Memo

City of Kelowna

Date: November 10, 2010

To: City Manager

From: Land Use Management, Community Sustainability

Application: A10-0004 **Owner:** FortisBC Inc.

Address: 4716 Stewart Road East **Applicant:** New Town Planning Services

Subject: Non-farm use within the Agricultural Land Reserve

Existing OCP Designation: Rural/Agricultural

Existing Zone: A1 - Agriculture 1

1.0 Recommendation

THAT Agricultural Land Reserve Appeal No. A10-0004 for Lot 210 Section 29 Township 29 ODYD Plan 1247, located at 4716 Stewart Road East, Kelowna, B.C. for a non-farm use within the Agricultural Land Reserve, pursuant to Section 20(3) of the Agricultural Land Commission Act, be supported by Municipal Council, subject to the provision of landscape buffering that is generally consistent with the Agricultural Land Commission's Landscape Buffer Specification number A.3a and/or A.4a;

AND THAT Municipal Council forward the subject application to the Agricultural Land Commission.

2.0 Purpose

The applicant is requesting permission from the Agricultural Land Commission (ALC) for a non-farm use within the Agricultural Land Reserve (ALR) to allow an expansion of the existing electrical substation on the subject property.

3.0 Land Use Management

The subject property has a variety of land capabilities and soil classifications across the site with the potential for improvement with irrigation. No portion of the property is currently being used for agricultural purposes; however this is not a reflection of the carrying capacity of the land but rather a reflection of the landowner, FortisBC, not engaging in farm activity.

The applicant notes that the substation on the subject property has been in operation since 1968 and that it predates the inception of the ALR. While the current substation is grandfathered as a legally non-conforming use, any expansion does trigger the need for a non-farm use application to the ALC.

FortisBC intends "to add a separate non-contiguous station to the northwestern portion of the site which will be electrically connected to the existing station," which will represent an approximate 200-250% increase in substation footprint. The attached site plan shows the

proposed expansion area in relation to the existing substation and lot lines. Previously supplied drawings (also attached) illustrated potential phased build-out of electrical equipment at 2015 and 2029, although these schematics were not as precise as to exact location on site. At eventual build-out, the small portions of land remaining would consist of steep slopes and buffer areas, and it is unlikely that the property would be able to be farmed.

Should the application for non-farm use be approved in principle by the ALC, subsequent applications to the City for an OCP amendment and rezoning will have to address the following items which have not yet been supplied by the applicant:

- proposed buffering and landscaping to minimize impact to adjacent agricultural land;
- site grading and drainage plan for proposed changes;
- assessment of visual impact; and,
- technical information on the size, height, configuration, and noise and nuisance potential of proposed additions (a gas turbine had been previously proposed for the site, for example).

4.0 Proposal

4.1 Project Description

FortisBC proposes to expand the existing electrical substation on site as a result of long term planning studies that indicate a requirement for expanded infrastructure in order to ensure the continued reliable delivery of electricity into the future.

Due to site topography constraints, FortisBC intends "to add a separate non-contiguous station to the northwestern portion of the site which will be electrically connected to the existing station." The attached drawings show potential phased build-out at 2015 and 2029. At eventual build-out, very little land would remain (composed of steep slopes and buffer areas) and it is unlikely that the property would be able to be farmed.

A direct result of this long term infrastructure planning has been the creation of three new substations: the Ellison substation near Quail Ridge, the Benvoulin substation on Casorso Road, and the Black Mountain substation on Joe Riche Road. FortisBC anticipates that no new greenfield substations are required in the next 20-30 year period and that any additional required capacity will be provided for with the expansion of existing facilities.

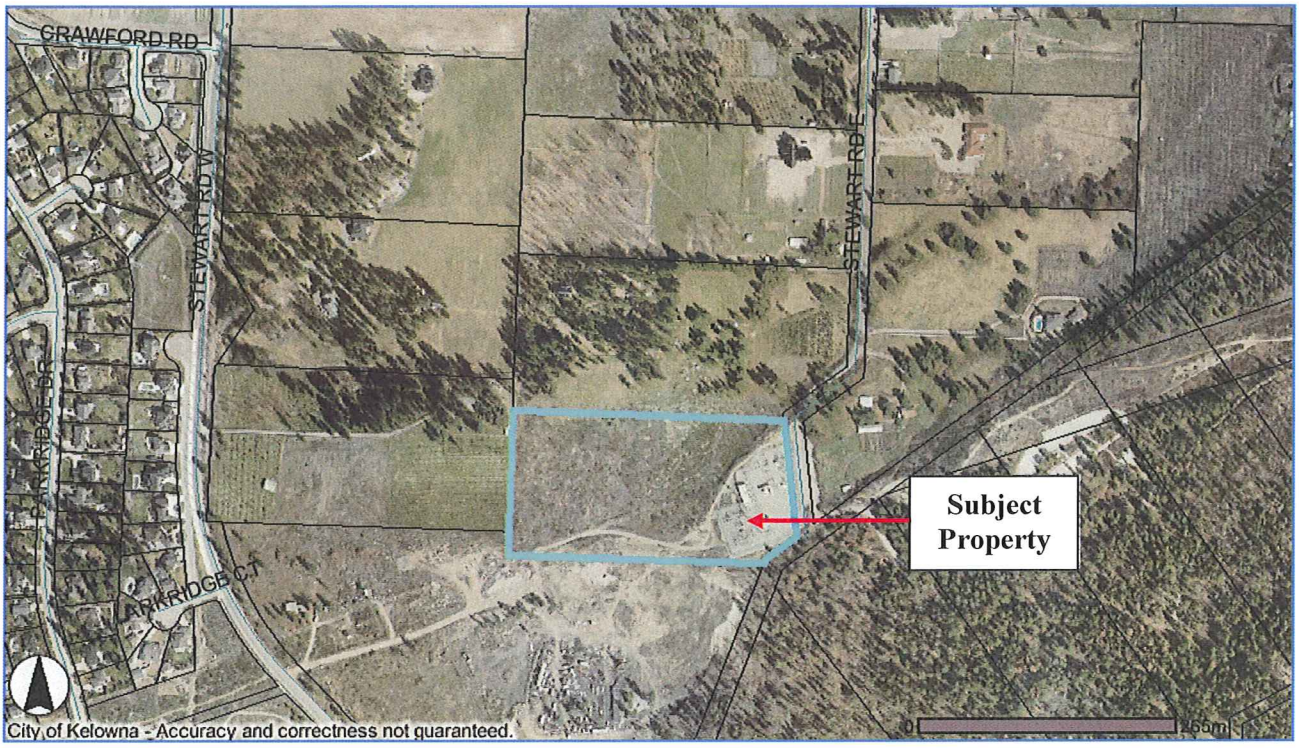
As the only two terminal stations in Kelowna, the proposed expansions of the substations on Steward Road East (DG Bell substation) and McCurdy Road East (Lee substation) serve to switch and transform electricity to lower voltages for delivery to the Kelowna distribution grid.

4.2 Site Context

The subject property is located on the west side of Stewart Road East, approximately 800 metres east from Crawford Estates, and is designated as a Wildland Fire Hazard Development Permit Area. The site area is 4.21 hectares (10.4 acres) and the site elevation varies between 498-514 metres above sea level, representing a change of 16 metres (52 feet) across the site.

Zoning and Land Use of Adjacent Properties			
North	A1 - Agriculture 1	ALR	Residence, small farm
South	A1 - Agriculture 1	ALR	Old gravel pit

East	A1 - Agriculture 1	ALR	Residence & Myra-Bellevue Provincial Park
West	A1 - Agriculture 1	ALR	Residence, small farm



5.0 Current Development Policies

5.1 Kelowna Official Community Plan (OCP) [1]

Agriculture Policies:

Sustained Agriculture. Encourage the retention of diverse agricultural uses through limits on urban development and non-farm use on lands of sustainable production capability.

Buffers. Provide for distinct boundaries that separate urban and rural uses by utilizing, where appropriate, roads, topographic features, watercourses, ditching, fencing, or small lot rural transition areas, as buffers to preserve larger farm units and areas.

Buffering. Require that new developments adjacent to or abutting agricultural areas provide sufficient setbacks, on-site fencing and vegetative buffering to mitigate potential conflicts.

Services & Utilities Policies:

Residential Setback. Encourage new residential development setbacks of 30 metres from the edge of the transmission line wires for feeder lines.

Non-Residential Setback. Encourage new development setbacks of 6 metres from the edge of high voltage power lines or as required by the electrical utility owner.

[1] City of Kelowna Official Community Plan, Chapters 11 and 13

6.0 Technical Comments

Development Engineering Branch. See attached.

