

# AMENDMENT APPLICATION REQUIREMENTS

An amendment application is required when a property owner wishes to change an existing official community plan (OCP) land use designation or policy, the property zoning or subdivision district, or any other land use regulation contained in the following Regional District bylaws:

- Electoral Area 'A' OCP Bylaw No. 1620, 2011;
- Electoral Area 'C' Arrowsmith Benson OCP Bylaw No. 1148, 1999;
- Electoral Area 'C' East Wellington Pleasant Valley OCP Bylaw No. 1055, 1998;
- Electoral Area 'E' Nanoose Bay OCP Bylaw No. 1400, 2005;
- Electoral Area 'F' OCP Bylaw No. 1152, 1999;
- Electoral Area 'G' OCP Bylaw No. 1540, 2008;
- Electoral Area 'H' OCP Bylaw No. 1335, 2017;
- Land Use and Subdivision Bylaw No. 500, 1987;
- Zoning and Subdivision Bylaw No. 1285, 2002.

Upon submission of an amendment application, including all required information, application fee(s) and an advertising deposit (see Submission Requirements below), planning staff will review the application. Please refer to the "Regional District of Nanaimo Impact Assessment Bylaw No. 1165, 1999" and the "Regional District of Nanaimo Development Application, Notification Procedures and Fees Bylaw No. 1845, 2022" for specific information required to support an application. It is strongly recommended that you contact Planning Staff to discuss your proposal prior to submitting an application

Where a parcel is designated within a development permit area (DPA) by an OCP and the proposed development is not exempt from the DPA guidelines, the property owner or agent is also required to apply to the Regional District of Nanaimo (RDN) Board for a development permit in addition to the amendment application. These applications may be reviewed concurrently; however separate application submissions and fees are required.

#### **Board Policy**

The RDN Board has adopted a policy (Policy B1.21) to standardize the information required at the rezoning stage to confirm that the potable water needs of proposed lots or use can be met. This policy is attached for information. Information required as a result of Board adoption or amendment of Policies and Bylaws may change from time to time. Please contact Planning staff prior to making an application.

#### **Submission Requirements**

To make an application for a development permit, the required fee and a completed application form must be submitted, along with any applicable additional information as listed in the application form.

#### **Estimated Time Frame**

The length of time to process an amendment application varies considerably. Generally, a minimum of six months is required to process a zoning amendment application while an OCP amendment takes a minimum of eight months.

#### **Agricultural Land Commission**

If an amendment application involves land that is located within the Provincial Agricultural Land Reserve, approval from the Agricultural Land Commission (ALC) concerning the proposed development is required before an amendment application is forwarded to the Electoral Area Services Committee/Committee of the Whole for consideration. For more information about the procedures involved with the separate application process to the ALC please consult the RDN Planning Department.

#### Ministry of Transportation and Infrastructure

When a development proposal involves a change in land use within a radius of 800 metres of an intersection of a controlled access highway, formal approval from the Ministry of Transportation and Infrastructure is required. An owner/agent may wish to discuss their proposal with the Ministry early in the application process to identify any significant road dedication, access improvements or other works and services that may be required to service the proposed development.

#### **Public Information Meeting**

As part of the amendment application process, a public information meeting (PIM) may be required where the proposed development is considered to have an impact on the local community, or on the region as a whole (please refer to the "Regional District of Nanaimo Development Approval Information Bylaw No. 1165, 1999 for information on the assessment criteria). The purpose of the PIM is to give the community an opportunity early on in the process to ask questions, provide comments, and give suggestions with respect to the proposed development.

A PIM, if required, will be held prior to the application being considered by the Electoral Area Services Committee/Committee of the Whole. This meeting is facilitated by RDN staff and the local Area Director; a summary of the comments received at this meeting will be forwarded to the Committee. Public notification will be completed prior to the meeting in accordance with "Regional District of Nanaimo Development Application and Notification Procedures Bylaw No. 1776, 2018".

