

# **Invitation to Tender No. 20-054**

# PW1 Production Well

# **Closing Date:**

Tenders must be received on or before 3:00 PM Pacific Time on October 1st, 2020

Questions and Tenders are to be submitted by email to:

Gerald St. Pierre, P.Eng., PMP
Project Engineer, Water Services
Phone 250-390-6751
GStPierre@rdn.bc.ca

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# 1 Background

During development of the River's Edge Subdivision multiple wells were drilled into both a middle and lower aquifer to gain a water source for the subdivision.

The water system was constructed in 2004 and transferred to the RDN upon registration of the lots. Since then the RDN has been operating and maintaining the system.

The water service area has now developed further, and water demands have increased. As such, the RDN is now interested in investigating the addition of well PW1 to the water system's supply.

As such, the RDN is now inviting Tenders for the development and pump testing of PW1.

# 2 Instructions to Bidders

# 2.1 Introduction

The Regional District of Nanaimo (RDN) invites Tenders from qualified Contractors for the development and pump testing of PW1, as detailed herein and in accordance with the documents included and referenced within this Invitation to Tender (ITT).

The requested scope includes:

- Development of PW1; and
- Step testing and pump testing of PW1.

The work should be completed by October 30<sup>th</sup>, 2020.

Specifications, prepared by GW Solutions, are attached as Appendix A.

The Work for this project will be completed using an RDN Contractor Services Agreement, attached as Appendix B. This ITT, any Addenda, and the Tenderer's completed Tender Forms will become part of the Contract Documents between the RDN and the Successful Tenderer.

# 2.2 Non-Mandatory Site Meeting

A non-mandatory site meeting will be held on Thursday, September 24<sup>th</sup>, 2020 at 10:00am at the project site located at 2260 Peterson Road, Nanoose Bay, B.C.

Site meeting attendees must maintain standard COVID 19 distancing protocols of 2 metres.

## 2.3 Submission of Tenders

This section describes the expectations for Tender submission and the basis for evaluation. Tender layout and content should be in general alignment with these expectations to facilitate comparative evaluation.

Before submitting Tenders, Tenderers must satisfy themselves about the nature and location of the work, local conditions, the professional services, equipment, technology and facilities needed for the execution of the work, and all other factors that might have a bearing on their Tender. Tenderers are fully responsible for obtaining all information required for the preparation of Tenders and the execution of the work.

Tenderers are solely responsible for their own expenses in preparing and submitting Tenders, and for any meeting, negotiations, or discussions with the RDN or its representatives and consultants, relating to or arising from this ITT. Tenderers agree that by participating in the ITT process, and/or submitting a Tender, they have no claim for compensation.

One (1) complete .pdf copy of each Tender must be received on or before 3:00 PM, Pacific Time, on October 1<sup>st</sup>, 2020 to the email address on the front cover of this ITT.

Tenders received after the Closing Date will not be considered.

Tenders sent by facsimile (fax) will not be accepted.

Tenders should be submitted on the attached Tender Forms and be authorized by a signing officer of the Tenderer's company.

# 2.4 Contact and Requests for Information

The contact person for the RDN is:

Gerald St. Pierre, P.Eng., PMP Project Engineer, Water Services Office Phone: 250-390-6751 Email: GStPierre@rdn.bc.ca

Any requests for information (RFI) related to this ITT are to be directed, in writing at least five (5) calendar days prior to the Closing Date, to Gerald St. Pierre via e-mail at <a href="GStPierre@rdn.bc.ca">GStPierre@rdn.bc.ca</a>. RFI's and answers will be recorded and, where the information requested is not already clearly indicated, distributed via addendum posted to BC Bid at (<a href="www.bcbid.gov.bc.ca">www.bcbid.gov.bc.ca</a>). It is the responsibility of the Tenderer to download and obtain any addenda posted prior to submitting their tender. Information obtained from any other source is not official and should not be relied upon.

#### 2.5 Withdrawal

Tenders may be withdrawn prior to the closing date and time upon emailed notice to Gerald St. Pierre. Withdrawn Tenders may be replaced by alternative Tenders providing the replacement Tender is received at the closing location prior to the closing date and time.