Infrastructure Planning. No comments.

South East Kelowna Irrigation District. No objections at this time but should the applicant want to construct any buildings that require water our comments are subject to change, as the nearest water main is some distance away.

7.0 Application Chronology

Date of Application Received: April 30, 2010

Agricultural Advisory Committee (AAC)

The above noted application was reviewed by at the July 8, 2010 meeting of the AAC and the following recommendation was passed:

> THAT the Agricultural Advisory Committee defer consideration of Application No. A10-0004 for 4716 Stewart Road East, by Fortis BC Inc., pending a meeting with City staff and representatives of FortisBC in order to address the concerns raised by the Agricultural Advisory Committee.

The above noted application was reviewed by at the September 9, 2010 meeting of the AAC and the following recommendation was passed:

> THAT the Agricultural Advisory Committee support Application No. A10-0004 for 4716 Stewart Road East, by Fortis BC Inc., to obtain approval from the Agricultural Land Commission under Section 20(3) of the Agricultural Land Commission Act for a non-farm use within the Agricultural Land Reserve to permit expansion of an existing electrical substation.

Report prepared by:

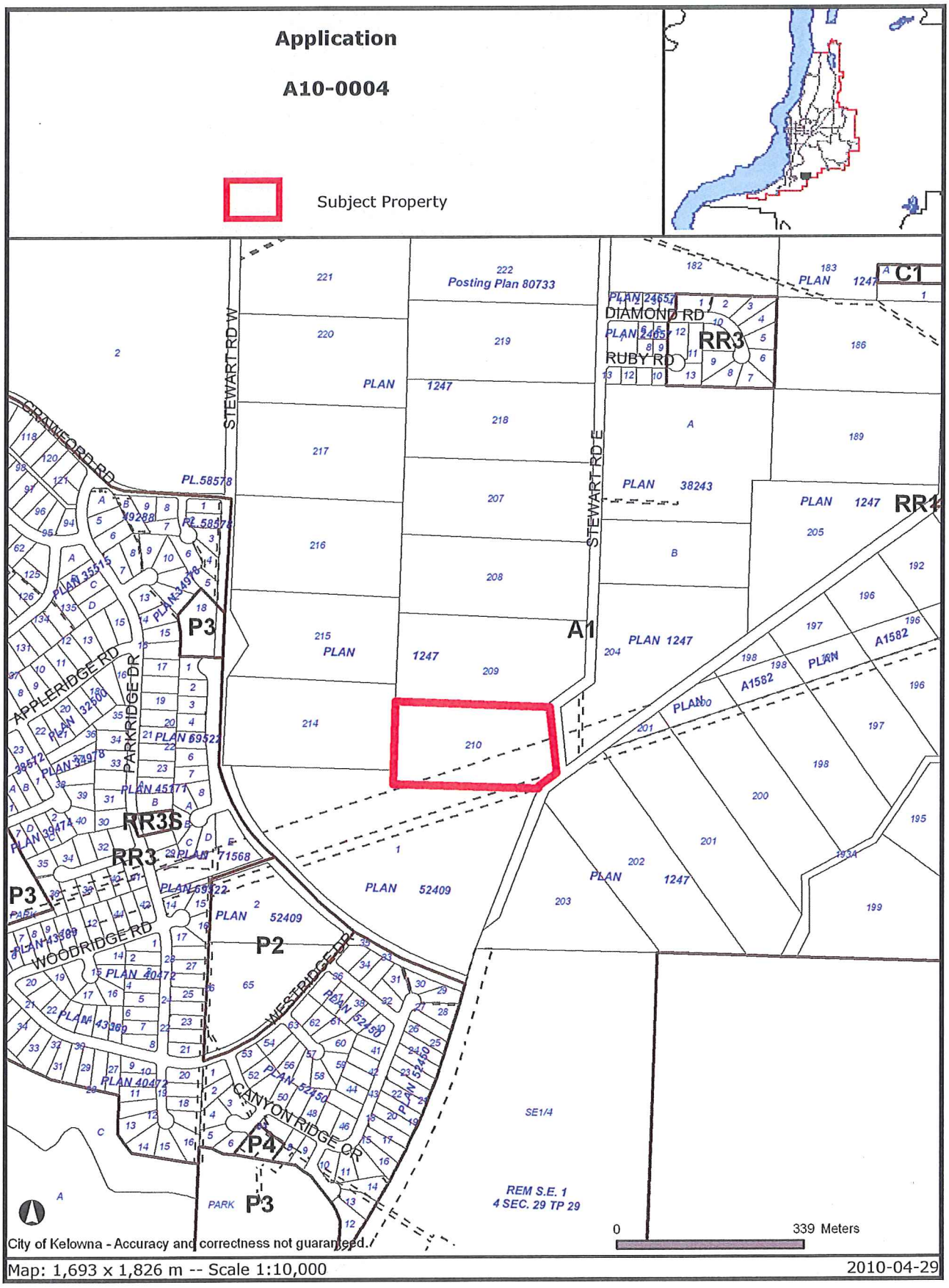
Andrew Browne, Urban Land Use Planner

Reviewed by: Todd Cashin Manager, Environment & Land Use Manager

Approved for Inclusion: Shelley Gambacort, Director, Land Use Management

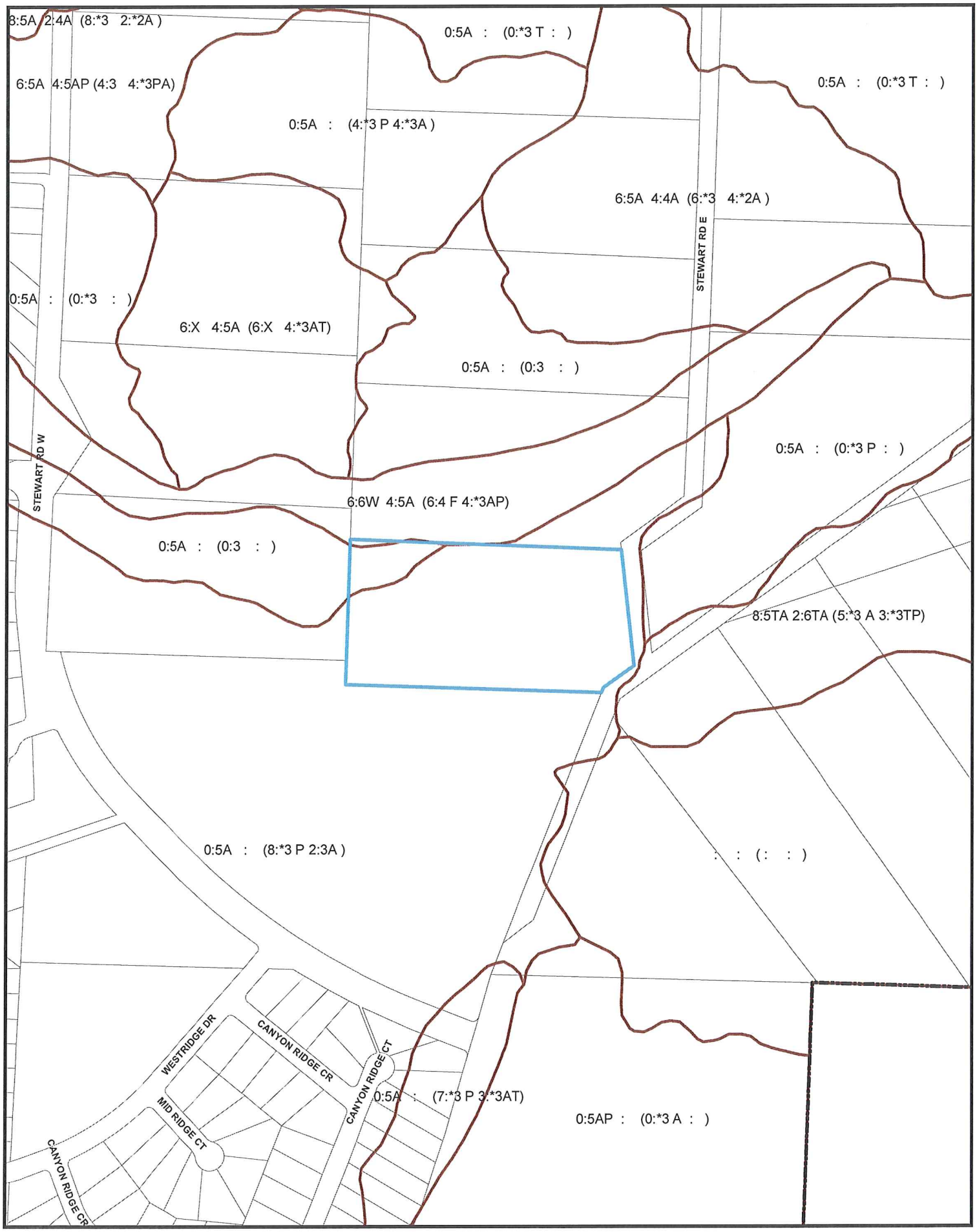
Attachments:

Location and zoning map of subject property
BCLI Land Capability and Soil Classification - Maps and descriptions (3 pages)
ALC Application by landowner (2 pages)
Letter of rationale and original schematics (11 pages)
Supplemental letter of rationale and updated site plan (7 pages)
ALC Landscape Buffer Specifications - A.3 and A.4 (2 pages)



Certain layers such as lots, zoning and dp areas are updated bi-weekly. This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.

