Let's connect early: Making space for electrical infrastructure in Saanich and Victoria

Many new housing developments in B.C. progress well into the municipal approval process before BC Hydro is brought into the conversation. This has often led to delays, costly redesigns, the loss of trees that might have been saved, and frustrated developers.

In response, two local governments — the District of Saanich and the City of Victoria — have partnered with BC Hydro as part of two new approaches aimed at earlier collaboration on development planning. Their shared goal is to improve consultation and the sharing of project information early in the development timeline to reduce friction and surprises later on.

"Developers have been asking for more clear processes, and more predictable outcomes. They want that predictability and potentially an early sign-off from BC Hydro that mitigates future problems around construction."

Alex Kearney, BC Hydro's senior design manager for Vancouver Island

The District of Saanich has launched a new **pre-application pilot project** and approached BC Hydro to offer guidance on electrical servicing requirements as part of an expedited high-level cross-departmental review of proposed 4-to-8-storey multi-family and townhouse development projects.

"We are early in trying this process out, but we see value in getting BC Hydro input early and having the developer, BC Hydro and the municipality have a better understanding of high-level site servicing plans. We're giving it a go, and we're excited about this."

Jon Poole, District of Saanich development planning process manager

BC Hydro worked with the City of Victoria (the City) to create a civil sign-off process in response to a city bylaw. The bylaw mandates that developers engage with BC Hydro to ensure that electrical requirements are met before the City issues a building permit. The civil sign-off process aims to align understanding between the City and BC Hydro. It includes questions about the level of electrical service required, the design of the civil infrastructure, and potential impacts on trees.

"The civil sign-off document has helped our teams understand where development projects are at and support better communication and collaboration with BC Hydro, avoiding stressful situations when conflicts with electrical infrastructure are encountered at a late stage."

Brent Molnar, the City of Victoria's manager of land development

BC Hydro estimates that early alignment with the City of Victoria will save about 20 days per project and roughly 450 employee hours per year. The civil sign-off document also helps the City better understand a project's status and—through better communication and collaboration with BC Hydro—has helped avoid late-stage conflicts.

Both initiatives rely on digital platforms to streamline communication and reduce delays.

- In Saanich, an applicant's documents are uploaded to a secure SharePoint site, where BC Hydro can review and comment.
- In Victoria, a structured sign-off form ensures key civil and electrical inputs have been considered before a building permit is issued.

Why now?

Increasing development density for new homes often requires a complex build-out of our electrical system at the neighbourhood level. There's a growing recognition that faster and more cost-effective connections for customers and the community requires that BC Hydro works more closely with local governments on streamlined processes.

Janna Gamache, manager of local government partnerships with BC Hydro, notes that when BC Hydro is brought in late to the process, it often limits available options and can result in delays and increased costs that impact developers and those seeking housing.

"We want developers and local governments to think about questions such as where's your transformer?" she says. "Where's your electrical room? How are we going to be able to service it? Does my building maintain safety clearances to existing infrastructure?" Or even "Don't plant trees there."

What's happening with Saanich's pre-application process

The new pre-application process supports prospective applicants with an effective preliminary discussion—supported by drawings and technical data from the applicant—at the start of the development review process. It applies only to proposed 4-to-8-storey multi-family and townhouse development projects.

The District of Saanich has the opportunity to provide feedback early to developers. And as one of the groups providing feedback, BC Hydro can help identify potential electrical connection issues before developers have invested too heavily in detailed designs.

The new development review process includes:

- A cross-departmental meeting with the applicant to review the development proposal a minimum of 20 days after application submission approval.
- A development response letter within five days of meeting with the applicant.
- Pre-application guidance for development and rezoning applications.

So far, the one project that has gone through the pre-application process has demonstrated the value of identifying high-level electrical servicing considerations early on. In that commercial redevelopment, an exchange of information unearthed conflicts with existing BC Hydro infrastructure that will impact the phasing of the demolition and build. It also found that the size and design of the development's parkades allocated only limited space for electrical infrastructure.

