February 1, 2022

TO: Park Board Chair and Commissioners

FROM: General Manager – Vancouver Board of Parks and Recreation

SUBJECT: BC Hydro Request for Rights-of-Way in Nelson Park - Agreements

RECOMMENDATION

THAT the Vancouver Park Board authorize the Director of Real Estate Services to execute multiple land use agreements with BC Hydro, as outlined in this report (the "Nelson Park Hydro Agreements"), for 1030 Bute Street, legally described as: PID 007-036-817, Lot B Block 22 District Lot 185 Plan 19348 related to the West End Substation Project (the "Project") on the terms and conditions outlined in this report and to the satisfaction of the General Manager of Real Estate & Facilities Management, the General Manager of Parks & Recreation, and the Director of Legal Services.

REPORT SUMMARY

This report seeks a decision to enter into multiple land use agreements across Nelson Park (collectively, the "Nelson Park Hydro Agreements") with BC Hydro. The Nelson Park Hydro Agreements are required to grant BC Hydro access ramps, electrical transmission and distribution corridors, and surface restrictions across Nelson Park to support the proposed West End Substation (the "Project") to be constructed beneath the Vancouver School Board's Lord Roberts Annex at 1150 Nelson Street.

BOARD AUTHORITY, POLICY, & PREVIOUS UPDATES

As per the Vancouver Charter, the Park Board has exclusive jurisdiction and control over all areas designated as permanent and temporary parks in the City of Vancouver, and shall have the custody, care and management of other areas as determined by Council. Nelson Park has not been designated as a Permanent Park. The City is the registered owner of the land comprising the park and owns adjacent streets; therefore, the City will be required to enter into any leases or statutory rights-of-way that may be required for the proposed substation and the underground high-voltage transmission lines.

On March 11, 2019, the Board received a presentation titled BC Hydro Rights-of-Way Request in Nelson Park providing an overview of the BC Hydro project to develop an underground substation beneath the Vancouver School Board's Lord Roberts Annex site, the rights-of-way request in Nelson Park, and information on the Park Board staff led impact study and engagement. A presentation on the impacts & engagement results was provided to the Board on May 25, 2020.

On October 19, 2020, the Park Board approved the VanPlay Framework, for Vancouver's Parks and Recreation Services Master Plan. VanPlay sets priorities and provides tools and policies to support the pursuit of equity, connectivity and access to parks and recreation for all. As outlined in VanPlay Report 2, Goal 2 is to "Protect Existing Park and Recreation from Loss, Encroachment & Densification".

BACKGROUND

In June 2018, the Vancouver School Board (VSB) accepted a proposal from BC Hydro to purchase an air space parcel beneath the Lord Roberts Annex School property in the West End and construct an underground electrical substation. The new substation, called the West End Substation, will ensure the provision of reliable power in downtown Vancouver by replacing BC Hydro's aging Dal Grauer substation.

Construction of the West End Substation beneath the Lord Roberts Annex site adjacent to Nelson Park (see Figure 1 below) could start as early as fall 2023 subject to completion of the new school in Coal Harbour. The existing Lord Roberts Annex school will be removed to facilitate construction of the substation, which could be in-service as early as 2028. Once the underground substation is complete the new Lord Roberts Annex school will be built in the western portion of the school site. The roof of the substation will act as an extension of the school grounds and is being designed to act as a sports/playfield to support the school and the community.