Land Capability = Brown/ Soil Class = Green



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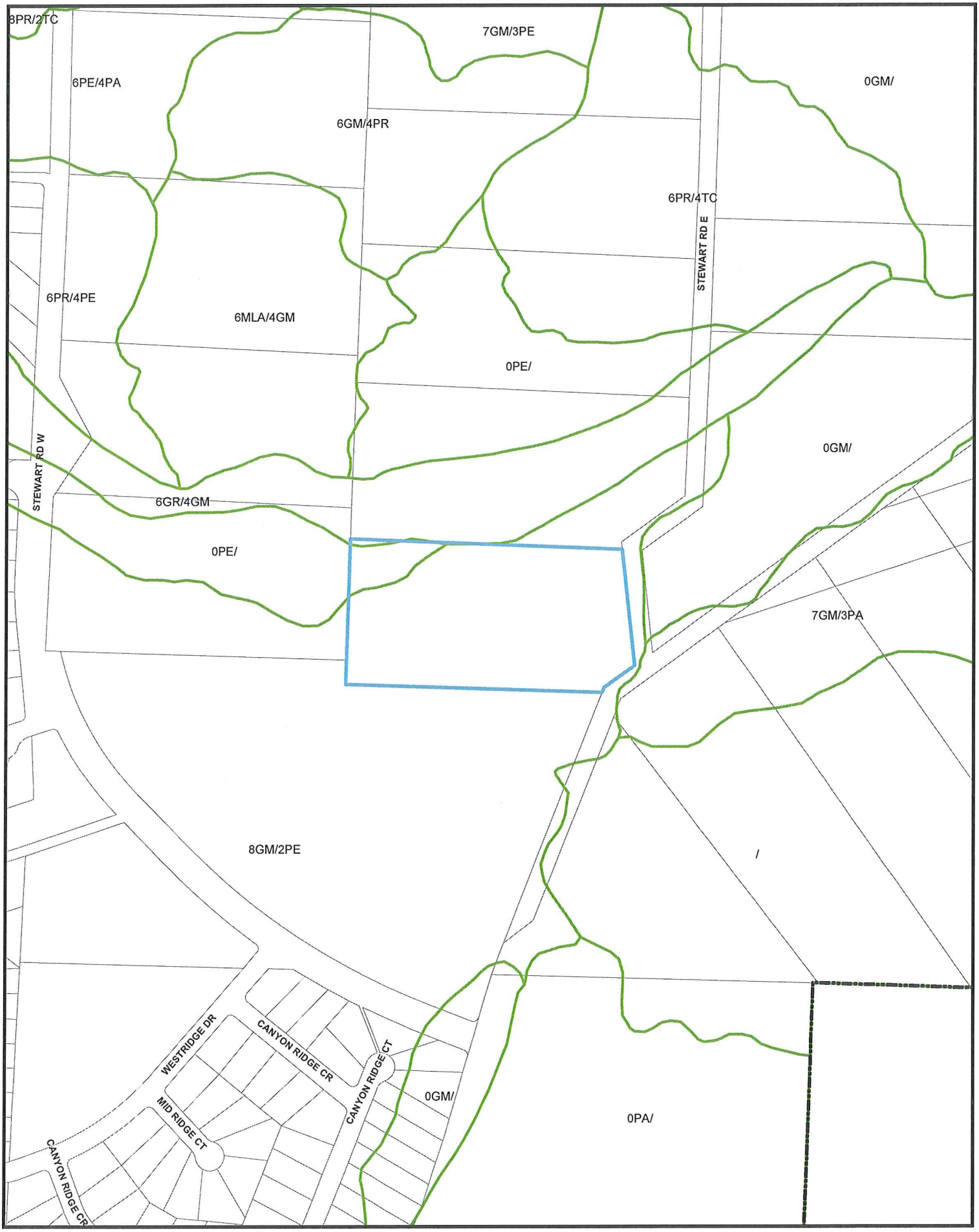

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BCLI Land Capability (Map 82E.083)

Portion of Site	Land Capability Rating, Unimproved	Land Capability Rating, with Improvements
NW	100% Class 5 with soil moisture deficiency	100% Class 3
S	100% Class 5 with soil moisture deficiency	80% Class 3 with stoniness 20% Class 3 with soil moisture deficiency

Class 5 - Soils in this class have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible. The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants, and may be improved by use of farm machinery. The improvement practices may include clearing of bush, cultivation, seeding, fertilizing, or water control.

Class 3 - Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices. The limitations are more severe than for Class 2 soils. They affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management they are fair to moderately high in productivity for a fair range of crops.

BCLI Soil Classification (Map 82E.083)

Portion of Site	%	Soil Type	Description
NW	100%	PE - Paradise	Land: Nearly level to very steeply sloping fluvioglacial deposits. Texture: 25 to 60 cm of sandy loam or loamy sand over gravelly loamy sand or very gravelly sand. Drainage: Rapid.
S	80%	GM - Gammil	Land: Very gently to extremely sloping fluvioglacial deposits. Texture: 10 to 25 cm of sandy loam or loamy sand over very gravelly loamy sand or very gravelly sand. Drainage: Rapid.
	20%	PE - Paradise	Land: Nearly level to very steeply sloping fluvioglacial deposits. Texture: 25 to 60 cm of sandy loam or loamy sand over gravelly loamy sand or very gravelly sand. Drainage: Rapid.

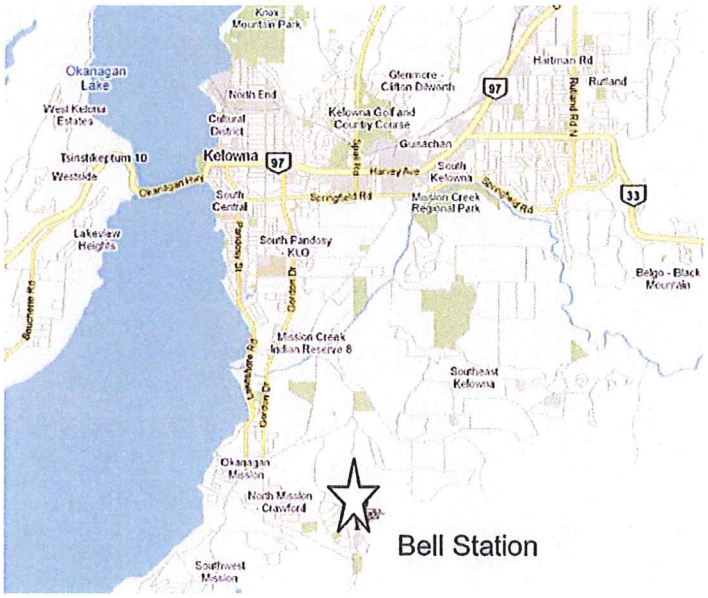
Request for ALC Non-Farm Use
To Allow for Expansion of Existing Electrical Station
Lot 210, Section 29, Township 29, ODYD, Plan 1247
DG Bell Station: 4716 Stewart Road East, Kelowna

Applicant: FortisBC

Introduction

A Non-Farm Use is requested from the Agricultural Land Commission to allow FortisBC to apply to the City of Kelowna for rezoning from Rural Agricultural (A1) to Utility (P4) in order to accommodate a future expansion to the existing electrical station, D G Bell Station. The subject area is projected in the Official Community Plan (OCP) as future agriculture use and will also require an OCP Amendment. The station has been in existence in Kelowna for over forty years in the Southeast Kelowna/Mission area of the City.

Figure 1: Location



Long Term Planning

Due to both growth of the City, and the increasing electrical needs of individual homes and businesses, the electrical distribution system requires upgrading to meet current and future demand. Over the last few years, FortisBC has invested significant resources in electrical upgrades and improvements to increase system reliability, services and safety. The load is currently forecasted to meet capacity by approximately 2015. The system must have the capacity for a certain amount of energy to provide seamless and reliable service in high demand periods, which occur during peak load conditions such as very cold and very hot weather.