#### **Electoral Area Services Committee and Regional Board Review**

Decisions on all land use matters are subject to consideration of the Regional Board of Directors. Prior to an application proceeding to the Regional Board, and depending on the type of amendment, an application is first considered by either the Electoral Area Services Committee or the Committee of the Whole. A staff report is provided to the Committee along with any correspondence received from the public as a result of notification, and a summary of the comments received at the public information meeting. Committee meetings are open to the public. Any member of the public, including an applicant, may request to address the Committee. Following consideration of an application, the Committee will then make a recommendation to be considered at a future Board meeting.

#### **Public Hearing and Bylaw Consideration**

If the Committee recommends that an amendment application proceed, an amendment bylaw is then drafted and presented to the RDN Board for consideration of first and second reading. If the bylaw receives first and second reading, a public hearing will be held. Notification of the hearing will be completed in accordance with the "Regional District of Nanaimo Development Application and Notification Procedures Bylaw No. 1776, 2018" and pursuant to the *Local Government Act*. Anyone individual who wishes to comment on the proposed amendment bylaw will have an opportunity, either verbally and/or in writing, to be heard at the public hearing.

A summary of the public hearing comments and submissions will then be included in a staff report to the RDN Board in order for the Board to consider third reading of the bylaw.

If the amendment bylaw receives third reading, and the proposed development involves a change in land use within 800 metres radius of an intersection of a controlled access highway pursuant to the Highway Act, the bylaw is forwarded to the Ministry of Transportation and Infrastructure for approval. In the case of an amendment to an official community plan, the corresponding bylaw is also forwarded to the Ministry for Community, Sport and Cultural Development for approval.

Upon receiving approval from these ministries, and upon security of any items required as a condition of rezoning, the amendment bylaw may then be presented to the RDN Board for consideration of final adoption (fourth reading) of the bylaw.

#### **Official Community Plan Amendment**

Pursuant to the Local Government Act, an amendment to an OCP involves a formal public consultation process, which includes referrals to provincial government agencies, adjoining municipalities or regional districts and other concerned agencies as determined by the RDN Board. The intent of these referrals is to ensure community plan amendments do not conflict with provincial mandates and legislation and the goals of adjoining local governments.

Amendment applications will be formally referred to all required agencies following first and second reading of an OCP amendment bylaw.



#### **Development and Emergency Services**

6300 Hammond Bay Road, Nanaimo, BC V9T 6N2 (250) 390-6510 (Nanaimo); 877-607-4111 (within BC) Email: planning@rdn.bc.ca; Fax:(250) 390-7511

### **Amendment Application Form**

	☐ REZONING	☐ OFFICIAL COMMUNIT	TY PLAN	☐ LAND USE CONTRACT
		OFFICE USE O	O N L Y	
Application Fee:		Receipt No.		File No
		TION 1: DESCRIPTION O		)
egal Description	·			,
ivic Address				
lectoral Area		Pard	cel Identifier (P I D	))
		ECTION 2: OWNER INFO		RS)
)		2)		
Name		Nam	16	
Mailing Addre	ss	Maili	ing Address	
Town / Provin	rce Postal Code	e Tow	n / Province	Postal Code
Telephone/ Co	ell Fax	Tele	phone/ Cell	Fax
Email		Ema	il	
		ECTION 3: AGENT INFO		FR)
	(10 52 00		TO NOT THE OWN	,
lame		Mailing Address		Town/Province
ostal Code	Telephone/ Cell	Fax	Email	
*NOTE: II	F THE APPLICANT IS NOT T	HE REGISTERED OWNER, A I	LETTER OF AUTHO	DRIZATION WILL BE REQUIRED
>	<b>SECTIO</b>	ON 4: DESCRIPTION OF	PROPOSAL	
I/wa the regist				v mako application as follows:
i/we, the regist		TE: Please attach letter if mo		y make application as follows: red.
Amendment Reques	sted:			
ourpose of Request	ed Amendment:			