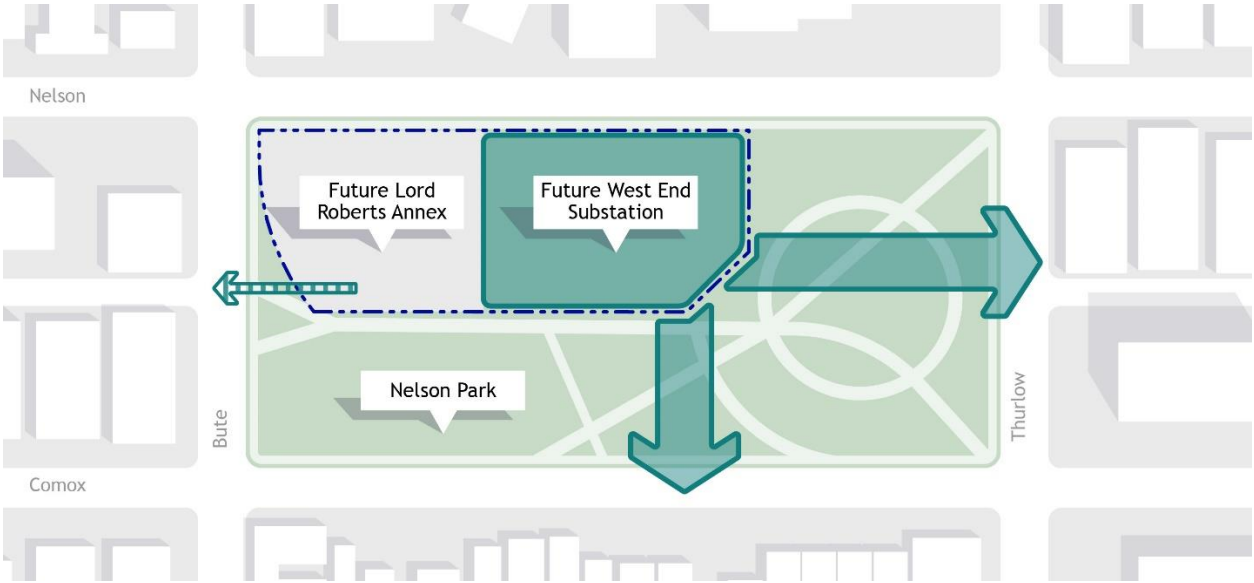

Figure 1: Easement and modified ROW alignment request from BCH

In fall of 2018, BC Hydro requested permission from the Vancouver Park Board for rights-of-way to bury five underground power cables through Nelson Park to connect its planned underground West End Substation to the larger city-wide electrical network. Figure 1 depicts Nelson Park and the rights-of-way in the park in relation to the future Lord Roberts Annex School and West End Substation on the adjacent VSB site. BC Hydro also requested an easement for a driveway through the western portion of the park for vehicular access to the underground substation and to school underground parking from Bute Street. Installation of the underground power cables through the park, including park restoration, would take between three and six months during which portions of the park would be closed to public access. The timing of the work in the park is flexible and would be coordinated subject to approval of the project by the Park Board.

In March 2019, prior to deciding on whether or not to grant BC Hydro the rights-of-way and easement, the Board directed staff to engage the community on the project, retain a multi-disciplinary team to develop a project impact report to outline short-term and long-term impacts of the project, and to work with the City's Real Estate Service to determine the potential value of the lands and legal rights being requested.

Nelson Park

Nelson Park is the largest non-waterfront park in downtown, located in the heart of the West End. At just under three acres in size, Nelson Park includes an off-leash dog park, community gardens, pathways, and passive open space encircled by mature trees and seating areas. A park playground supplements a larger one on the adjacent school grounds. The park was renewed in 2008 and is very well used, serving the densest neighbourhood in the city, which is among the densest in North America. Figure 2 below highlights that according to VanPlay, downtown Vancouver and the West End have the lowest park provision ratings in the City

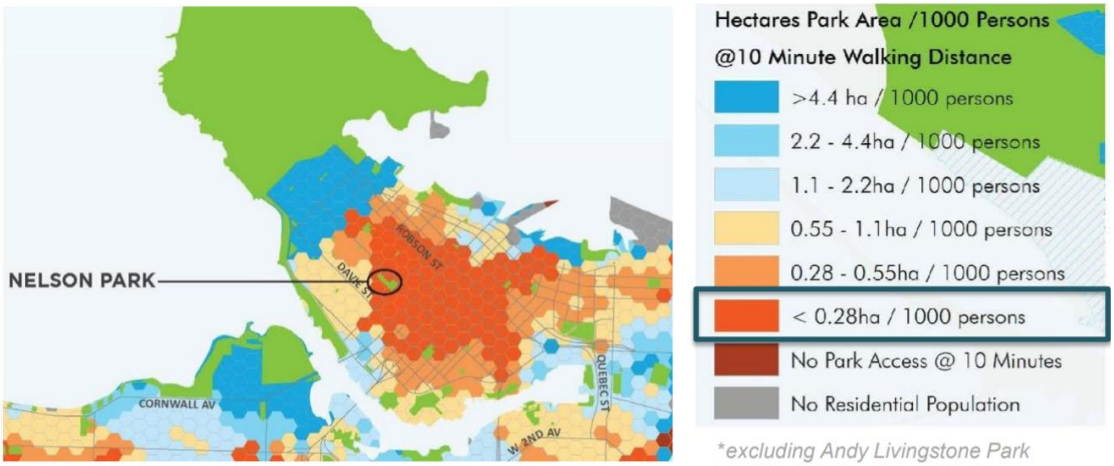

Figure 2: Park Area (Hectares) Provision Per 1000 persons

With a number of residential towers proposed nearby, and no opportunities anticipated to acquire parkland of significant size in this area, it is expected that the pressure on this park will continue to increase. A recent review of development applications indicated there are approximately 5,000 new units planned for the area around the park as shown in Figure 3, excluding the development potential of the adjacent St. Paul's hospital site which is anticipated to generate significant additional population density in the West End.

Figure 3: West End Development Applications – number of residential units

Public Engagement
Staff led a comprehensive public engagement campaign in the fall of 2019 to seek public feedback on BC Hydro's request for rights-of-way through the park. Engagement included two stakeholder workshops, a public information session in the park, and a Community conversations event near the park. The public engagement was supplemented with a discussion guide.