Tenders must remain valid for 60 calendar days following the ITT closing date and time noted. Tenders are irrevocable after the closing date and time.

# 2.6 Acceptance of Tenders

This ITT is not an agreement to purchase goods or services. The RDN is not bound to enter into a Contract with any Tenderer. Tenders will be assessed in light of the Tender review criteria. The RDN will be under no obligation to receive further information, whether written or oral, from any Tenderer. The offer of services will prevail whether accurate or not.

The acceptance of any Tender may be subject to available budget and approval by RDN Senior Management.

#### 2.7 Definition and Form of Contract

Any Contract with the selected Tenderer will be substantially similar to the terms and conditions of the RDN Contractor Services Agreement attached herein.

# 2.8 Liability Insurance and Worksafe BC

The successful Tenderer is required to submit to the RDN a Certificate of Insurance, naming the RDN as additional insured, a Worksafe BC Notice of Project, and Worksafe BC Clearance Letter, prior to the RDN issuing a Notice to Proceed.

Insurance requirements will be as per Section 9 of the attached RDN Contractor Services Agreement.

The successful Tenderer will be assigned, and assume the responsibilities of, the Prime Contractor for the project.

# 2.9 Modification of Terms

The RDN reserves the right to modify the terms of this ITT, in its sole discretion, at any time up to two (2) working days prior to the noted closing date. The RDN reserves the right to cancel this ITT at any time without entering into a Contract.

# 2.10 Ownership of Responses

All documents, including Responses, submitted to the RDN become the property of the RDN. The RDN is bound by the provisions of the Freedom of Information and Protection of Privacy Act. All Tenderers submitting Tenders pursuant to this ITT are advised that such Tenders will be treated as public documents and the contents of the same disclosed upon written request if required to do so pursuant to the Act.

# 2.11 Confidentiality of Information

Information pertaining to the RDN obtained by the Tenderer as a result of participation in this ITT is confidential and must not be disclosed without written authorization from the RDN.

## 2.12 Tender Evaluation

The RDN reserves the right to reject any or all Tenders or to accept the Tender deemed most favorable in the interest of the District. The lowest priced or any Tender may not necessarily be accepted.

Tenders will be evaluated based on the information provided by the Tenderer in Schedules A through C that represents the best overall value to the RDN.

The decision as to what constitutes best overall value will be at the sole discretion of the RDN.

# 3 Schedules

Schedule A – Tender Form

Schedule B – List of Previous Contracts

Schedule C – List of Subcontractors

Schedule D – Proposed Work Schedule

# Schedule A – Tender Form

(To be submitted with the Tender)

Item #	Description	Units	Estimated Quantity	Unit Price	Total
1	Mobilization and De- Mobilization	Lump Sum	-	-	
2	Well Development	Hours	30		
3	Supply and Installation of Test Pump, Flow Meter, and Sounding Tube	Lump Sum	-	-	
4	Step Test	Hours	5		
5	Pump Test and Recovery	Hours	28		
5a	Optional Long-Term Pump Test	Days	15		
6	Supply of discharge pipe/hose	Lump Sum	-	-	
7	Prepare and supply required measurements and documentation	Lump Sum	-	-	
			Total (no	ot including GST)	

Flowmeter to be Used:						
Substantial Performance:						
The Tenderer agrees to attain Substantial Performance of the	Work by Oc	tober 30 <sup>th</sup> , 2020.				
Addenda:						
We acknowledge receipt of the following Addenda to the Ten	der docume	ents:				
Addendum No dated:	_ of:	pages				
Addendum No dated:	_ of:	pages				
Addendum No dated:	_ of:	_ pages				

Development Pressure:\_\_\_\_\_ Discharge Rate:\_\_\_\_\_

The undersigned Tenderer, having carefully read and examined the Instructions to Tenderers, Tender Forms and Attachments, has complied with the Instructions to Tenderers and hereby offers to perform all the work, and provide all the labour, material and equipment under the provisions therein set forth for Development and Pump Testing for PW1 Production Well Tender.

