WELCOME BIG BEND SUBSTATION OPEN HOUSE

11 A.M. – 2 P.M.

WELCOME!

Take a look at the storyboards and maps to learn more about the future Big Bend Substation

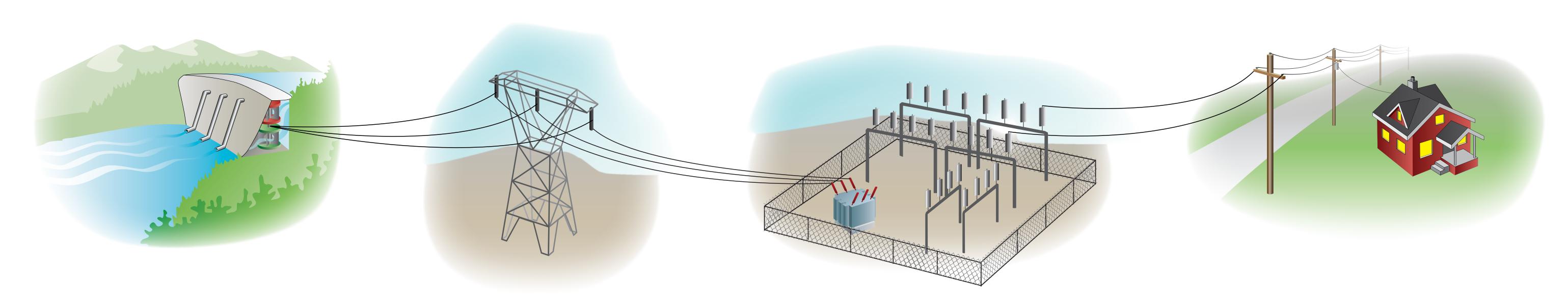
- Why it is needed
- How its design and landscaping will fit into the Glenlyon Business Park

Project team members are here to answer your questions, so please have a chat with us.



WHATISA SUBSTATION?

Substations link BC Hydro's transmission and distribution systems.



Generation:

Electricity is generated by BC Hydro and independent power producers

Transmission:

Electricity is moved from where it is produced to where it is used

Substations:

Voltage is reduced at substations to provide power suitable for use in homes and businesses

Distribution:

Low voltage electricity is provided to neighbourhoods and businesses



ELECTRICAL TRANSMISSION SYSTEM IN SOUTH BURNABY Tyne St Imperial Street Patterson Ave Nelson Ave Kerr St Newell Substation Rumble St Gilley Ave Southridge Dr Marine Dr Marine Way Marine Dr McMillan Fraser Way Riverway Golf Course Bloedel Substation (Private) Z_o Glenlyon Pkwy Big Bend River Rd Substation BoydSt FUTURE BIG BEND SUBSTATION Big Bend Area N Tree Island ENEN AVE **SUBSTATIONS** Substation (Private) 230 KV TRANSMISSION LINE Sensborough Connector Crown Paper 69 KV TRANSMISSION LINE Substation (Private) 1 km

WHY IS BIG BEND SUBSTATION NEEDED?

Burnaby's Big Bend area is home to scores of small businesses – and it's still growing.

BC Hydro forecasts show that the demand for electricity in Big Bend will increase by more than 20 per cent over the next 10 years.

The Big Bend area gets its electricity from Newell Substation (Kingsway and Griffiths). But soon, Newell will no longer be able to meet load growth in Big Bend.

The new Big Bend Substation will ensure continued, reliable power to this important business area.