	ALL MEASUREMENTS TO BE IN METRIC		
	A copy of state of title certificate(s) and corporate registry search (if applicable) dated within past 30 days		
	A letter outlining the details of the Application		
	Application fee as required by Bylaw No. 1845, 2022		
	Two (2) survey plans certified by a BC Land Surveyor to a maximum scale of 1:500, showing: location of existing and proposed buildings and structures and parts thereof, address, legal description, name of applicant, date, property lines, scale, north arrow, all easements and right of ways, restrictive covenant areas, location of all watercourses and associated setbacks, and building setbacks as per Zoning and Floodplain Bylaws		
	Electronic copies of all plans		
	Property Declaration Form		
Add	itional information may be required, such as:		
	Two (2) building elevation plans to a maximum scale of 1:100		
	Two (2) survey plans certified by a BC Land Surveyor including topographical information		
	Professional Engineer's Report		
	RDN Sustainable Development Checklist:   Residential Commercial		
	A letter of authorization (To be completed if the applicant is not the registered owner)		
	Environmental Assessment		
	Achaeological Assessment		
	Arborist Report		
	Landscape Plan		
	Riparian Area Assessment		
	Other		
<u> </u>			
	SECTION 6: Applicant Signature		
•	eclare that all the above noted statements and information contained in this application and glocuments are true and correct.		
App	licant Signature Date		
	Signat Name (D) D : ()		
Apr	llicant Name (Please Print)		

**SECTION 5: APPLICATION COMPLETION CHECKLIST:** 

In order to process your application, please provide all necessary documentation with your application. Please retain a copy of the submitted application for your records. Contact the RDN Planning Department for assistance.

Submit the completed application form, required fee, plans, and supporting material to the Regional District of Nanaimo. The fee is payable to the "Regional District of Nanaimo".



### **Letter of Authorization**

for Representative / Agent

			Date:			
As the	registered owner(s) of the	ne follov	wing property:			
Civic A	Address:					
Legal	Description:					
pertain deeme docum	hereby authorize the folioning to the application for ed to know of and to tents. I / We acknowledgook to be performed unde	develo unders e the a	pment on the a stand the cor uthority of the	above noted itents of the agent to bind	property e applic d me/us i	and by doing so will be ations and associated in all matters relating to
	OCP Amendment Development Permit Temporary Use Permit		Rezoning Development Vari Agricultural Land			Subdivision Board of Variance Other
	Owner Name (please pri	int)		Ov	vner Name (	(please print)
	Signature of Owner				Signature	of Owner
<u>Agen</u>	<u>t's Information</u>					
	Agent's Name				Company	y Name
			(Address)			
	City				Postal	Code
	Telephone				Fax	No.
	Cellular Phone				Ema	ail

Personal information collected on this form is collected for the purposes of processing this application and for administration and enforcement. The personal information is collected under the authority of the *Local Government Act*, Regional District of Nanaimo Bylaws and pursuant to section 26 of the *Freedom of Information and Protection of Privacy Act*.



### **Property Declaration Form**

for Riparian Areas, Nesting Trees, Coastal Floodplain, and Site Profiles

Civic Address:	9 Digit PID:
Legal Description:	
<u>Riparian Areas</u>	
I (we) acknowledge that the province of British Columbia enacted critical features, functions, and conditions required to sustain fish hab Regional District of Nanaimo (RDN) from approving or allowing watercourse until it has received notice that a report prepared by a received by the Ministry of Environment & Climate Change Strategy.	pitat. Furthermore, this legislation prohibits the ng a development to proceed adjacent to a
I (we) understand that a water feature includes any of the following:	
<ul><li>a) any watercourse, whether it usually contains water or not;</li><li>b) any pond, lake, river, creek or brook; and/or,</li><li>c) any ditch, culvert, spring, or wetland.</li></ul>	
I (we) declare that I (we) are familiar with the property and area, and h for the existence of any water features. I (we) declare that ( <i>please chec</i>	·
<ul><li>that there are no water features located on the subject pro</li><li>there are water features located on the subject property.</li></ul>	operty; or
I (we) declare that all proposed development including land alteration of a building or structure (please check the one that applies):	n, vegetation removal, alteration or construction
<ul><li>□ is greater than 30.0 metres from a water feature; or</li><li>□ is less than 30.0 metres from a water feature.</li></ul>	
Coastal Floodplain	
I (we) acknowledge that a building located in a marine coastal area master storm surges and wave effects.	y be subject to flooding as a result of high tides,
I (we) declare that we are familiar with the property and area, and has for the existence of the marine coast.	ave inspected the property and immediate area
I (we) declare that (please check the <u>one</u> that applies):	
<ul><li>☐ the property is located more than 100 metres from the mar</li><li>☐ the property is located less than 100 metres from the mar</li></ul>	