# **Signed and Authorized:**

Company Name:	Contact Name and Title (please print)
Address:	
Phone:	Authorized Signature:
Fax:	
Email:	Date:

ITT for Development and Pump Testing for PW1 Production Well Regional District of Nanaimo

# Schedule B – List of Previous Contracts

(To be submitted with Tender)

The Tenderer has recently undertaken and completed the contracts described below and authorizes the RDN to inquire as to the Tenderer's performance on these contracts.

Project	Description of Work	Owner/Contact	Date Completed	Value (\$)
		Owner / Contact		
		Phone Email		
		Owner / Contact		
		Phone Email		
		Owner / Contact		
		Phone Email		
		Owner / Contact		
		Phone Email		
		Owner / Contact		
		Phone Email		
		Owner / Contact		
		Phone Email		

Sianod:	
Signed:	

# Schedule C – List of Subcontractors

(To be submitted with Tender)

TENDER ITEM	TRADE	SUBCONTRACTOR NAME	PHONE NUMBER

Sianod:	
Signed:	

# Schedule D – Proposed Work Schedule

(To be submitted with Tender)

Indicate schedule below with major activities and their durations.

ACTIVITY	SCHEDULE (work days)																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

Signed:		
J.,		

# 4 Attachments

Appendix A – Specifications for Well Development and Performing a Step Test and 24-Hour Pumping Test on PW1 6-inch Production Well, GW Solutions Inc., September 16<sup>th</sup>, 2020.

Appendix B – RDN Contractor Services Agreement



# Specifications for Well Development and Performing a Step Test and 24-Hour Pumping Test on PW1 6-inch Production Well

# 1. Specifications for Development of a PW1 Production Well

The Englishman River Water Service area is currently supplied by two wells in the area. These wells are PW2 and PW3 (WTN 90381 and WTN 94515/100191) which operate at 30 and 70 Igpm, respectively. Ten boreholes were originally drilled; four were completed as 6" screened production wells (PW1, PW2, PW3, PW4), five were completed as observation wells with piezometers (OW1, OW2, MW3, OW4, OW6), and one was backfilled with bentonite (TH1). PW4 has since been converted into provincial observation well 395. Refer to Figure 1 for the location of the wells.

Due to decreased production from wells PW3 and PW2 along with increased water demand in the region supplied by these aforementioned wells, the RDN desires to put PW1 online.

Information						
Location:	Peterson Rd, Nanoose Bay, BC, RDN Englishman Service Area (See attached map for approximate location)					
Type of Well:	Water supply – not connected & bare of equipment					
Formation Material:	Fine sand					
Static Water Level:	Approx. 4.5 m (15 ft)					
Accessibility to the Site:	Accessible.					
Other Wells Completed in the Area:	There are test wells and production wells completed within the site. Figure 1 for the location of the wells.					

Development	Specifications
Screen:	Material: stainless steel
	Length: 5.20 m (17 ft)
	Slot size: #4 slot (155 - 159.5 ft), #8 slot (159.5 - 164 ft), #10 slot (164 - 172 ft)
Development:	Well was previously developed using airlift method. GW Solutions completed a video camera inspection and corroborated the well has very little sediments at the bottom. In addition, there is very little iron buildup around the screen. Therefore, no adverse conditions are expected.
	Development method: Consider applying 3 times the following cycle with incremental levels of energy: combined airlifting and water jetting, bailing, 30 min pumping test to assess progress on development (up to 50 USgpm)
	Short pumping test duration 30 minutes. We estimate in total three short tests.
	Please provide an hourly rate for development and describe equipment to be used (pressure and discharge rate). Consider a total of 3 days of development (approx. 1 day per cycle).
Anticipated Starting Date:	September 2020.

Well should be disinfected after drilling according to the GWPR.