The goals of the engagement events were to:

- Provide the project background;
- Inform community members about the impact study that was being developed and share early findings; and
- Surface questions and comments regarding pending changes that could affect users of Nelson Park.

Public feedback related to the project was captured through a TalkVancouver survey. Detailed results of the survey and response analysis can be found in the Park Board's BC Hydro Nelson Park Engagement Summary, with a high level summary shown in Figure 4 below.

Figure 4: Summary of Park Board BC Hydro Nelson Park Engagement Results

Engagement results shown below in Figure 5 indicate that generally people understand the need for BC Hydro to provide reliable power to the community, however there are mixed levels of public support on BC Hydro's request in Nelson Park as the project combines two important needs: the need to upgrade infrastructure to meet power needs and the need to maintain a valued neighbourhood park.

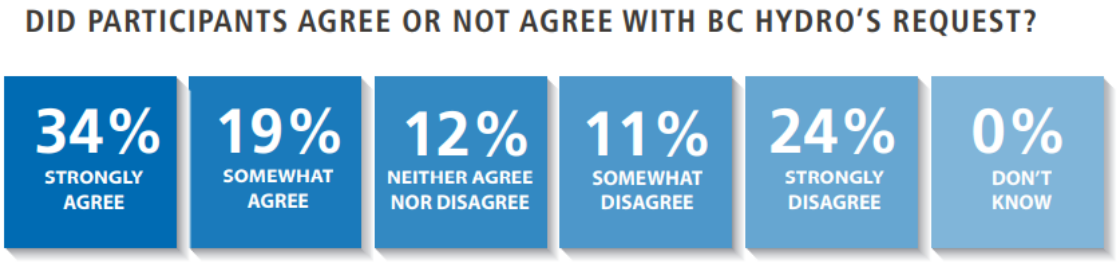

Figure 5: Image from Park Board BC Hydro Nelson Park Engagement Summary

Key reasons for supporting the request from BC Hydro include a desire to ensure reliable power in the area and the feeling an underground substation will have fewer impacts than an above-ground substation.

Key reasons for non-support of the request by BC Hydro include concerns about park impacts, unknown factors, community disruption, and power lines in close proximity to public space**.**

Other themes identified through analysis of the engagement feedback include:

- Concerns about removal of mature trees, disruption from construction impacts, duration of construction, public safety perceptions related to electric and magnetic fields (EMF), and impacts to park features including community gardens, playgrounds, and green space;
- Concerns that restrictions on what can be placed above the underground power cables in Nelson Park will affect the future park design and character;
- General development fatigue related to ongoing development in the West End; and
- Results indicate that some feel there is an opportunity to improve Nelson Park if changes are planned with the community around a long-term park vision that considers context and future community needs.

Project Impact Study

To better understand the short-term and long-term impacts of BC Hydro's request, a report was developed by a multi-disciplinary team of professionals including arborists, geotechnical engineers, wildlife experts, hydrogeologists, landscape architects, planners, and public safety experts. The Nelson Park Impact Assessment and Mitigation Options Study provided a detailed assessment of likely and potential impacts related to the construction and management of the infrastructure required to support the substation.

The goals of the study were to:

- **Review** findings from BC Hydro's previous studies and identify potential gaps in information or questions that will support informed review and decision-making;
- Identify potential **direct impacts** to Nelson Park if the Park Board were to grant BC Hydro the requested rights-of-way through Nelson Park;
- Identify potential **indirect impacts** to Nelson Park as a result of BC Hydro's underground substation development at the adjacent Lord Roberts Annex site including both short-term (during the construction process) and long-term (post-construction, when the new substation

is in operation) impacts, recognizing that the West End Substation project is proceeding as planned and that project is not directly affected by the outcomes of this Study; and

- Identify potential **mitigation considerations** that could help alleviate the aforementioned short-term and long-term impacts.

The report includes a detailed inventory of all park features and uses and examines the impacts of BC Hydro's request through the lens of eight distinct fields of study. Figure 6 below identifies the areas of study included in the report:

Figure 6: Categories of park features and uses

The report provides a category description for each area, identifies known or potential impacts, and proposes mitigation considerations and options to address impacts to each of the study areas.

The most significant or noticeable impacts to the park and park use include:

- the removal of 12 trees (5 large and 7 small);
- removal and relocation of the playground;
- removal and relocation of the trellis structure and plaza area;
- removal and relocation of the water feature;
- removal of other shrub and vegetative areas within the proposed ROWs;
- placement of shoring anchors beneath the park to support the substation excavation (no surface impact to the park);
- temporary loss of park space around the substation construction to support a safety buffer for the duration of the substation construction project (est 4-5 yrs);
- temporary loss of park access during the installation of the transmission and distribution lines and park restoration (est 3-6 months); and
- limitations of certain park structures and vegetation placed within the proposed ROWs.

In addition to the items noted above, the construction of the substation and new school within the Lord Roberts Annex parcel will also result in typical construction impacts such as noise, dust, traffic etc. for the duration of the construction projects (currently estimated at 5 years).