As one of only two terminal stations in Kelowna, Bell Station provides high voltage transmission switching and transformation to lower voltages for delivery to the Kelowna grid. The second station, Lee Station, located in the Rutland area of Kelowna is also slated for expansion in the 20-30 year period. A separate application has been submitted to the ALC to accommodate those expansion plans.

Bell and Lee are critical cogs in the Kelowna area electrical distribution system. They also serve important roles in the local neighbourhoods as the stations also include a substation to provide energy to the local area.

Upon the recent approval of new Kelowna area substations (Benvoulin, Black Mountain, Ellison, Big White), the remaining projects planned for the 20-30 year time range include upgrades and expansion to existing facilities, with no new Greenfield station projects planned. Expansion to the distribution stations, Bell and Lee, are priority projects to ensure consistent and quality service to the community.

Bell Station has been in operation for approximately fifty years and pre-dates the ALCR; as such, FortisBC did not initially realize that the station was part of ALR land and believed that they were already on appropriately zoned sites. The applications for non-farm use for both Bell and Lee stations will allow FortisBC to apply for appropriate re-zoning and OCP Amendments prior to applying to the British Columbia Utilities Commission (BCUC) for the expansion to the existing stations. At this point, FortisBC anticipates that the expansion of Bell and Lee Station, in addition to recent substation approvals will be sufficient to meet electrical demands in the Kelowna area for a 20 to 30 year period.

Background

The DG Bell station has been operating in the current location since 1968. The station provides 138Kv power to the entire City on an N-1 transmission circuit and 13.8Kv distribution to the South Kelowna and South Mission area. As part of FortisBC's long term planning, expansion to the existing DG Bell Station will be required to meet the City's future electrical demands, in addition to providing back-up to the West Kelowna area, which currently operates on a radial line.

Although the station is on Agricultural Land, the parcel and use pre-dates the Agricultural Land Reserve. The site is forecasted as Agricultural Land in the Official Community Plan, and will require an OCP Amendment in addition to ALC approval and re-zoning.

Figure 2: Context

Subject Site

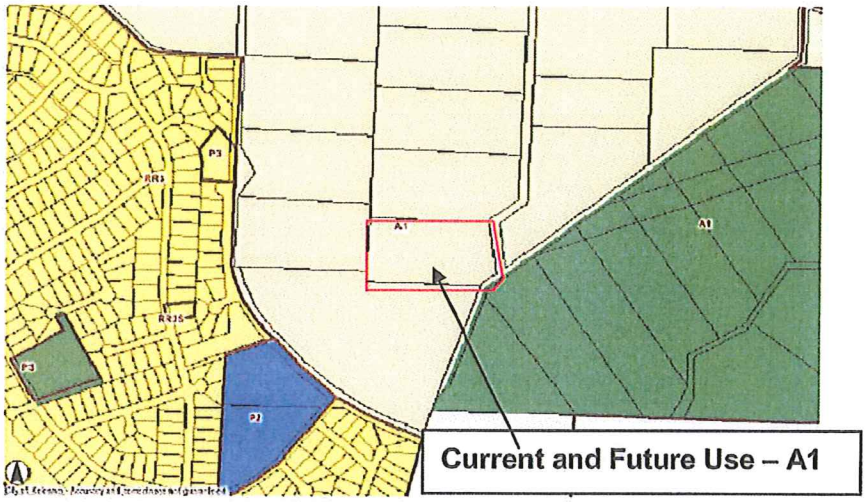
The property under application is a 4.04 hectare (10.87 acres) parcel which is within the Agricultural Land Reserve (ALR) and is not known to have ever been used for agricultural uses.

The site is located on the periphery of a large block of agricultural land, with an abandoned gravel pit to the southwest. Tree cover comprises the edges of the adjacent property use, indicating that active agricultural use is not being pursued in the immediate vicinity of the subject site, with the exception of a small tree farm on the western boundary. Myra-Bellevue Provincial Park is located to the South and East and is still zoned A1 but is identified in the OCP as future Park use.

Approximately one third of the property is occupied by the existing distribution station which is very tight to the property boundaries. FortisBC is currently in the process of fencing the site.

The topography of the site is steep, and drops off approximately 15 m from the southeast to the northwest corner of the site (see Figure 6). During the 2003 Kelowna fire the site was cleared of all trees. Due to the undisturbed grasslands and lack of development to a large portion of the property, mitigation to reduce impact of the expansion of the site will be pursued.

Figure 3: Current and Future Zoning



Siting Rationale

Due to the topography and the current station footprint, contiguous expansion to the station is not possible. Fortis BC plans to add a separate non-contiguous station to the northwestern portion of the site which will be electrically connected to the existing station. By directing the expansion to the northwest portion of the property, the overall station footprint will be minimized, and the expansion will be further away from property lines. The area between the stations can be used for agricultural purposes. The planned station for the target years 2015 and 2029 are included as a appendix, Okanagan Bell Terminal 2015 and Okanagan Bell Terminal 2029.