# 2. Specifications Regarding Step Test and 24-Hour Pumping Test of a 20-inch Production Well

Information and General Specifications					
Location:	Peterson Rd, Nanoose Bay, BC, RDN Englishman Service Area (See attached map for approximate location)				
Expected Completion date:	September 2020				
Type of Well:	Drinking water supply, within a well field				
Formation Material:	Confined Overburden Aquifer (Fine sand)				
Static Water Level:	Approx. 4.5 m (15 ft)				
Available Water Column:	42.6 m (140 ft)				
Estimated pump location:	40 m (located above well screen).				
Equipment:	Contractor provide pump for the test				
Power source:	Contractor to provide power (Generator).				
Sounder pipe:	Install sounder pipe to a depth corresponding to top of pump (PVC diameter adequate to install ¾ inch logger and measuring tape, min 1¼ in)				
Discharge Location:	Approx. 50 m away from well. (Probably to a storm sewer)				
Flow Rate Measurements:	Type of flowmeter open to suggestions. The flowmeter should allow easy changes and adjustments of flow rates. Flow rate must be confirmed by manual measurements.				
Comments:	Contractor provide cost estimate per day (up to 15 days) to continue pumping after the 24-hr pumping test with minimum supervision (no water level measurements) at the same rate as the 24-hr pumping test.				

Step Test					
Number of Steps:	4				
Duration of Each Step:	1 hour				
Estimated Pumping Rates:	25, 50, 75 and 100 USgpm				
Water Level Measurements:	Manual, using water level meter				
Water Level Measurements Frequency:	See table below in the production well.  Some manual measurements in the observation well (OW1) located within 12 m from the production well. OW1 has two piezometers.				
Recovery Readings:	Do not include recovery readings.				

# Manual readings will be scheduled as follows for each step:

Proposed Time (min) Since Starting of Test or Following a Change in Pumping Rate									
0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
6	7	8	9	10	12	14	16	20	25
30	35	40	45	50	60				

Constant rate pumping test						
Duration of Pumping Test:	24 hours supervised and up to 15 days minimum supervision					
Rate of Pumping Test:	To be defined depending on step test results (likely 50 USgpm).					
Water Level Measurements in the Production Well:	Manual using water level meter.					
Water Level Measurements Frequency:	See table below in the production well.					
	Some manual measurements in the observation well (OW1) located within 12 m from the production well. OW1 has two piezometers completed at different levels.					
Optional-Long term pumping test:	Contractor provide cost estimate per day (up to 15 days) to continue pumping after the 24-hr pumping test with minimum supervision (no water level measurements) at the same rate as the 24-hr pumping test. We want to characterize the water chemistry evolution during pumping					
Recovery Readings:	Consider 4 hours or until water level recovery reaches at least 90% of its static level. The recovery of water level will be measured in the pumping well at the same interval as given in the table below for the start of the test.					

# Manual readings in the pumped well will be scheduled as follows:

Proposed Time (Min) Since Starting of Test									
0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
6	7	8	9	10	12	14	16	20	25
30	35	40	45	50	60	90	120	150	180
210	240	270	300	360	And hourly intervals till end of the test				

Well should be disinfected (chlorinated) after drilling according to the GWPR. Volume of chlorine will be estimated according to the diameter, depth of well and static water level.



Figure 1. Location of PW1 and other wells within the RDN Englishman River Service Area



#### REGIONAL DISTRICT OF NANAIMO

## CONTRACTOR SERVICES AGREEMENT

THIS AGREEMENT made the <XX> day of <Month>, 20<XX>.

BETWEEN:

REGIONAL DISTRICT OF NANAIMO 6300 Hammond Bay Road Nanaimo, BC V9T 6N2

(hereinafter called the "Regional District")

AND:

<Company Name>
<Street Address>
<City, Province, Country>
<Postal Code>

(hereinafter called the "Contractor")

#### NOW THIS AGREEMENT WITNESSETH:

THAT in consideration of the terms, conditions and covenants hereinafter set forth, the Regional District and the Contractor covenant and agree each with the other as follows:

## 1. Appointment

The Regional District retains the Contractor to provide the Services (herein called the "Services") described in Schedule 'B' which is attached hereto and forms part of this Agreement.