#### **Eagle and Heron Nesting Trees**

I (we) acknowledge that the Wildlife Act protects Bald Eagles and Great Blue Herons, their eggs and nests. Bald Eagles and Great Blue Herons are sensitive to development near their nesting sites and may return to a nest that has been unused for a number of years.

While the provincial government and the RDN undertake mapping of nesting sites from time to time, not all are mapped. Some on private property may have been undetected, and new nests are continually being built. Typically, a 60 metre radius for an eagle nesting tree and depending on the level of development in an area, a 60 - 300 metre radius for a heron nesting tree (or trees) is considered to be sensitive to disturbance. Electoral Areas A, E, G and H require that a development permit be obtained prior to development near an eagle or heron nest.

а

	maps.ca/GBHE/.
	that I (we) are familiar with the property and area, and have inspected the property and immediate area area area of eagle or heron nests prior to completing this form. I (we) declare that ( <i>please check the one that</i>
	ere are no eagle or heron nesting trees on or within 100 metres of the subject property; ere is an eagle or heron nesting tree on or within 100 metres of the subject property.
Site Profile - se	ection to be completed for demolition, subdivision, rezoning, development or development variance permit
Act requires the being used of the Contamina 2 activities are content/environment.	Aledge that when an application is made to the RDN, Section 40(1) of the Environmental Management that a Site Profile be completed when the applicant knows, or reasonably should know, that the land is or has been used for industrial or commercial purposes of the type listed in Schedule 2 of ated Sites Regulation, unless otherwise exempt under the Regulation. Please find the list of Schedule and Site Disclosure Statement on the Government of BC website at <a href="www2.gov.bc.ca/gov/pnment/air-land-water/site-remediation/site-identification">www2.gov.bc.ca/gov/pnment/air-land-water/site-remediation/site-identification</a> . Please contact the RDN Planning any of the activities listed in Schedule 2 apply to the subject property.
I (we) declare t	that ( <b>please check the <u>one</u> that applies)</b> :
su	(we) have read the <i>Contaminated Sites Regulation</i> Schedule 2 document, and determined that the abject property has been used for purposes listed in Schedule 2, and filled out the Site Disclosure catement; or
su	(we) have read the <i>Contaminated Sites Regulation</i> Schedule 2 document and am (are) not required to abmit a Site Disclosure Statement as to my (our) knowledge, the subject property has not been used or any of the activities listed in Schedule 2; or
be Re	(we) have read the <i>Contaminated Sites Regulation</i> Schedule 2 document and am (are) exempted from eing required to submit a Site Disclosure Statement under Section 4 of the <i>Contaminated Sites</i> egulation. I (we) have provided the following information in support of this exemption: (List formation below, use additional pages as required)

#### **DECLARATION SIGNATURE**

Please provide an additional page with owners' names and signatures if required.

I (we) declare that I (we) have read and filled out the above form.

Owner 1/Agent (Print Name)	(Signature)	(Date)
Phone:	Email:	
Owner 2/Agent (Print Name)	(Signature)	(Date)
Phone:	Email:	
Owner 3/Agent (Print Name)	(Signature)	(Date)
Phone:	Email:	
if the owner is a Corporation or Limited	l Company:	
	) Corporate Seal	
(Company Name)	)	(Date)
Authorized Signatory	,	
nessed By:		
Witness (Print Name)	(Signature)	(Date)
Phone:	 Email:	

Personal information collected on this form is collected for the purposes of processing this application and for administration and enforcement. The personal information is collected under the authority of the *Local Government Act*, Regional District of Nanaimo Bylaws and pursuant to section 26 of the *Freedom of Information and Protection of Privacy Act*.