ROW Alignment

As part of the original request for access and rights-of-way, BC Hydro submitted a plan noting locations of the proposed transmission and distribution cables. Based on the findings of the impact study, staff worked with BC Hydro to adjust cable locations to find an alternative alignment that limits overall impacts to park assets, reduces tree canopy losses, reduces the overall area of the ROW's, and maximizes flexibility for future park programming. Figure 7 notes the initial ROW alignment submitted by BC Hydro in 2018, and Figure 8 depicts the revised alignments coordinated in 2020. The revised alignments have been incorporated into the draft Nelson Park Hydro Agreements.

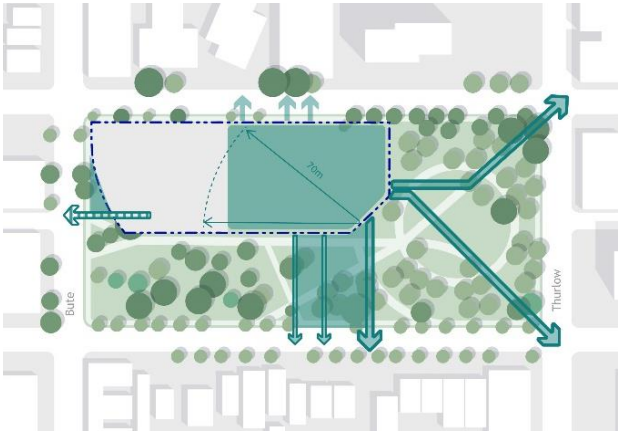

Figure 7: Original alignment proposed (2018**)**

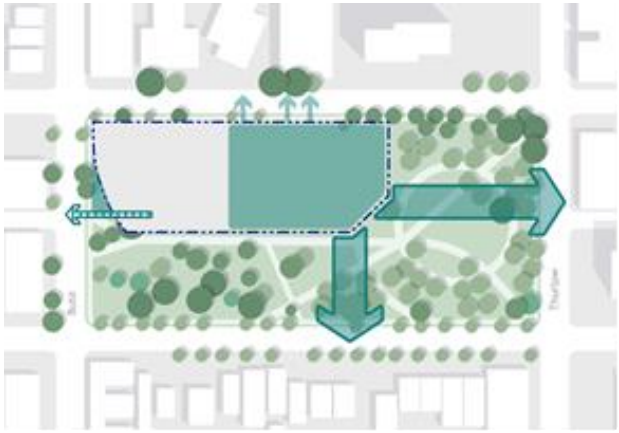

Figure 8: Revised alignment (2020)

DISCUSSION

Park Impacts and Restoration

As noted in this report, the direct impacts to the park related to the installation of the underground power cables include removal of trees, and removal of existing park structures and amenities to accommodate the trenching for the placement of cables as depicted in Figure 9. The agreements note BC Hydro's requirement to repair the impacted portions of the park on a like-for-like basis once their work is complete.

It is currently estimated the work within Nelson Park, including park restoration, will take 3-6 months, during which time a portion of the park will be closed to the public for safety. BC Hydro has indicated there is opportunity for ongoing discussion to determine when the work is completed in the park during the estimated five-year substation construction (2023-2028) window. BC Hydro has also indicated the work within the park can be done in winter to minimize park use disruptions. The timeline provided by BC Hydro below (Figure 12) does not include the VSB's school construction which is anticipated to start upon completion of the substation.

Figure 9: Artist's rendering indicating substation excavation and cable trenching through Nelson Park

In addition to the portion of park closed to facilitate the installation of the cables, Figure 10 illustrates a request for an additional 5m offset around the eastern and southern edges of the Lord Roberts Annex site to be used as an additional safety buffer space around the construction site for the duration of the substation construction. BC Hydro has also requested permission to build a fence in the park for public safety 2m from the property line which is shown in Figure 11.

