrete work including foundations, bases, below slab piping, floor openings, sumps,</li> </ul>



	basins, grout, trenches and concrete embedment
3	<ul style="list-style-type: none"> <li>Labor for installing the equipment and instrumentation provided</li> </ul>
4	<ul style="list-style-type: none"> <li>Electrical supply of serviceable quality to the UV system to include conduits and/or cable trays if required. <b>Note that a neutral or additional transformer per unit is required</b></li> </ul>
5	<ul style="list-style-type: none"> <li>Pulling new wire through existing or new conduit for upgraded systems and new cabinets</li> </ul>
6	<ul style="list-style-type: none"> <li>Unloading of all the components supplied by Aquionics.</li> </ul>
7	<ul style="list-style-type: none"> <li>Commissioning lab fees or other start-up performance costs</li> </ul>
8	<ul style="list-style-type: none"> <li>Placement in storage of all the components supplied by Aquionics if required; storage to be dry &amp; clean</li> </ul>
9	<ul style="list-style-type: none"> <li>Supply two (2) automated 14" butterfly vales with electric actuators for the outlet of each UV system. Actuators shall be open/close service with ¼" turn capabilities. Operating time for full limits of travel shall prevent water hammer damage or pressure build-up. Motors shall be rated NEMA 12 for indoor installation</li> <li>Supply (2) two 14" butterfly valves with 1/4" turn on inlet of each UV system for manual operation</li> <li>Valves shall be supplied with open/close position feedback to UV master controller</li> </ul>

**Pricing Summary for All Options:**

Option	QTY	DESCRIPTION	TOTAL PRICE
<b>1</b>	<b>3</b>	Two (2) New Combined Power/Controls cabinets with air conditioning, one (1) master PLC with updated chambers AND (1) one complete brand new InLine 4250+ unit and cabinet	<b>\$209,587</b>
<b>2</b>	<b>2</b>	Two (2) New Combined Power/Controls cabinets with air conditioning, one (1) master PLC and updated chambers	<b>\$133,440</b>
<b>3</b>	<b>1</b>	One (1) complete brand new InLine 4250+ unit and cabinet	<b>\$90,115</b>

*\* If air conditioning is installed in building the standard NEMA 12 epoxy coated cabinets with forced fan cooling would be suitable and the upgrade with air conditioners would no longer be required.*

Optional deduct*	QTY	DESCRIPTION	TOTAL PRICE
<b>1</b>	<b>3</b>	Cabinets shall be rated NEMA 12 epoxy coated with forced fan cooling for indoor installation	<b>(-\$12,940)</b>

*\*\* If Ethernet is required for communication local controllers shall be upgraded to Allen Bradley Compact Logix PLCs*

Optional Adder**	QTY	DESCRIPTION	TOTAL PRICE
<b>2</b>	<b>3</b>	Upgrade local power and control cabinets to Allen Bradley Compact Logix PLC with touch screen HMI and Ethernet	<b>\$16,725</b>



**Commercial Terms:**

1. Freight (CPT – Carriage paid to) to jobsite is included in amount. Offloading and arrangement of the equipment is not included.
2. Price quoted is firm and valid for 60 days
3. Price is based upon the following payment terms (net 30 days):
  - a. 90% - upon shipment of equipment to jobsite
  - b. 10% - commissioning and final system acceptance
4. Submittals are available within 1-3 weeks after acceptance of purchase order.
5. Equipment delivery is within 14 weeks after approved submittals.
6. Delivery times are based upon an approval period of four (4) weeks, which approval shall not be unreasonably withheld.
7. Aquionics does not provide for any process utility requirements including electrical power.
8. This pricing and scope is based upon Aquionics General Terms of Business.
9. No taxes, of any kind have been included in this firm proposal.



827 South Director Street · Seattle · WA 98108  
Phone (206) 763-6875 · Fax (206) 764-8880

**To:** Mark Fogle  
**Company:** City of North Bend  
**From:** Danny Keithly  
**Date:** January 7, 2016

Dear Mark,

Thank you for giving Keithly Electric Company the opportunity to assist you with your Berson Inline upgrades. The cost for this work is lump sum and will cost \$9,500.00. In review, I have noted the following to be included in the scope of work:

1. Demolish existing UV wiring on Units #405 and 406
2. Supply and install new 30kV DC wire for UV on Units #405 and 406
3. Supply and install wiring for customer supplied UV sensor on Units #405 and 406
4. Wire customer supplied motherboard on Units #405 and 406
5. Supply and install new ceramic connectors for UV lamps on Units #405 and 406
6. Supply and install new wiring for fan motor on Unit #405 and 406
7. Startup support, as needed

This proposal does not include:

1. Taxes
2. Overtime

Please do not hesitate to contact me if you have any questions or need additional information. I look forward to working with you on this project.

Sincerely,

Danny Keithly  
206.763.6875

Keithly Electric Company warranties all work for one year from the date of completion. The warranty is void if a person or firm other than Keithly Electric performs or re-performs any work directly related to our installation. Keithly Electric Company can only warrant materials that it supplies and does not warrant materials supplied by the customer.