#### REGIONAL DISTRICT OF NANAIMO

### POLICY

SUBJECT:	Hydrogeological (groundwater) assessment requirements for rezoning un- serviced lands and for development permits (Current Planning)	POLICY NO: CROSS REF.:	B 1.21
EFFECTIVE DATE:	February 22, 2011	APPROVED BY:	Board
REVISION DATE:	April 23, 2019	PAGE:	1 of 8

#### **PURPOSE**

To identify and standardize the technical information required for rezoning applications to confirm that the potable water needs of a proposed parcel, parcels or use can be met, assess potential impacts on groundwater resources, existing groundwater users, and hydraulically-connected streams., and provide consistency in the review of development proposals.

To identify and standardize the technical information required through development permit area guidelines for hydrogeological assessments and provide consistency in the review of development approvals.

To uphold the policies and objectives in the Official Community Plans (OCP) with regards to water supply in rural areas, and to identify and minimize potential impacts of the proposed development on existing groundwater or surface water users and sensitive ecosystems.

#### **POLICY**

This policy outlines the approaches that will be taken when considering rezoning lands that are unserviced (by community water), and when considering issuance of a development permit where a hydrogeological assessment is required, and outlines details the requirements for the following application types:

- A. Rezoning to facilitate subdivision.
- B. Rezoning to permit multi-family, commercial, institutional or industrial use.
- C. Development permit application where a hydrogeological assessment is required through the development permit area guidelines.

For both types of rezoning and for development permit applications, a preliminary hydrogeological assessment is required. In cases where a desktop review of available data and site visit provide a sufficient level of confidence that the required water needs can be met without adverse impact, in the

opinion of the qualified professional registered with Engineers and Geoscientists of BC (EGBC) with competency in hydrogeology, then a pumping test is not required. If the qualified professional deems it necessary to perform a pumping test to confirm water supply, a well must be drilled (if not already present) on the parcel and tested through the completion of a pumping test to proceed with the assessment.

This assessment is not intended to provide a guarantee that future property owners will have an adequate supply of potable water, but rather to provide a qualified opinion of the likelihood of obtaining an adequate supply of potable water without compromising water resource sustainability, existing water users and hydraulically-connected streams.

#### A. Rezoning to facilitate subdivision

Where a parcel is the subject of a rezoning application to reduce the minimum lot size in order to facilitate a subdivision, a **preliminary hydrogeological assessment** completed by a qualified professional (P. Eng or P. Geo. registered with Engineers and Geoscientists of BC (EGBC) with competency in hydrogeology) must be submitted as part of the rezoning application and must be received and reviewed by staff prior to proceeding to the Board for introduction of the associated amendment bylaw.

See flow chart for rezoning to facilitate subdivision below in Figure 1.

NOTE: If the application involves the rezoning of lands to permit subdivision of lands that are currently occupied by dwellings, each with their own well, and the rezoning will not result in additional dwelling unit or a change in water use, a preliminary hydrogeological assessment is not required provided the applicant proceeds with the well testing and associated final well report (outlined below) to the satisfaction of the Regional District.

#### Preliminary Hydrogeological Assessment Report Requirements

The preliminary hydrogeological assessment must confirm that in the opinion of the qualified professional:

- i. a minimum year-round potable water supply of
  - a. 3.5 m³ (3,500 litres) per day can be provided for each new residential parcel being proposed
  - b. Or, for non-residential uses, sufficient supply to support the proposed use can be provided on each new parcel being proposed
- ii. the proposed well(s) are not anticipated to have adverse impacts on groundwater resources, existing groundwater users, and hydraulically-connected streams.

Requirements for the preliminary hydrogeological assessment are outlined in full within a detailed checklist (**Appendix I: RDN Checklist for Hydrogeological Assessment Reports**). The report should address all the items listed in the checklist.