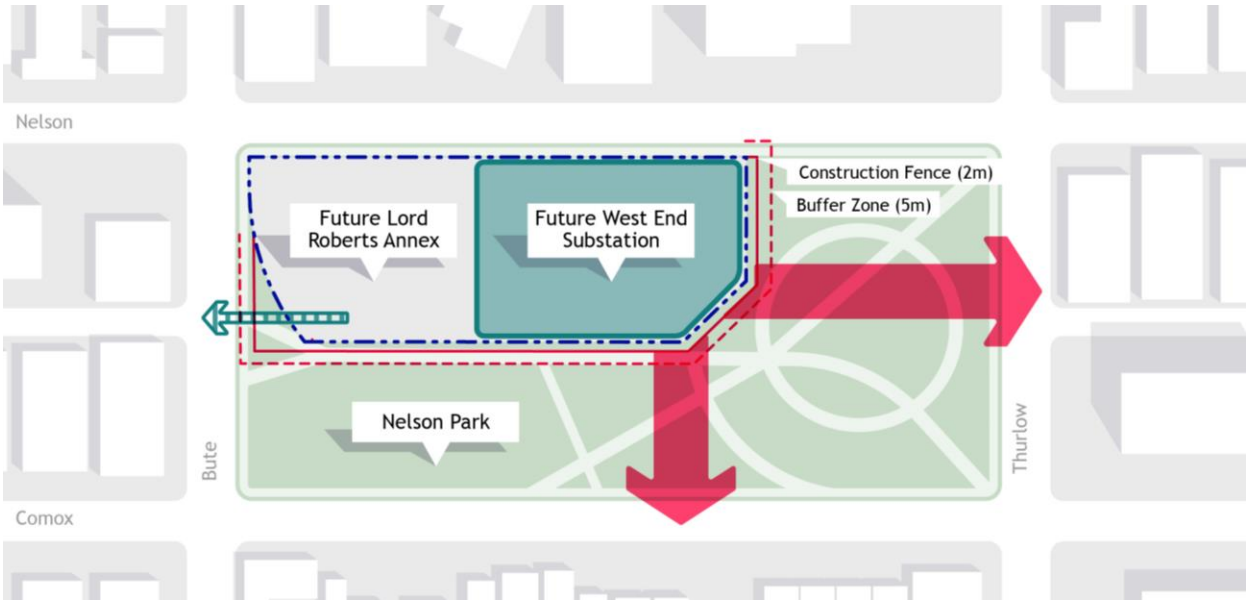

Figure 10: Proposed safety buffer and fencing plan

Figure 11: Estimated line of construction fencing and buffer zone.

Figure 12 below illustrates a tentative project timeline shared publicly by BC Hydro.

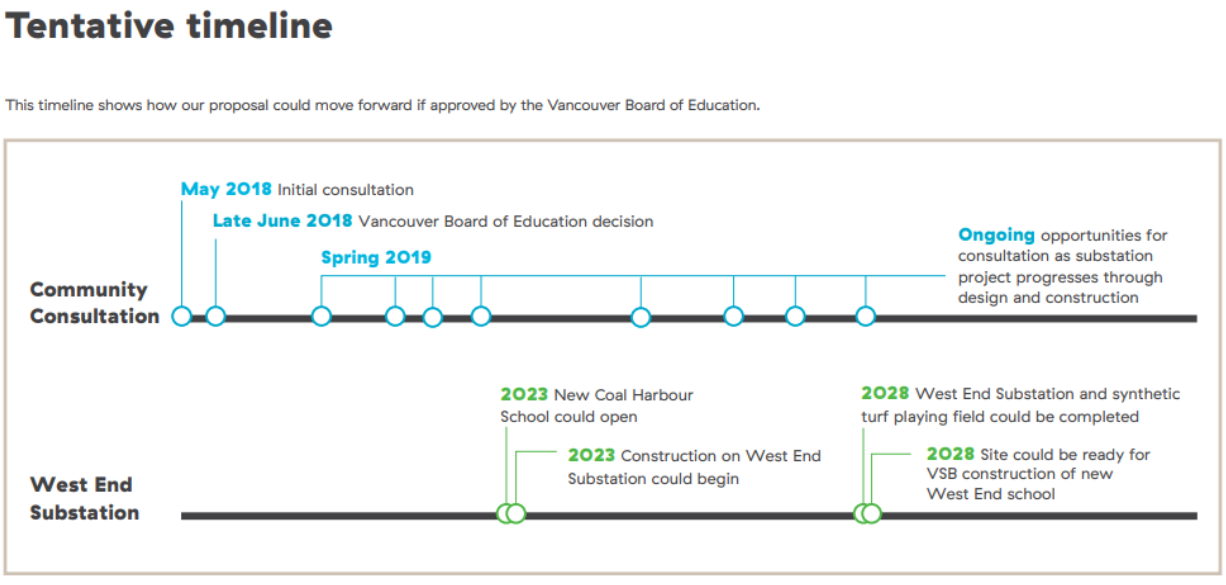

Figure 12 – Timeline Graphic from BC Hydro's 2018 Discussion Guide

Should the agreements be approved, staff recommend reviewing the existing park design and considering opportunities for a more comprehensive park renewal. Although the park was

renewed as recently as 2009, the impacts of the construction in the park paired with significant changes at the Lord Roberts Annex site, which include a new school and open space over the substation, provide an opportunity to reimagine Nelson Park and the Lord Roberts Annex site as a more cohesive public space. This is also an opportunity to optimise park usage to ensure the park is able to maintain levels of service in a rapidly changing and densifying neighbourhood.

Park Encumbrances
The draft agreements for the underground power cables in Nelson Park place limitations on what can and cannot be constructed on top of the transmission and distribution line within the rights-of-way; current language dictates the no buildings or structures (including pools) can be constructed and that shrubs or trees shall not exceed 3.0m in height. Many other park uses are still supported within the ROWs as the underground transmission and distribution lines are not visible at the surface. While ROWs come with limitations on types of park use and amenities that may be constructed within them, they do not inherently represent a loss of park space, just restrictions on what can be placed on top of the ROWs.