Figure 4: Station and Proposed Expansion Location

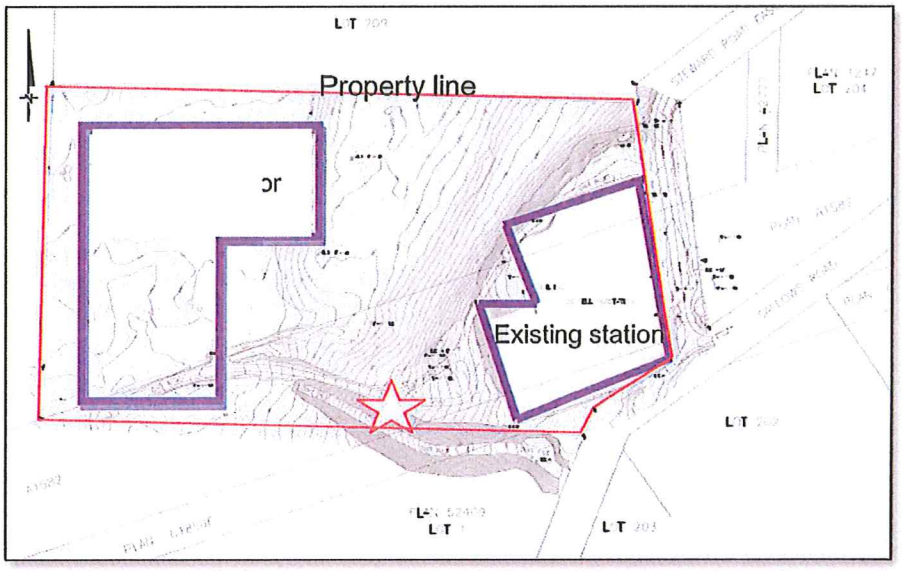
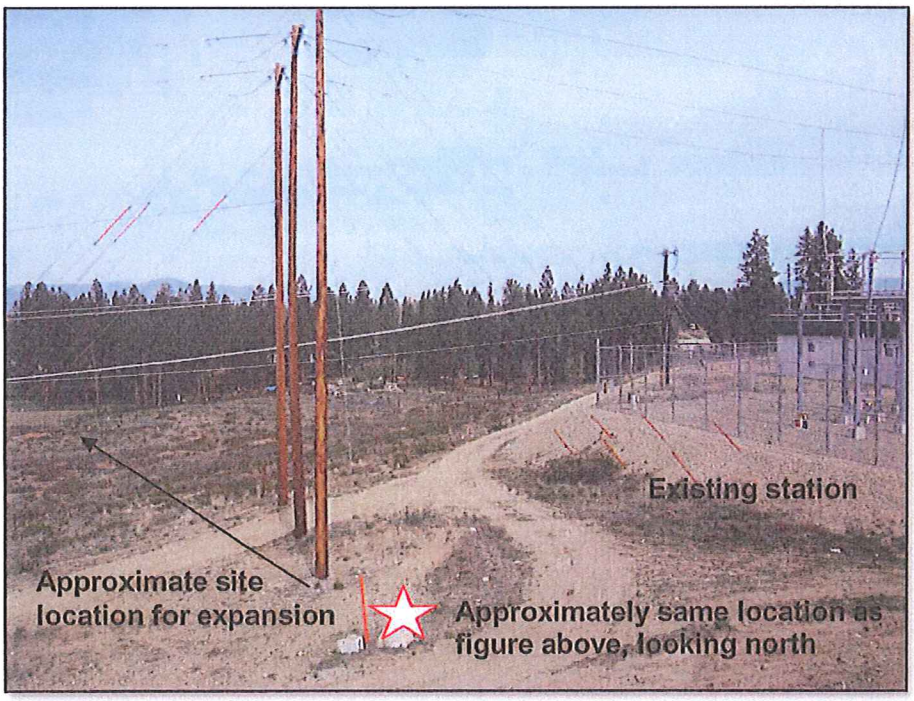
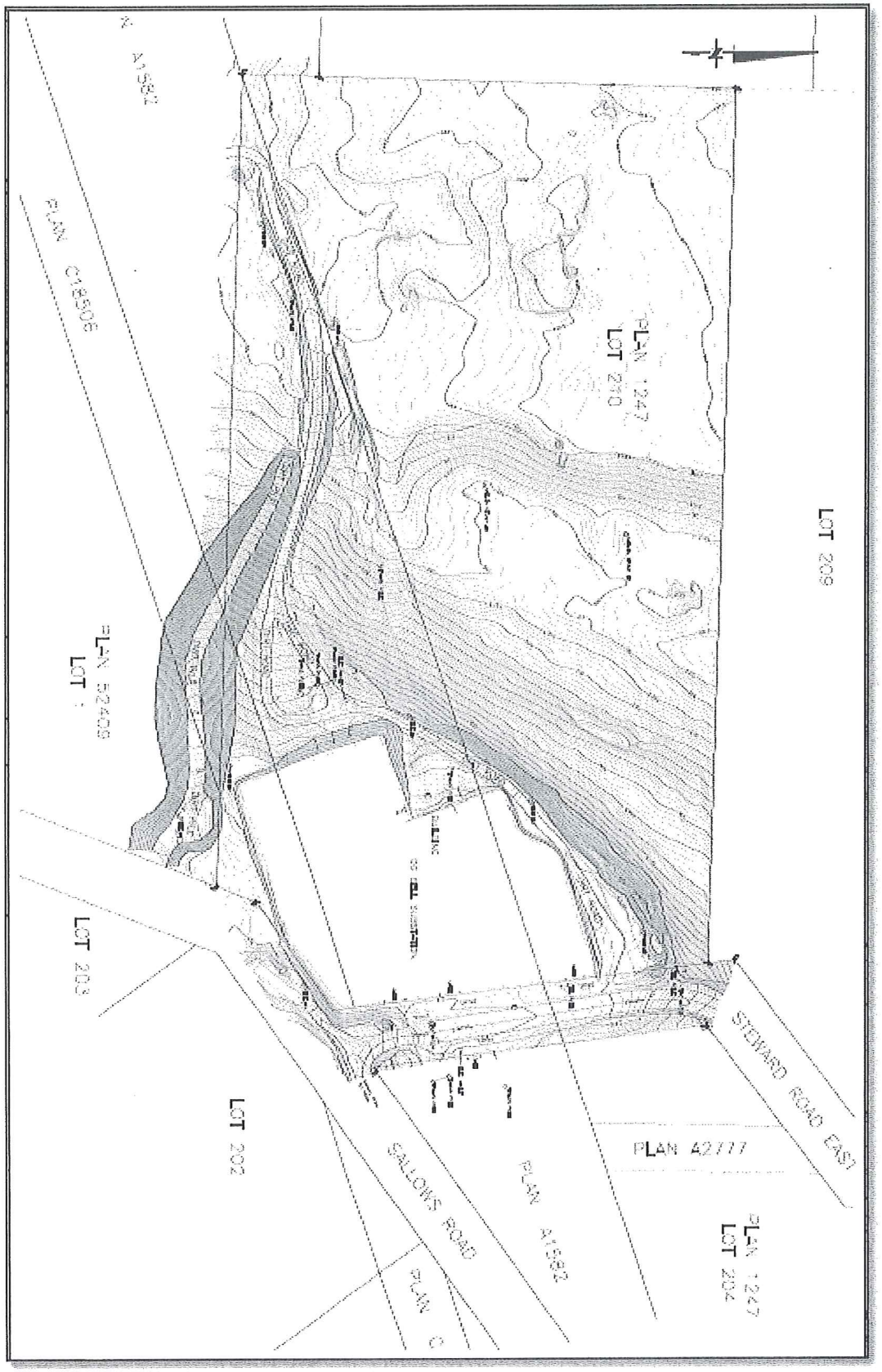


Figure 5: Photo of Station and Expansion Location




PLAN 1247
LOT 210
LOT 209
PLAN 42777
STEWARD ROAD EAST
GALLOWS ROAD
LOT 202
LOT 203
PLAN 1247
LOT 204

Agricultural Impacts

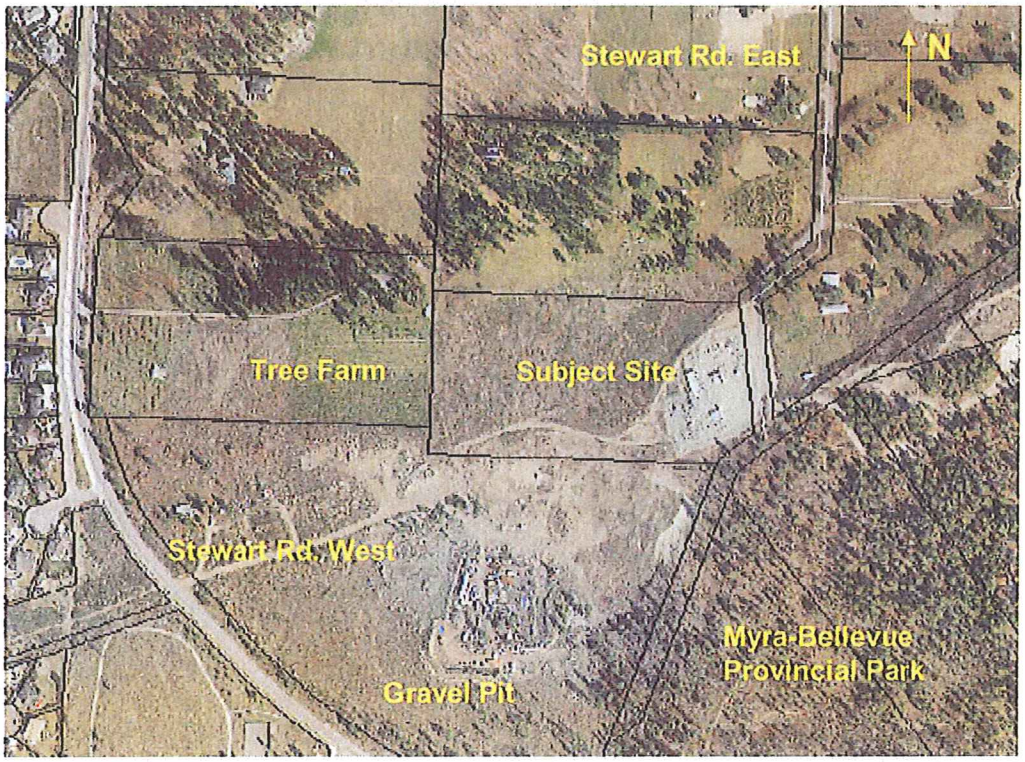
The site has been used as an electric station since 1968 and does not have any history of agricultural use. Agriculture uses have not been pursued in the immediate area with the exception of a small tree far on the western boundary. The station location is therefore not in an intensive agriculture zone and is not interrupting contiguous agriculture use. The agricultural impact of expanding the station may result in soil erosion and mitigation through berms and landscaping will be pursued. As required by the City of Kelowna bylaws, a buffer will be included on the subject property between the abutting ALR land and station. Agricultural uses could be pursued on the balance of the site.

Neighbourhood Impacts

The area immediately surrounding the site is isolated, with tree cover to the North, a gravel pit to the South and Myra-Bellevue Provincial Park to the Southeast. One of the parking lots for the Provincial Park is accessed on Stewart Road East, just past the Station. This parking lot is used primarily for mountain bikers and has limited amenities, with a dirt parking lot and pit toilets. Overflow parking for the Park is also used on the area between the station fence and road.

A number of homes along Stewart Road West face the existing station, approximately 350 m from the western edge of the station property line. These homes were constructed approximately thirty years after the station was constructed and were therefore aware of the station's presence at the time of construction/purchase. As an expansion to an existing facility, the addition will not drastically change the view from the neighbourhood, as it will be an addition to existing infrastructure.

Figure 9: Neighbourhood Context



Visual Impact

Given that the station is already in existence and is proposing an addition to the site, the visual impact of the expanded station is minimal. At the time of construction, a landscaped berm and fence surrounding the station expansion will help to minimize the views from the neighbourhood to the west. Allowing proper re-zoning of the site will therefore be a benefit to the neighbourhood as measures to reduce the visual impact of the existing station will be required upon construction of the expansion.