Prior to bylaw adoption, a covenant must be registered on title which will require that the new wells be constructed, tested, and a **final well report (Appendix II: Final Well Report Requirements)** submitted to the RDN prior to final approval of subdivision.

#### B. Rezoning to permit multi-family, commercial, institutional or industrial use

Where a lot is the subject of a rezoning application to permit multiple residential units, commercial, institutional or industrial use, a **preliminary hydrogeological assessment** completed by a qualified professional (P. Eng or P. Geo registered with Engineers and Geoscientists of BC (EGBC) with competency in hydrogeology) must be submitted as part of the rezoning application. The preliminary assessment report must be received and reviewed by staff prior to proceeding to the Board for introduction of the associated amendment bylaw.

See flow chart for rezoning to allow a change in use below in Figure 2.

#### Preliminary Hydrogeological Assessment Requirements

The preliminary assessment report must contain estimated flow requirements for the proposed use and confirm that in the opinion of the qualified professional:

- i. a minimum year-round potable water supply to support the proposed use can be provided on the parcel, and that,
- ii. the proposed well(s) are not anticipated to have adverse impacts on groundwater resources, existing groundwater users, and hydraulically-connected streams.

Requirements for the preliminary hydrogeological assessment are outlined in full within a detailed checklist (**Appendix I: RDN Checklist for Hydrogeological Assessment Reports**). The report should address all the items listed in the checklist.

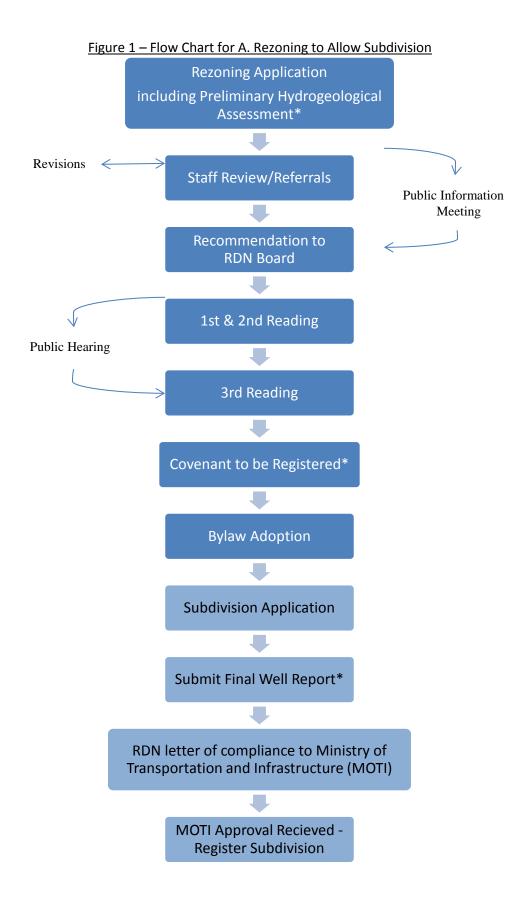
Prior to bylaw adoption the applicant must receive and demonstrate to the RDN:

- An approved groundwater license from the Province. This is a requirement of all non-domestic groundwater uses.
- Source approval from the Vancouver Island Health Authority (Island Health), if required. This is required for all drinking water systems other than a single-family home.

These documents fulfill much of what is required for a final well report (Appendix II). The applicant may be asked to provide supplementary information to the groundwater license and source approval as per **Appendix II: Final Well Report Requirements**, if necessary.

## C. <u>Development permit application where a hydrogeological assessment is required through the</u> development permit area guidelines

Where a hydrogeological assessment is required for a development permit application, the assessment must address the items listed in **Appendix I: RDN Checklist for Hydrogeological Assessment Reports** in addition to the relevant development permit guidelines.