The request for an easement to construct a driveway ramp off Bute Street represents a permanent loss of park space of 87m2 as the driveway is required to provide long-term vehicular access into the substation and into the school parking garage. In addition, a small section of park north of the easement off Bute Street (99m2) would be separated from the park by a driveway resulting in a 'stranded' piece of park.

The long-term rights-of-way and easements requested by BC Hydro represent a total of 1638.42 m2 or approximately 14% of the total park. A recent assessment undertaken by staff using available GIS data has identified that conservatively 6.3% of all park space city-wide is encumbered by some sort of non-park related infrastructure including BC Hydro ducts, Fortis BC gas mains, telecommunications ducts (various), COV fiber lines, Metro Vancouver water, sanitary and storm mains, and COV water and sewer mains. While these utilities are an integral part of a functioning urban environment, the agreements associated with these utilities place restrictions on the kinds of park amenities and uses permitted above them. This limits the Park Board's ability to change park uses to meet user needs and address services levels.

FINANCIAL / OTHER CONSIDERATIONS

Real Estate Services, in consultation with Park Board Staff, have been actively in negotiations with BC Hydro since 2019 regarding a payment that would fairly compensate the City for the rights granted and the impact to the park. Details of all financial negotiations are confidential.

Staff have worked with BC Hydro to develop a compensation package that reflects the cost of the disruption to the users of Nelson Park and the need to restore the park once the work is complete. The information will be made public once all negotiations are complete.

LEGAL CONSIDERATIONS AND AGREEMENTS

BC Hydro has secured from the VSB a volumetric subsurface air space parcel in fee simple ("ASP"), SRW and covenants, and a construction lease to enable the construction of the Project beneath the VSB Property. To bring transmission power to the substation, distribute the downgraded power to the West End peninsula and allow service access to the substation, BC Hydro requires certain rights of way and easements across City-owned Nelson Park.

Real Estate Services, in consultation with Park Board Staff, have been in negotiations with BC Hydro over the various land use agreements required for the Project and the payment to the City that reflects fair compensation for granting such rights over Nelson Park. The details of all financial negotiations are confidential. The Nelson Park Hydro Agreements as negotiated are further described in the section below:

Nelson Park Hydro Agreements
The final draft forms of the various legal agreements have recently been settled and are known collectively as the Nelson Park Hydro Agreements, which are summarized below.

1) Agreement to Acquire Rights

   The Agreement to Acquire Rights (the "AtAR") is the overarching agreement between BC Hydro and the City which sets out:

   - the multiple property interests required from BC Hydro across Nelson Park, as detailed in the following paragraphs;
   - the BC Hydro Condition Precedent, being senior management and board approval;
   - the commitments of each party, particularly with respect to access to Nelson Park, public consultation components and the need to settle design solutions for removal/modification of the City's pre-existing SRWs;
   - construction schedule and notification provisions; and
   - the obligations on BC Hydro to replace temporary blanket SRWs with permanent volumetric surveyed SRWs, upon project completion.

2) Initial Transmission Statutory Right of Way

   The "Initial Transmission SRW" document, provides for a temporary blanket SRW entering Nelson Park from Thurlow Street, which will covey property rights from the City to BC Hydro to install and construct the underground transmission lines for the Project in an 11 meter wide area through Nelson Park from Thurlow Street.

   The total area of the Initial Transmission SRW will be registered as a blanket SRW, the permitted area of the works is limited to 727.5m2. There are no ancillary rights granted through these SRWs, meaning BC Hydro can only access the 11m wide portion for construction purposes. Upon completion of the Project, the Initial Transmission SRW will be replaced with a volumetric SRW, as described next.

3) Replacement Transmission Statutory Right of Way

   Upon completion of the Project, BC Hydro will survey the as-built transmission infrastructure in order to replace the blanket Initial Transmission SRW with a reduced, volumetric (three-dimensional) "Replacement Transmission SRW", all to the satisfaction of the City. For clarity, the Replacement Transmission SRW area will be drawn to the measured limits of the built infrastructure and provide for a twenty-five foot (7.6m') vertical limit above-grade for vehicle and machinery access.

   The Replacement Transmission SRW, shall grant BC Hydro the right to maintain and operate the transmission infrastructure, including access to the area for excavation, repair, keeping the area clear of obstructions and any other actions required to maintain the

transmission infrastructure. Upon the City's acceptance of the volumetric plan for the Replacement Transmission SRW, BC Hydro will, within six (6) months, discharge from the legal title to Nelson Park the Initial Transmission SRW described in item 2 above, and replace it by registering the Replacement Transmission SRW to the Title.