Public Input

The ALR Non-Farm Use application is the first step in procuring the necessary approvals to expand the station. Following a successful resolution by the ALC, FortisBC will make a re-zoning application with the City of Kelowna. The public will have the opportunity to provide feedback and comments through the re-zoning process, in particular at the Public Hearing. Additionally, a thorough consultation process is required as part of the BCUC application process and the existing community will have the opportunity to comment and provide feedback. FortisBC will seriously consider the feedback and take reasonable measures to minimize the impact to the community of expanding the station.

Noise and Pollution Levels

Once built, FortisBC does not anticipate any noise, congestion or dust related to the operation of the station.

Noise from a station can be characterized as a low hum as a result of the transformer operation. No sounds are likely to be detected from the residence closest to the site.

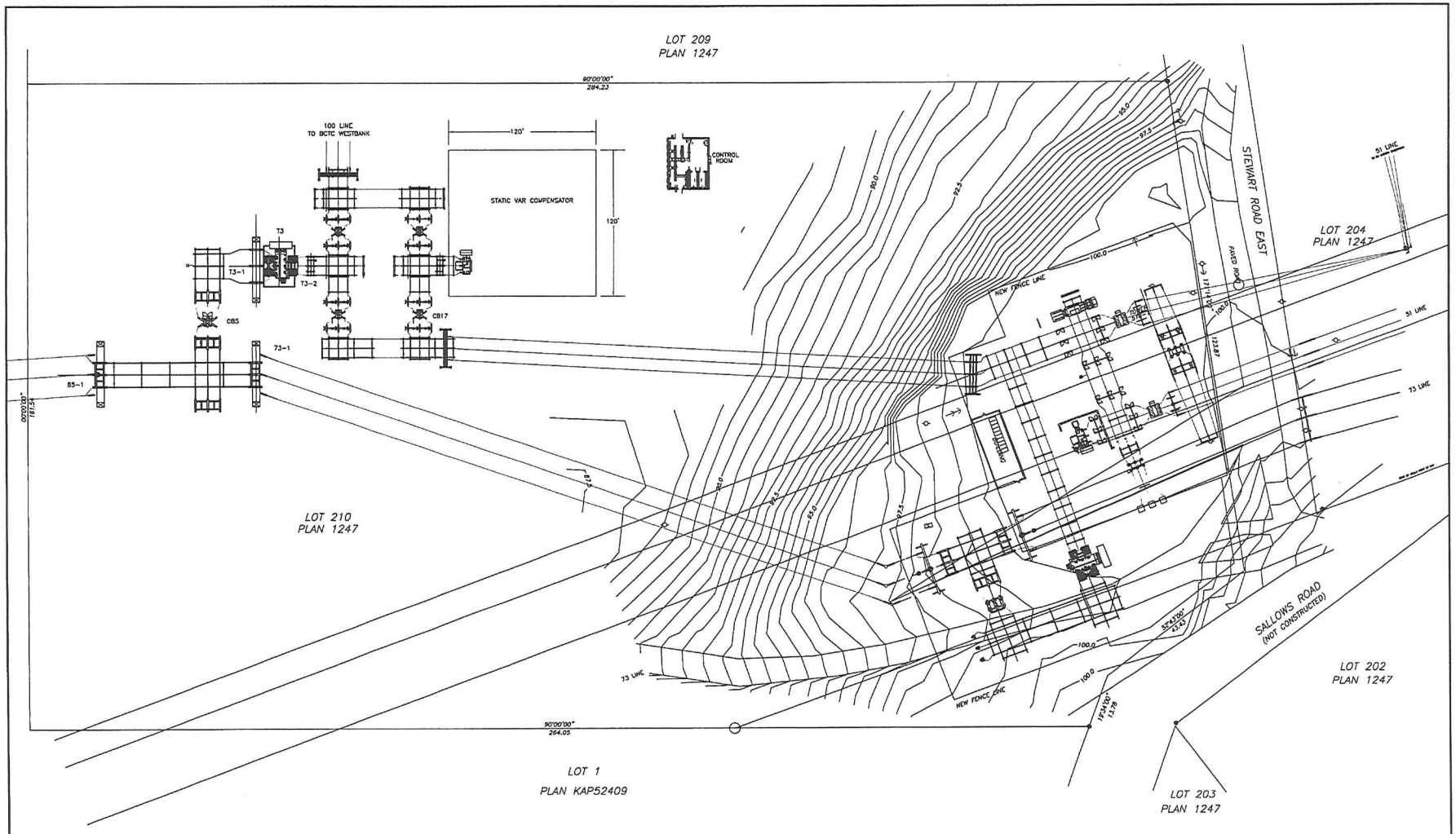
Access to the station will be from the existing access point off Stewart Road East. Once the station is in operation, FortisBC expects minimal traffic to and from the site. Maintenance visits are expected to occur approximately once a month.

Summary

In anticipation of increased demand over the 20-30 year period and reliability of service expansion to the Bell Station will allow FortisBC to continue providing service without construction a new substation. The current station has been in operation for over fifty years and pre-dates the inception of the ALR.

Due to the current site location and the topography, the station expansion will be on the northwest section of the site allowing a corridor between the two facilities. The area between the facilities can be used for agricultural purposes.

A Non-Farm Use approval from the ALR will allow FortisBC to pursue appropriate zoning, OCP Amendments, and apply for expansion from the BCUC.



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FORTISBC

OKANAGAN
PLANNING
BELL TERMINAL- 2015
GENERAL ARRANGEMENT - BCTC

DRAWING NUMBER	REV
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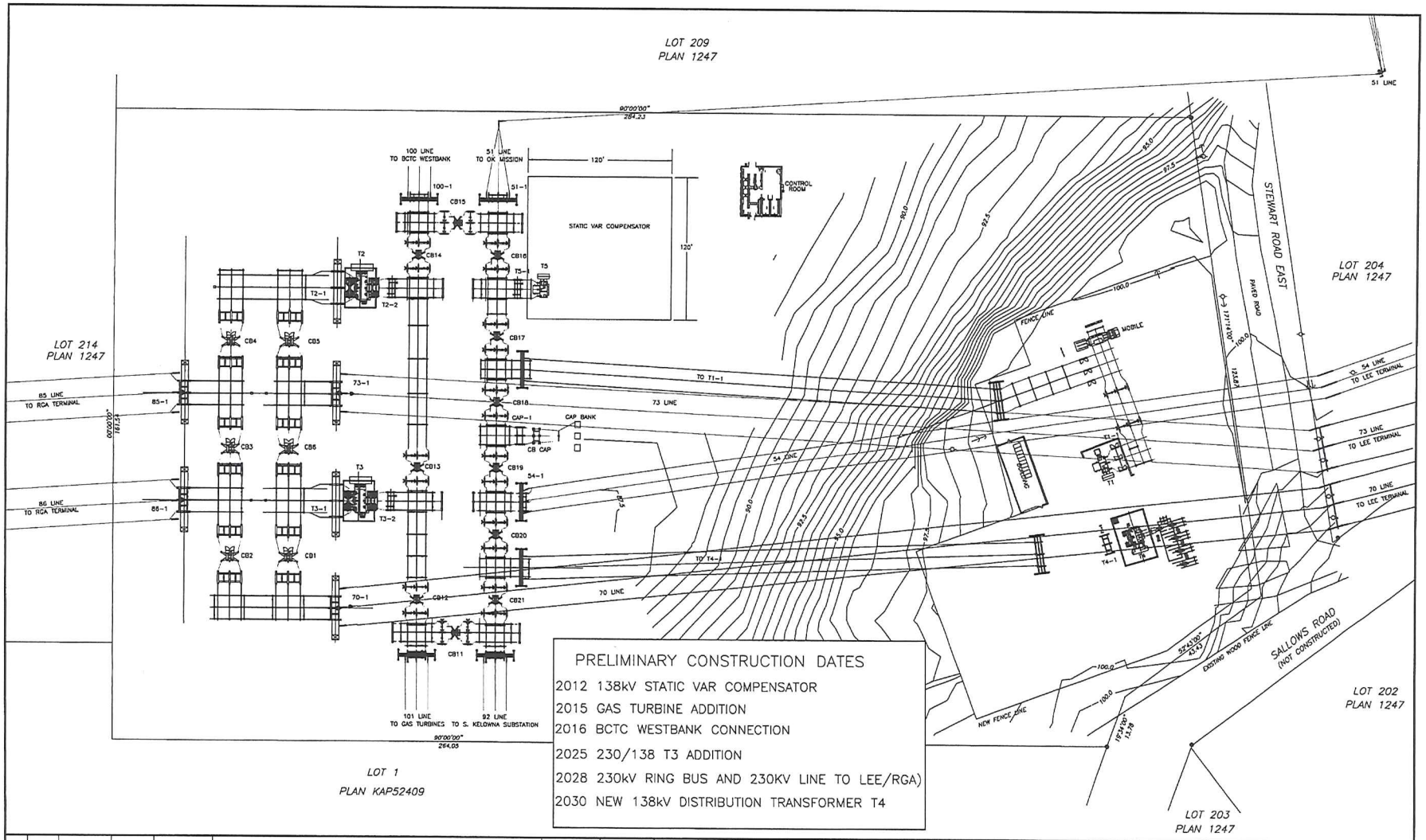