<sup>\*</sup> Denotes key requirement of Board Policy B1.21

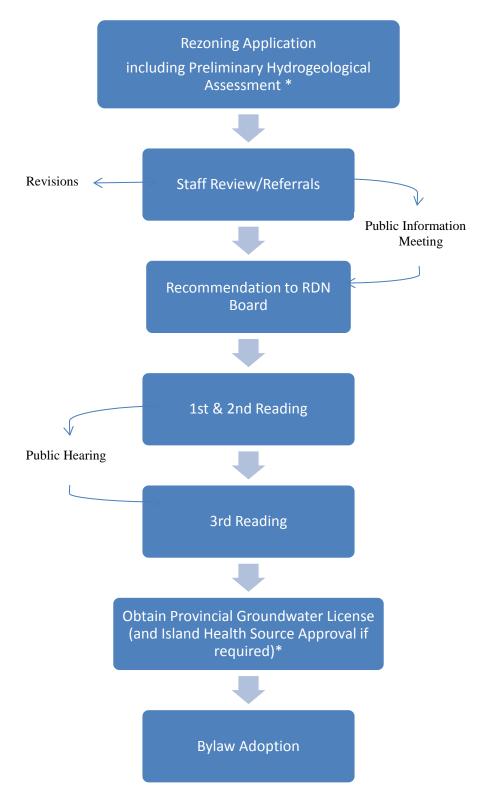


Figure 2- Flow Chart for B. Rezoning to Allow a Change in Use

#### Appendix I: RDN Checklist for Hydrogeological Assessment Reports

This checklist outlines the elements to be addressed in the <u>preliminary</u> professional hydrogeological assessment reports required for rezoning applications OR for professional hydrogeological assessment reports for development permit applications:

Component	Details / Sources
Site Description	Description of the project, site and study area including a description of proposed land use and water
	use for the site.
	☐ Location map including:
	o topography
	<ul> <li>aquifer boundaries where mapped</li> </ul>
	<ul> <li>locations of current and proposed wells (production and monitoring) on the site and adjacer properties</li> </ul>
	<ul> <li>location of existing licensed water users (groundwater and surface water) within at least 300</li> </ul>
	m radius of the property.
	o locations of watercourses and sensitive environmental features
	o surrounding land uses
Local Hydrogeology	☐ Description of local geology — bedrock and/or surficial (GSC /NRCAN).
, , ,	☐ Summary of data on neighbouring wells diverting groundwater (GWELLS or iMapBC).
	Description of the aquifer including storativity, transmissivity, hydraulic conductivity (Provincial
	aquifer classification database, well records, ECOCAT, RDN Water Budget Study, other local reports).
	☐ Description of local groundwater regime and its seasonal variations (e.g. measured water level
	fluctuations from existing observation wells or other monitored wells nearby, if applicable.)
	☐ Hydrogeological maps and cross sections illustrating groundwater flow and surface water interaction,
	if available.
Hydrologic Setting	☐ Description of the local area's climate and a summary of relevant available climate data.
	Description of nearby lakes, streams, springs, wetlands in the area.
	Description of surface water flux (i.e. streamflow data, lake level data) in correlation to precipitation
	data and groundwater level fluctuations.
Hydraulic	Description of known or potential hydraulic connections to surface water bodies and under what
Connectivity	conditions might pumping be likely to impact the quantity of water in those surface water bodies.
Assessment of	☐ For multi-family, commercial, institutional or industrial: provide demand estimates (flow
Adequacy of Supply	requirements) for the proposed use.
	☐ Confirmation that a minimum year-round potable water supply of 3.5 m³ (3,500 litres) per day can be
[Only applies to	provided for each new parcel (A) or the proposed use (B).
Rezoning]	☐ Use publicly available data and/or referenced literature values to support estimates.
	☐ If deemed necessary by Professional, considering aquifer stress level and characteristics, provide
Discretionary:	pumping test results and interpretation. Must follow BC Pumping Test Guidelines and BC Water
	Sustainability Act and Regulations for time of year, duration, methodology etc.
Assessment of	☐ Describe known water quality concerns in the regional and local area.
Quality of Supply	☐ Include well water test results if applicable; confirm the water quality meets the Canadian Drinking
	Water Guidelines.
	☐ Recommendations for water treatment if applicable.
Assessment of	☐ Confirm that the proposed well(s) and associated pumping will not adversely impact groundwater
Potential Impacts	resources, existing groundwater users and hydraulically connected streams.
•	Use aquifer parameters obtained from pumping tests conducted on site or in the immediate area or
	from other referenced information, if available.
	·
Conclusions and	
Recommendations	
	from other referenced information, if available.  Address the risk of sea water intrusion, if applicable.  Provide recommendations; monitoring and/or management approaches to mitigate aquifer impacts