All involved in the pre-application recognized the importance of further engagement to fully understand the site plans.

A challenge: How to provide BC Hydro access to large documents

Right away, the District of Saanich had to find a way to get details of the pre-application—including 11 pages of civil drawings—securely to BC Hydro in digital format.

The District has set up and is managing a SharePoint site that includes email automation to push out referral notices to BC Hydro and the developer. Poole says that if this exchange of documents works well, it could open the door to using the same process for other consultations with BC Hydro, including through the engineering department.

"This way, we can see the planned location of a PMT (pad-mounted transformer), and if the drawings indicate whether their planned connection is underground or overhead," says Poole.

BC Hydro distribution design staff can review and comment on whether there's anything from a BC Hydro perspective that might be a concern, such as a key design risk consideration that the developer should be looking at early on.

In Victoria, a civil sign-off document acts as an essential check-in

Working with the City of Victoria, BC Hydro created a new civil sign-off document to bridge the Hydro design team to engaged City staff to align understanding and confirm that key infrastructure decisions have been made before the building permit stage.

"The City of Victoria has a bylaw that stipulates that developers must engage with BC Hydro, TELUS, Shaw and any other utility company and receive a sign off from us that the electrical design for the development is complete or is acceptable before a building permit is issued," says Maciek Dobrowolski, a distribution design manager with BC Hydro based in Nanaimo. "It's essentially authorization to start construction."

Dobrowolski says that before the new process was introduced, sign-offs on electrical design were often inconsistent, with some consultants requesting from BC Hydro to simply put a signature on a drawing. There was simply no consistent sign-off, and no clear understanding of what the sign-off (if any) meant.

The new development review process includes:

- Are your electrical loads confirmed? Have you confirmed with us exactly the type, the size of electrical capacity that we can provide you, and that it's not going to change?
- Is your civil infrastructure duct routing designed and complete? Is the design for the undergrounding or the infrastructure that's going to be put in the ground not going to change?
- Is there any impact to trees? Can BC Hydro be confident that we don't need to cut down trees or design through root systems, or if that's required, that the City is aware at the front end, before the building permit is issued?

Based on that information and BC Hydro's feedback, it's up to the City of Victoria whether to grant the construction permit. Many developers are ready to proceed to the building permit. For those that aren't, the process flags areas that require more work and prevent potential time delays and cost increases later on.

"We can say that because a design hasn't been completed, the impacts can't be fully understood," says Dobrowolski. "Because there's this document, the City can say to a developer: 'You're not ready for a building permit. Go back to BC Hydro and work out the details before we advance this'."

Benefits and challenges so far

For developers, the early consultation in Saanich and Victoria provides more clarity on what to expect from BC Hydro in terms of costs. For example, if the design calls for undergrounding on a section of a street, the developer will know to budget for the additional costs.

For local governments, there's greater confidence that construction delays and/or cost challenges won't hold up construction of housing at a time of great need.

For BC Hydro, there should be fewer instances of rework and a back-and-forth with consultants during the construction phase. Ideally, the time spent early in electrical planning will be far less than what's required to wrestle with issues while the clock ticks later on.

"For a relatively small up-front effort, we flag potential conflicts and reduce potential re-work and time delays on the back end," says BC Hydro's Kearney. "And then there's an indirect benefit for the customer, the architects and the engineers and everyone else, because they're not going to have to do that rework."

Kearney adds that, in its support of housing development, BC Hydro is committed to continuously improving the efficiency and impact of our work. He sees the Saanich and Victoria initiatives as important progress toward that goal, and looks forward to growing that collaboration.

"Our teams have skills and experience that can help support developers and local governments delivering their projects," he says. "These pilots are trying new ways to share our knowledge earlier and avoid conflicts on the backend of a project when there are more constraints and less time to resolve."

For more information or partnership inquiries regarding process improvements, contact localgov@bchydro.com.