SITE

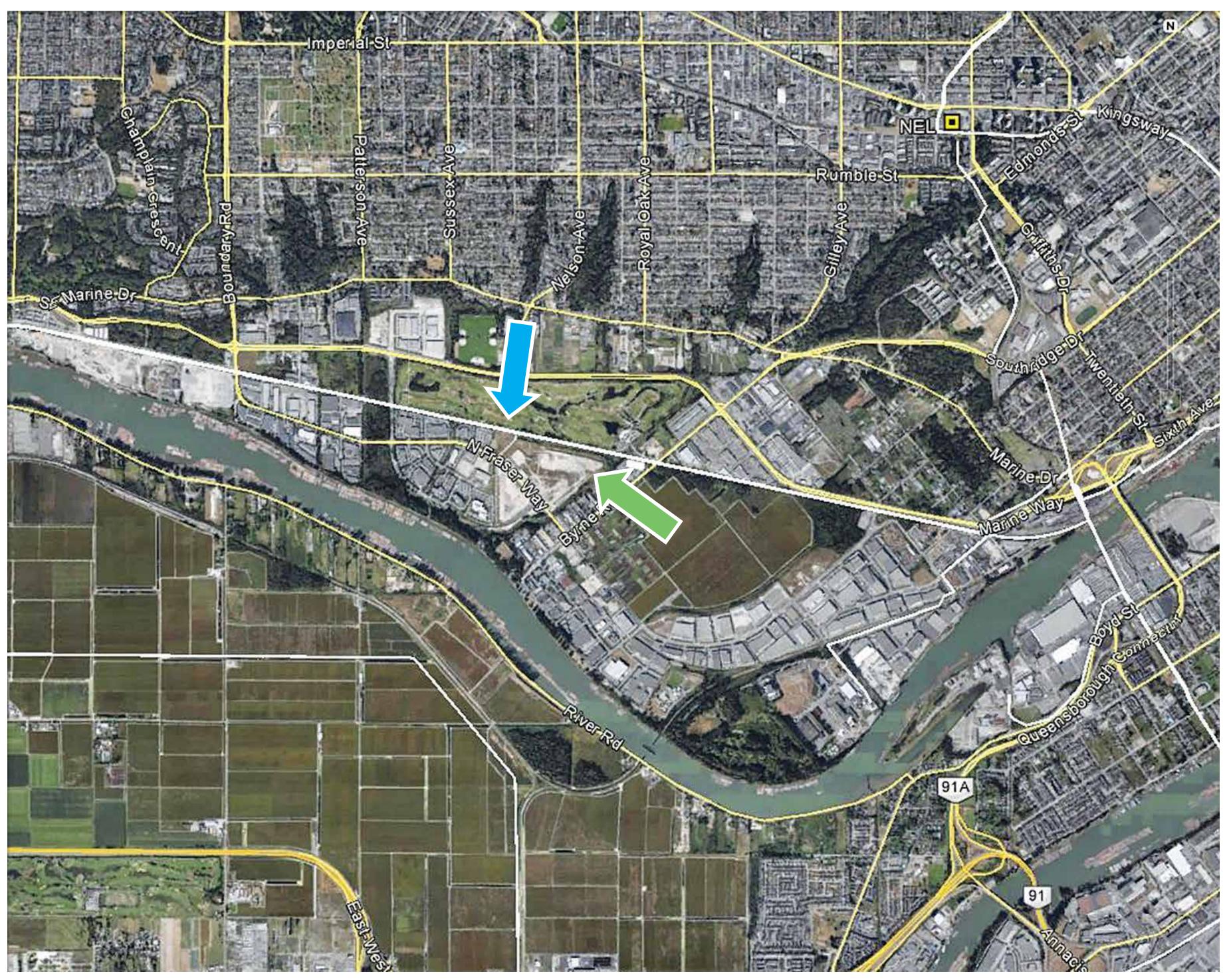


Image provided by Google Earth Pro

Blue arrow points to the existing transmission lines Green arrow points to the future site of Big Bend Substation



THE RIGHT LOCATION IS KEY

BC Hydro has purchased 8.5 acres off North Fraser Way, just south of Riverway Golf Course.

We will use about 2.3 acres to build Big Bend Substation. If we need to expand Big Bend Substation someday, there will be enough property to do this, and to provide room for viewscape screening.

The location is ideal because it's:

- In the heart of Big Bend, where load growth is taking place, and away from any residential development
- Located right by the 69 kV transmission lines that will feed it so no need to build additional transmission lines
- Located close to the distribution system that will carry electricity to Big Bend businesses
- Level, above the flood plain, and has been preloaded
- Already disturbed, so environmental impacts minimal