#### **APPENDIX II: Final Well Report Requirements**

The intent of the final well report for **A. Rezoning to facilitate subdivision** is to confirm, once the well(s) is/are installed, that there is a well for each proposed parcel that can provide adequate water and meets current Groundwater Protection regulations. The report must be completed, dated, signed and sealed by a qualified professional and include/confirm the following:

- the date when the well was drilled along with a copy of the driller's log (if available);
- the well identification number as indicated on the plate secured to the well;
- photographs of the well identity tag, 'stick up', and general location of the well;
- that a pumping test has been completed by a registered well driller, registered pump installer or person working
  under the direct supervision of the well driller, pump installer or professional with competency in hydrogeology,
  in accordance with the protocols outlined in the <u>BC Guide to Conducting Well Pumping Tests</u>.
- the pumping test is required to have been run for the greater of 12 hours or until the water level stabilizes at the pumping rate of at least 2.5 litres/minute with a well recovery period monitored for the greater of 6 hours or until the water level recovers to a minimum of 90% of its pre-pumping water level. This pumping test must be conducted only during the months of July through October (lowest water table). [Note: if a pumping test was completed on a new well that will service the re-zoned parcel as part of the Preliminary Hydrogeological Assessment it is considered valid for the final well report within 3 years.]
- test results (i.e. chemical analyses from a certified laboratory) of the well water quality as analyzed against the
  Guidelines for Canadian Drinking Water Quality. The analysis should have been completed within 6 months of
  the date of the report. The report must also identify where parameters do not meet the Guidelines for Canadian
  Drinking Water Quality and the qualified professional shall provide recommendations for appropriate mitigation
  / treatment to achieve a potable quality;
- confirmation that the well meets the current minimum well standards as outlined in the Groundwater Protection Regulation under the *BC Water Sustainability Act,* in particular:
  - o is at minimum 30m from potential sources of contamination, including but not limited to: agricultural buildings, septic fields, animal pens/runs, refuse and compost piles, areas of fertilizer/herbicide use or storage, above or below ground storage tanks, and parking areas;
  - is outside of a floodplain, or if within a floodplain measures taken/required to protect the well;
  - o is accessible for maintenance;
  - has a secure and watertight cap;
  - o the well head is at minimum 300mm above the adjacent finished grade, above the 200 year flood level and the ground around the well head is sloped away from the well casing.
  - o a surface seal is installed to prevent surface contaminants from entering the well from outside the casing.

Appendix III: Information Sources for Hydrogeological Assessments – current to February 2019

#### **Provincial Resources**

<u>Links Page – Groundwater Science and Data</u>

**GWELLS - Groundwater Wells Search** 

**BC Water Resources Atlas** 

**ECO CAT - Ecological Reports Catalogue** 

**Guide To Using BC Aquifer Classification Maps** 

**Guide To Conducting Well Pumping Tests** 

**Determining Likelihood Of Hydraulic Connection** 

Modelling Tools For Estimating Effects Of Groundwater Pumping On Surface Waters

**BC Observation Well Network Interactive Map** 

**Environmental Reporting - Trends in Groundwater Levels in BC** 

**Real-time Water Data Reporting** 

#### **Regional Resources**

RDN Phase 1 Water Budget Study

RDN GIS ... Select: Water Map

**DWWP Reports Inventory** ...includes State of our Aquifers Reports

**RDN Well Protection Upgrade Rebate**