#### 2. Term

The Contractor will provide the Services during the period (hereinafter called the "Term") commencing on <a href="Month Day">Month Day</a>, Year>, unless sooner terminated as hereinafter provided.

# 3. Payment

The Regional District will pay to the Contractor, for the Services, the amount, in the manner and at the times set out in Schedule 'A' attached hereto. The Contractor agrees to accept the amount as full payment and reimbursement. No additional amounts may be charged by the Contractor.



# 4. Independent Contractor

The Contractor will be an independent contractor and not the servant, employee or agent of the Regional District. The Contractor is not, and must not claim to be the Regional District's agent for any purpose unless the Regional District gives the Contractor authorization in writing to act as the Regional District's agent for specific purposes that are reasonably necessary to the Contractor's rendering of the Services pursuant to this Agreement.

# 5. Assignment and Sub-contracting

Unless already approved by the Regional District, the Contractor will not, without the prior written consent of the Regional District, assign or subcontract this Agreement or any portion thereof.

## 6. Ownership of Documents and Confidentiality

- 6.1 Title. The title, property rights, moral rights and ownership in and to all present and future materials and information produced or prepared by the Contractor pursuant to this Agreement including but not limited to plans, drawings, specifications, computer discs, listings, computer software and any other material or physical item on which information is stored shall vest in the Regional District without any payment by the Regional District therefor.
- 6.2 Patent and Copyright. The title, property rights, moral rights and ownership in and to all copyright in all present and future literary or artistic works including, but not limited to, computer programs and software, plans, drawings and specifications and the title, property rights and ownership in and to all patent rights in any invention developed during the course of or out of providing the Services shall vest in the Regional District without any payment by the Regional District therefor.
- 6.3 Further Assurances. The Contractor shall upon request by the Regional District, do all such things and execute and deliver to the Regional District all such documents and instruments as the Regional District shall reasonably require in order to vest title, property rights and ownership in the Regional District and the Contractor shall execute and deliver all such assignments, documents and instruments as may, in the Regional District's opinion, be necessary or desirable for the application or the issuance of any patents, designs or the registration of any copyright.

#### 7. Conflict

The Contractor shall not, during the term, perform a service for or provide advice to any person, firm or corporation where the performance of the service or the provision of the advice may or does, in the reasonable opinion of the Regional District, give rise to a conflict of interest between the obligations of the Contractor to the Regional District under this Agreement, and the obligations of the Contractor to such other person, firm or corporation.

# 8. Indemnity

The Contractor shall release, indemnify and save harmless the Regional District, its elected officials, officers, and employees of and from all claims, costs, losses, damages, actions, causes of action, expenses and costs arising from any error, omission or negligent act of the Contractor, or its officers, employees,



agents or Contractors, in the performance of the Services, or from the Contractor's breach of this Agreement.

#### 9. Insurance

Comprehensive General Liability Insurance in an amount not less than two million dollars (\$2,000,000.00) inclusive per occurrence against bodily injury and property damage. The Regional District is to be added as an additional insured under this policy, is to be endorsed to provide the Regional District with 30 days advance written notice of cancellation or material change and include a cross liability clause.

Automobile third party liability insurance in an amount not less than \$2,000,000 inclusive per occurrence for bodily injury, death and damage to property, covering all vehicles owned or leased by the Contractor.

#### 10. Termination

Notwithstanding any other provision of this Agreement:

- a) If the Contractor fails to comply with any provision of this Agreement, then, and in addition to any other remedy or remedies available to the Regional District, the Regional District may, at its option, terminate this Agreement immediately by giving written notice of termination to the Contractor.
- b) Either Party may terminate this Agreement at any time upon giving the other Party seven (7) days notice of such termination.

If either such option is exercised by the Regional District, the Regional District will be under no further obligation to the Contractor except to pay the Contractor such amount as the Contractor may be entitled to receive, pursuant to Schedule 'A', for services provided and expenses incurred to the date the said notice is given or delivered to the Contractor. The Contractor will refund to the Regional District any payment already made to the Contractor not yet earned.