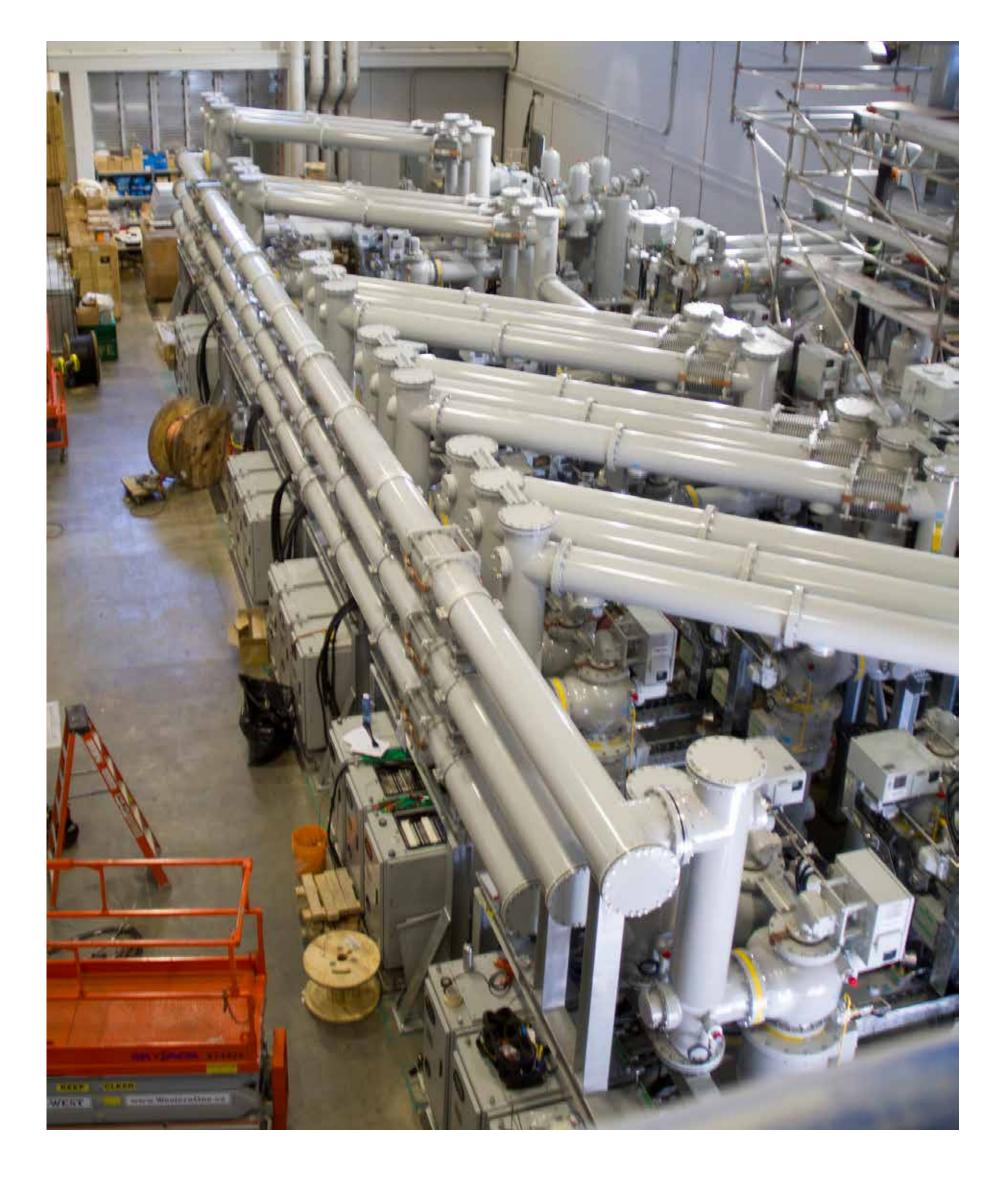
BUILDINGS



CONTROL BUILDING

The control building will house the substation's telecommunication system.

This allows the substation to be operated remotely from the BC Hydro control centre in the Fraser Valley.



FEEDER BUILDING

The feeder building will house the equipment that distributes electricity from the substation to the underground distribution cables connected to customers.