4) Initial Distribution Statutory Right of Way

The "Initial Distribution SRW" document provides for a temporary blanket SRW, which will covey property rights from the City to BC Hydro to install and construct the underground distribution lines for the Project in an 18 meter-wide, area through Nelson Park from Comox Street,.

While the Initial Distribution SRW will be registered as a blanket SRW, the permitted area of the works is limited to 796m2. There are no ancillary rights granted through these SRWs, meaning BC Hydro can only access the 18m wide portion for construction purposes. Upon completion of the Project, the Initial Distribution SRW will be replaced with a volumetric SRW, as described in item 5 below.

5) Replacement Distribution Statutory Right of Way

As with the transmission infrastructure described above, upon completion of the Project BC Hydro shall survey the as-built distribution infrastructure in order to replace the 2D blanket Initial Distribution SRW on the Title to Nelson Park with the "Replacement Distribution SRW". The Replacement Distribution SRW shall provide for a three-dimensional volumetric plan drawn to the limits of the distribution infrastructure, and providing for a 7.6m vertical limit, which grants BC Hydro property rights to maintain, repair and operate the infrastructure.

6) Section 219 Restrictive Covenant

The "S. 219 Covenant" is a charge secured against the Title to Nelson Park in favour of BC Hydro, restricting the City's land uses within the Transmission and Distribution SRW areas of the park to ensure the protection of BC Hydro's infrastructure. The S. 219 Covenant limits construction and uses in these areas to paved roads, pathways, plaza areas or sports courts, the placement of shallow infrastructure including signage, fencing and irrigation lines, the placement of temporary structures (e.g. tents for farmers markets), and the placing of lawn, turf, low plantings and additional fill. The blanket S. 219 Covenant covering the Initial Transmission and Distribution SRWs shall be substituted (post-construction) by a replacement S. 219 Covenant, restricting limiting the restrictions on land uses to the actual final dimensions of the Replacement Transmission and Distribution SRWs.

7) Access Easement

The "Access Easement" comprises a tripartite agreement between the City, BC Hydro and the VSB providing access across a portion of Nelson Park for both VSB and BC Hydro. The Access Easement grants rights for the construction and use of a shared maintenance vehicle ramp, servicing both the VSB Property and BC Hydro's ASP, with ongoing maintenance the responsibility of BC Hydro and VSB.

The area of the Access Easement is1236sf, with BC Hydro responsible for updating the access area with a survey of the as-built's, upon completion.

8) Release/Modification of City Statutory Right of Way

There are two pre-existing City-owned Statutory Right of Ways (the "First City SRW" and "Second City SRW") traversing Nelson Park for public utility purposes, providing for water-mains, sewer and third-party utilities serving both Nelson Park and the VSB Property. The AtAR commits the parties to arrive at a design solution acceptable to the City for abandoning or relocating the utilities in the City's SRWs, such that BC Hydro can construct the Project. Upon relocation or abandonment of the utilities to the City's satisfaction, the City will execute a release of the First City SRW (the "Release") and a release, modification and/or replacement of the Second City SRW (the "Modification").

As the Release and Modification require finalization of a design solution before the documents can be execution-ready, they are not attached to this report, however Recommendation A will, subject to Council's approval, authorize the Director of Real Estate Services to negotiate and execute the Release and Modification to the satisfaction of the General Manager of Real Estate & Facilities Management, the General Manager Parks & Recreation and the Director of Legal Services.

9) Substation Construction Licence

The "Substation Construction Licence", provides BC Hydro with temporary rights during the construction term of the Project to:

- Bring vehicles and equipment across the future area of the Access Easement (the "Easement Area") and lands immediately adjacent the Easement Area, off Bute Street (the "Access Area");
- To install anchor rods and shoring works within a portion of Nelson Park adjacent the substation ASP (the "Shoring Area");
- To permit the swinging of a construction crane over the air space of Nelson Park (the "Crane Area");
- To install temporary safety hoarding and fencing on Nelson Park around the perimeter of the VSB Property (The Safety Works Area"); and
- To clear, prune and remove trees/vegetation, and inspect/monitor/do all things reasonable necessary to affect the Project within the various areas noted above (collectively, the "Licensed Area").

The Term of the Substation Construction Licence shall be six (6) years, commencing no earlier than September 1, 2024 and no later than December 31, 2025.

10) SRW Construction Licence

The "SRW Construction Licence" provides BC Hydro with temporary rights required for those areas of Nelson Park required for the construction of the Transmission and Distribution SRWs (areas not covered through the Substation Construction Licence, noted in item 9 above). While construction of the substation component of the Project is estimated to take five (5)+ years, construction timing for the Transmission and Distribution SRWs is considerably shorter at just six (6) months.

BC Hydro will require additional portions of Nelson Park during this 6-month window for access, fencing, storage of materials, clearing of vegetation, and finally, installation and construction of the electrical infrastructure to be placed in the Transmission and Distribution SRWs. The portions of Nelson Park covered by the SRW Construction Licence are a 21 meter-wide corridor off Thurlow Street covering the future Transmission SRW area, and a 28 meter-wide corridor off Comox Street covering the future Distribution SRW.