#### 11. Prior Dealings

All prior negotiations and agreements between the parties relating to the subject matter of this Agreement are superseded by this Agreement. There are no representations, warranties, understandings or agreements other than those expressly set forth in the Agreement or subsequently agreed to in writing, which writing shall be executed by a duly authorized officer of the party to be bound thereby.

#### 12. Waiver

The failure of either party at any time to require the other party's performance of any obligation under this Agreement shall not affect the right to require performance of that obligation in the future. Any waiver by either party of any such breach or any such provision hereof shall not be construed as a waiver or modification of this provision itself, or a waiver or modification of any other right under this Agreement.



This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument. Delivery by electronic transmission in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.

## 14. Dispute Resolution

If the parties to this Agreement are unable to agree on the interpretation or application of any provision in the Agreement, or are unable to resolve any other issue relating to this Agreement, the parties agree to the following process in the order it is set out:

- a) the party initiating the process will send written notice to the other party (the "Dispute Notice"); and:
- b) the parties will promptly, diligently and in good faith, including the senior management of both parties, take all reasonable measures to negotiate an acceptable resolution to the disagreement or dispute.
- c) if the dispute is not resolved through collaborative negotiation within 30 Business Days of the dispute arising, the parties must then attempt to resolve the dispute through mediation under the rules of the Mediate BC Society and will be held in Nanaimo, BC.

#### 15. Freedom of Information

The Contractor acknowledges and agrees that any Confidential Information disclosed by it to the RDN under this Agreement may be subject to a request for public disclosure under the Freedom of Information and Protection of Privacy Act, R.S.B.C. 1996, c.165, as amended from time to time.

## 16. Collection of Personal Information

Unless the Agreement otherwise specifies or the Regional District otherwise directs in writing, the Contractor may only collect or create Personal Information that is necessary for the performance of the Contractor's obligations, or the exercise of the Contractor's rights, under the Agreement.

Unless the Agreement otherwise specifies or the Regional District otherwise directs in writing, the Contractor must collect personal information directly from the individual the information is about.

Unless the Agreement otherwise specifies or the Regional District otherwise directs in writing, the Contractor must tell an individual from whom the Contractor collects personal information:

- a) the purpose for collecting it;
- b) the legal authority for collecting it; and
- c) the title, business address and business telephone number of the person designated by the Regional District to answer questions about the Contractor's collection of personal information.



This Agreement is governed by and is to be interpreted and construed in accordance with, the laws applicable in British Columbia.

# 18. Worksafe BC Coverage

All employers with employees must be registered with WorkSafe BC and remittance up to date. Self-employed proprietors or partners in a partnership, must have Personal Optional Protection coverage.

#### 19. Prime Contractor

The successful Contractor will be assigned, and assume the responsibilities of, the Prime Contractor for the project, in accordance with the Workers Compensation Act.

# 20. Miscellaneous

All provisions of this Agreement in favour of the Regional District and all rights and remedies of the Regional District, either at law or equity, will survive the expiration or sooner termination of this Agreement.



# **SIGNATORIES**

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first above written.

For the Regional District of Nanaimo:	
Printed Name, Title	
Signature	
For the Contractor, <company name="">:</company>	
Printed Name, Title	
Signature	



# SCHEDULE 'A' FEE SCHEDULE

Total compensation to be paid to the Contractor by the Regional District of Nanaimo shall not exceed a maximum of <\$XX,XXX.XX> in Canadian Dollars. This compensation includes all fees and expenses including GST. If the services are completed by the Contractor at less cost than maximum amount, the Regional District shall be billed only for actual hours worked and actual expenses incurred. If the Contractor receives the Maximum Fee, but has yet to complete the Services, it shall continue to provide the Services until it has provided all the Services.

Payment by the Regional District to the Contractor will be upon receipt of monthly written invoices from the Contractor for completed services and will be paid on a net 30 days basis from date of receipt. (Invoices shall contain a written statement of account showing the calculation of all fees and should reference the Purchase Order Number.)

# SCHEDULE 'B' SCOPE OF WORK

<Enter scope of Services here or reference the Contractor's RFP/Tender response and include the response in the agreement.>