SCHEDULE

Currently completing project planning phase, including:

• Final technical substation design

Architectural and landscape designs

Construction start: Fall 2014

In-service date: Fall 2016





ENVIRONMENT

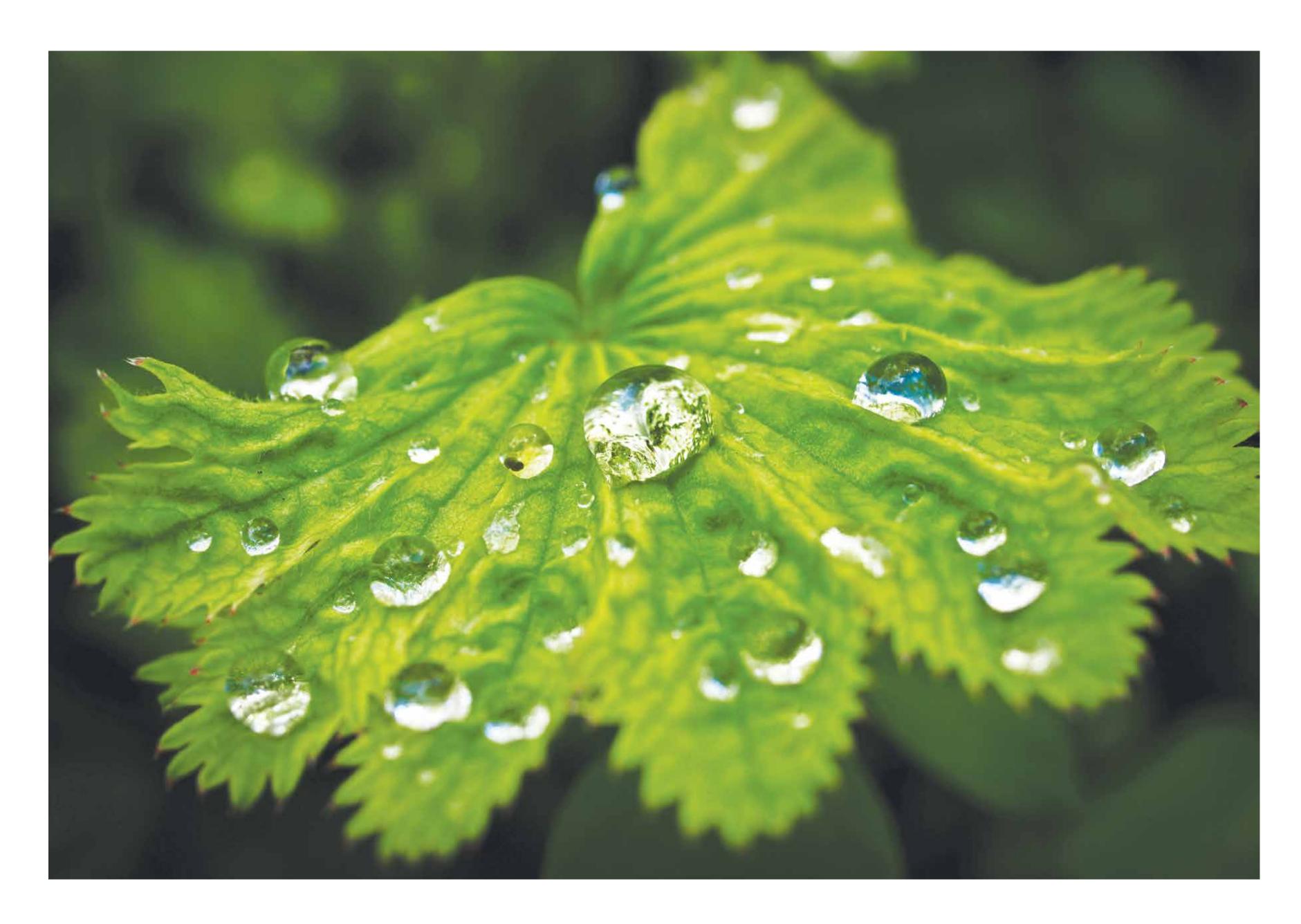
The Big Bend Substation property is bordered by Byrne Creek to the east and Gray Creek to the north.

Appropriate setbacks from these fish-bearing streams will be followed in siting the substation and during all construction activities.

Further protection to the creeks will be provided by the environmental management and protection plans that will be followed during construction.

Environmental monitors will ensure that workers abide by these plans.

The substation will be equipped with state of the art containment to prevent any risk of fluid spills into the watershed.





THANKYOU FOR COMING!

FOR MORE INFORMATION:

bchydro.com/bigbendsub

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