The survey plan of Nelson Park, incorporating the Transmission & Distribution SRWs and Access Easement, is shown below in Figure 13.

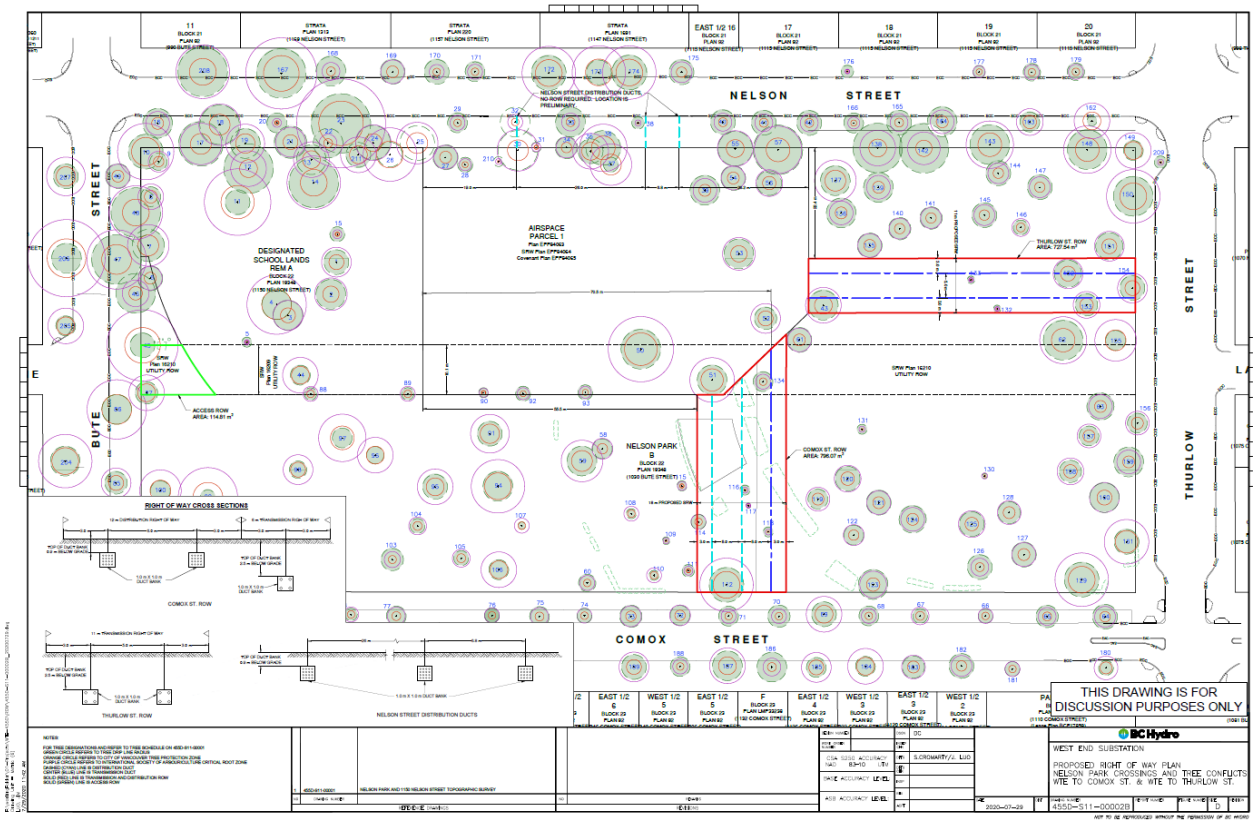

Figure 13: SRW & Access Easement Survey Plan including location of existing trees, Nelson Park

NEXT STEPS

Subject to acceptance of the agreements as outlined in this report and the associated compensation negotiated by City of Vancouver Real Estate Services, Park Board staff will engage in further detailed coordination with BC Hydro as the design of the substation progresses. Staff from CoV legal and real estate will facilitate the finalization and signing of the agreements to the satisfaction of the GM's as noted in the recommendation. Park Board staff will also continue to work with staff from the VSB on the design of the new school and school grounds to ensure the two spaces are compatible and support the recreational and outdoor needs of the immediate community.

CONCLUSION

Should the project be approved, the request for rights-of-way, easement and construction impacts will result in short-term loss of access to portions of the park and will place permanent limitations on the Park Board's ability to redesign portions of the park in the future to address public space needs and meet levels of service. However, the compensation received through the agreements could provide the Park Board opportunities to improve park services and access to parks within the park deficient West End. The overall public benefits of BC Hydro's West End Substation outside the boundaries of the park should also be considered as the substation project will provide resilient power infrastructure for residents and businesses in a growing downtown and has provided funding to support the growth of schools in the West End and downtown Vancouver.

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