PRELIMINARY CONSTRUCTION DATES

2012 138kV STATIC VAR COMPENSATOR
2015 GAS TURBINE ADDITION
2016 BCTC WESTBANK CONNECTION
2025 230/138 T3 ADDITION
2028 230kV RING BUS AND 230KV LINE TO LEE/RGA)
2030 NEW 138kV DISTRIBUTION TRANSFORMER T4

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FORTISBC

OKANAGAN
PLANNING
BELL TERMINAL- 2029
GENERAL ARRANGEMENT -T4 ADDITION

DRAWING NUMBER	REV
PLN11-1006-GA1	0

NEW TOWN

August 20, 2010

City File: A10-0004
Our File 1527-L

City of Kelowna
Environment & Land Use Branch
1435 Water Street
Kelowna, BC V1Y 1J4

Attention: Andrew Browne VIA EMAIL AND HAND DELIVERED

Re: Supplemental Information - Application for Non-Farm Use in the ALR
DG Bell Station – 4716 Stewart Road East, Kelowna BC

Dear Andrew:

Enclosed please find an information package to supplement our *Request for Non-Farm Use Within the ALR* for the Bell electrical station located at 4716 Stewart Road East.

Much of the new information has been provided in response to comments and questions raised by the Agricultural Advisory Committee at their meeting of July 8, 2010. We appreciate the thoughtful consideration and input from the AAC to date and look forward to making a second presentation and having further discussion with them at the earliest possible opportunity.

As always please do not hesitate to contact our office if you have any questions or comments.

Regards,

Lisa Fraser
Business & Planning Manager

/ljf
Encl.

cc: FortisBC Inc. (via email)

PATRICK McCUSKER, ARCHITECT, PRINCIPAL / NEW TOWN ARCHITECTURE INC.
BFA, B.ARCH, MAIBC, MRAIC

KEITH FUNK, VICE PRESIDENT / NEW TOWN ARCHITECTURE INC.
BA, MEDES (ARCHITECTURE), MCIP, MPIBC

1450 Pandosy Street
Kelowna BC V1Y 1P3

Phone: 250-860-8185
www.newtownservices.net

Supplemental Information
Request for ALC Non-Farm Use
Lot 210, Section 29, Township 29, ODYD, Plan 1247
DG Bell Station: 4716 Stewart Road East, Kelowna

The following information provides additional details and issues for consideration with respect to the request by FortisBC for Non-Farm Use of their existing Bell Station site (April 18, 2010).

BCUC Regulations

FortisBC, BC Hydro, Terasen Gas and ICBC are all regulated by the BC Utilities Commission (BCUC), a provincially regulated authority created to ensure that monopoly utilities act on behalf of the public's best interests. BCUC's mission is to ensure that ratepayers receive safe, reliable, and non-discriminatory energy services at fair rates from the utilities it regulates, and that shareholders of those utilities are afforded a reasonable opportunity to earn a fair return on their invested capital. In applying for project approval from the BCUC FortisBC must demonstrate that a proposal is a cost effective solution representing a balance between the various stakeholders including the ratepayer, the public and the shareholder.

Regulatory and Application Process

Historically, FortisBC has presented land use requests to the municipal authorities and Agricultural Land Commission upon receipt of regulatory project approval from the BCUC. This has created a strain on the land use approval process as the project costs and general planning has already been determined.

In an effort to improve consultation opportunities with local government and the ALC, FortisBC has chosen to present this application to them earlier in the process. As the BCUC review has not yet been completed funding of resources to finalize site planning and expenditure details are not approved meaning that project planning and engineering are still in the preliminary stages.

Reduced Impacts to Agriculture

The Agricultural Land Commission has requested that FortisBC maximize existing facilities prior to introducing new Greenfield sites. The expansion of the subject site allows FortisBC to reduce impact on additional agricultural lands by using existing transmission and distribution infrastructures to provide the upgraded service that the area needs.

Alternate sites for expansion within the Kelowna area are very limited. This project must be adjacent to the transmission line 73L. As shown in Figure 1, acquiring a new site in the required area with the appropriate site conditions, location and size would likely necessitate the use of land within the ALR. Expansion within the existing site limits the overall disturbance to agricultural lands.

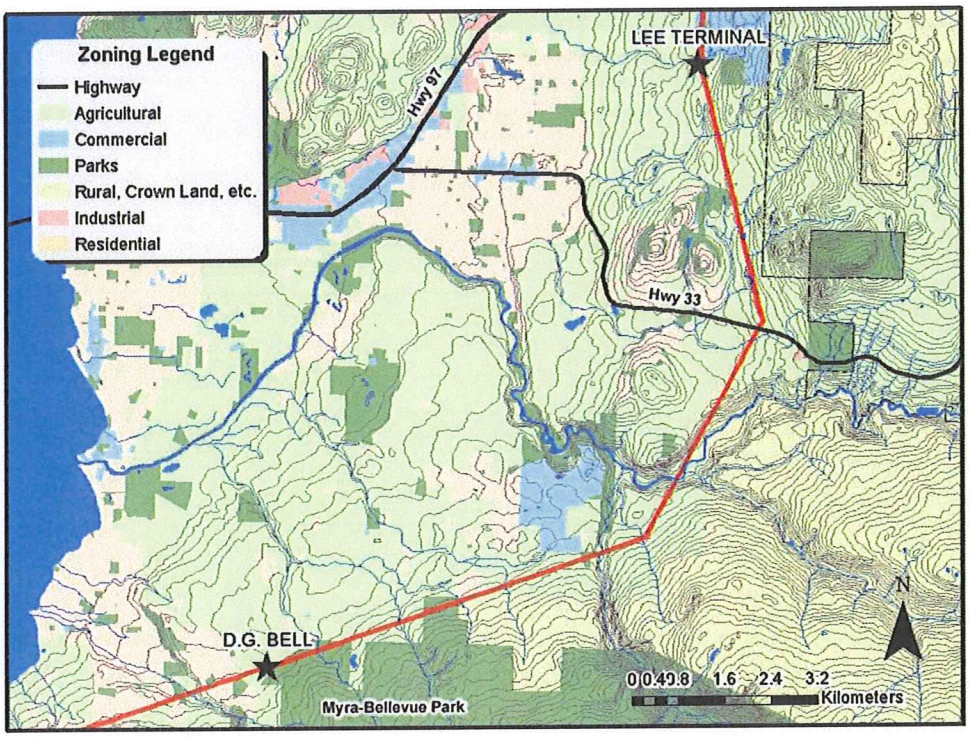


Figure 1 – Transmission Line 73L and Surrounding Land Uses

The soil limitations (Class 5) and topographical constraints make expansion of the existing site a better choice than pursuing alternate lands with potentially better agricultural capabilities.

Property Exchange

At the suggestion of the City of Kelowna Agricultural Advisory Committee, FortisBC explored the possibility of a land exchange with Mark Turton, owner of the property to the south (see Figure 2). The Turton property has previously been used as a gravel pit and obtaining the northern portion of that site would have enabled FortisBC to construct the station expansion adjacent to the current footprint leaving the area currently proposed for expansion free for more intensive agricultural uses.

While Mr. Turton was open to discussion about the potential for a land exchange he ultimately determined that it was not a transaction he was interested in pursuing.

FortisBC notes that the soil classification for each of the areas is the same at Class 5. The land exchange would not result in a significant improvement to agricultural capabilities in the area.

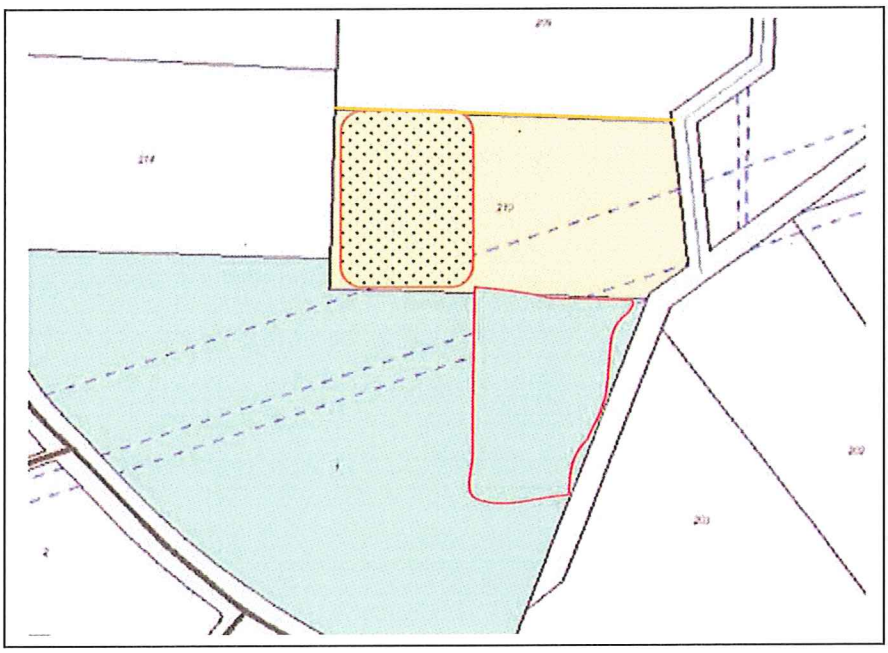


Figure 2 – Areas Considered for Property Exchange

Siting Rationale

The expansion on the existing property is proposed for the lower, flattest section of the site. This area was selected for a variety of reasons.

Sites must be relatively flat in order for Fortis personnel to access, operate and maintain the equipment safely and effectively.

Site preparation costs also need to be considered when submitting project proposals to the BCUC. The current costs for cut and fill is approximately $50 and $100 per cubic meter respectively. With an approximate 15 m drop in elevation from the existing station to the edge of the expansion, site preparation costs for contiguous expansion are estimated at over $17 million.

A contiguous expansion at a lower cost of $6 million could be achieved through the construction of a 7.5m tall retaining wall separating the expansion from the existing station. This configuration presents considerable challenges with respect to access and safe operation and maintenance, however.

Not surprisingly, locating the expansion on the flatter portion of the site as proposed reduces the site preparation costs down even further to approximately $1 million. It should be noted that all numbers are subject to detailed engineering and geotechnical reports.

In all cases the amount and suitability of land remaining available for agriculture is approximately the same. The proposed location offers a significant cost savings and ensures safe access for the installation and ongoing maintenance of the equipment.

Station Requirements and Equipment

The Bell and Lee stations are the only two transmission supply points in the Kelowna Area. The expansion of the Bell station on the subject site includes the addition of a Static VAR Compensator (approximately 2012-2015), a transmission transformer, transformer switching and a distribution transformer (approximately 2018-2022). This equipment will improve system reliability and overall demand.

The addition of a gas turbine as identified in the drawing submitted with the initial application has now been deemed as unnecessary. No gas turbine will be installed at this site.

The Static VAR Compensator is required primarily as a reliability measure to prevent critical system fault which can cause a voltage collapse as far away as Penticton or Vernon. The compensator will also reduce energy losses on the system. Figure 3 is provided as an example of a compensator similar to that planned for the Bell site. The transformers and switching equipment are similar to the existing equipment at Bell, Lee and other FortisBC stations and are simply an expansion of existing infrastructure.

Figure 3 – Static VAR Compensator located at the Recreation Substation in downtown Kelowna

Visual Impact

The majority of the new equipment will be less than 15m high. The site configuration as proposed is effectively screened by the topography from the north and east sides because the land has a drop of 14-15 meters. To the south and west the visual impact to the closest residential properties is expected to be minimal as the distance is over 300m from the edge of the site to the nearest residence.

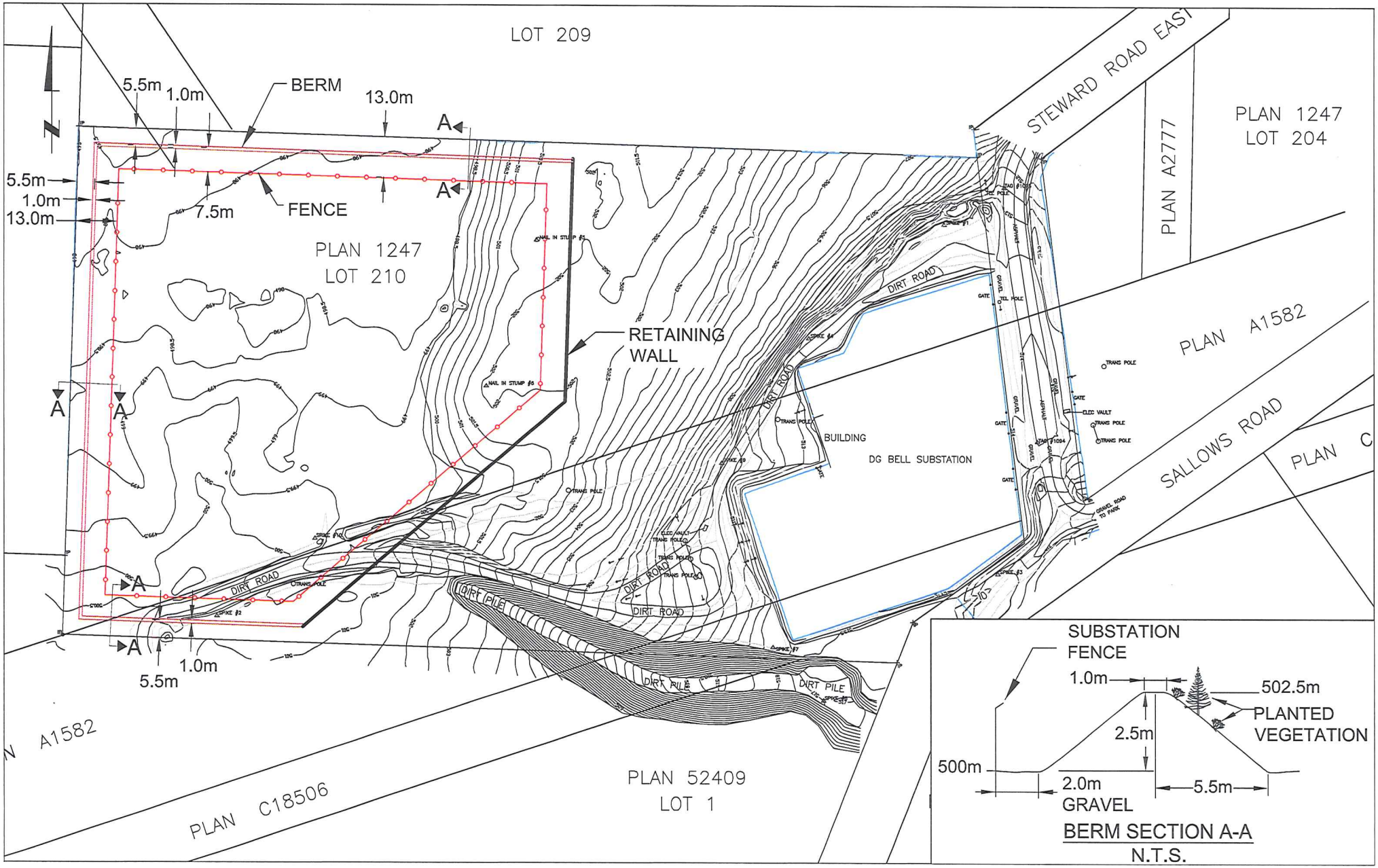
FortisBC is proposing a 2.5m high landscaped berm around three sides of the expansion area. This will provide a 10m wide buffer to the adjoining properties and exceeds the requirements prescribed by the City of Kelowna Level 5 Landscape Buffer requirements.

The site plan included as Attachment A shows the topography of the site as well as the siting for the proposed expansion. A cross section of the landscape berm is also illustrated.

Landscaping and visual impacts are generally reviewed during the rezoning application process and FortisBC will work closely with City staff at that time to ensure that any concerns are sufficiently addressed.

Conclusion

The Bell station remains a key facility in the Kelowna area and as such will be subject to ongoing project work to further optimize the electrical system. Expansion to the station is vital to the continued service and reliability of the electrical system. FortisBC has considered numerous alternatives, to both the location as well as the arrangement on the current site, and has determined that the expansion plan as proposed in this application is the most viable solution to ensure safe, consistent and cost effective delivery of electricity to the greater community.

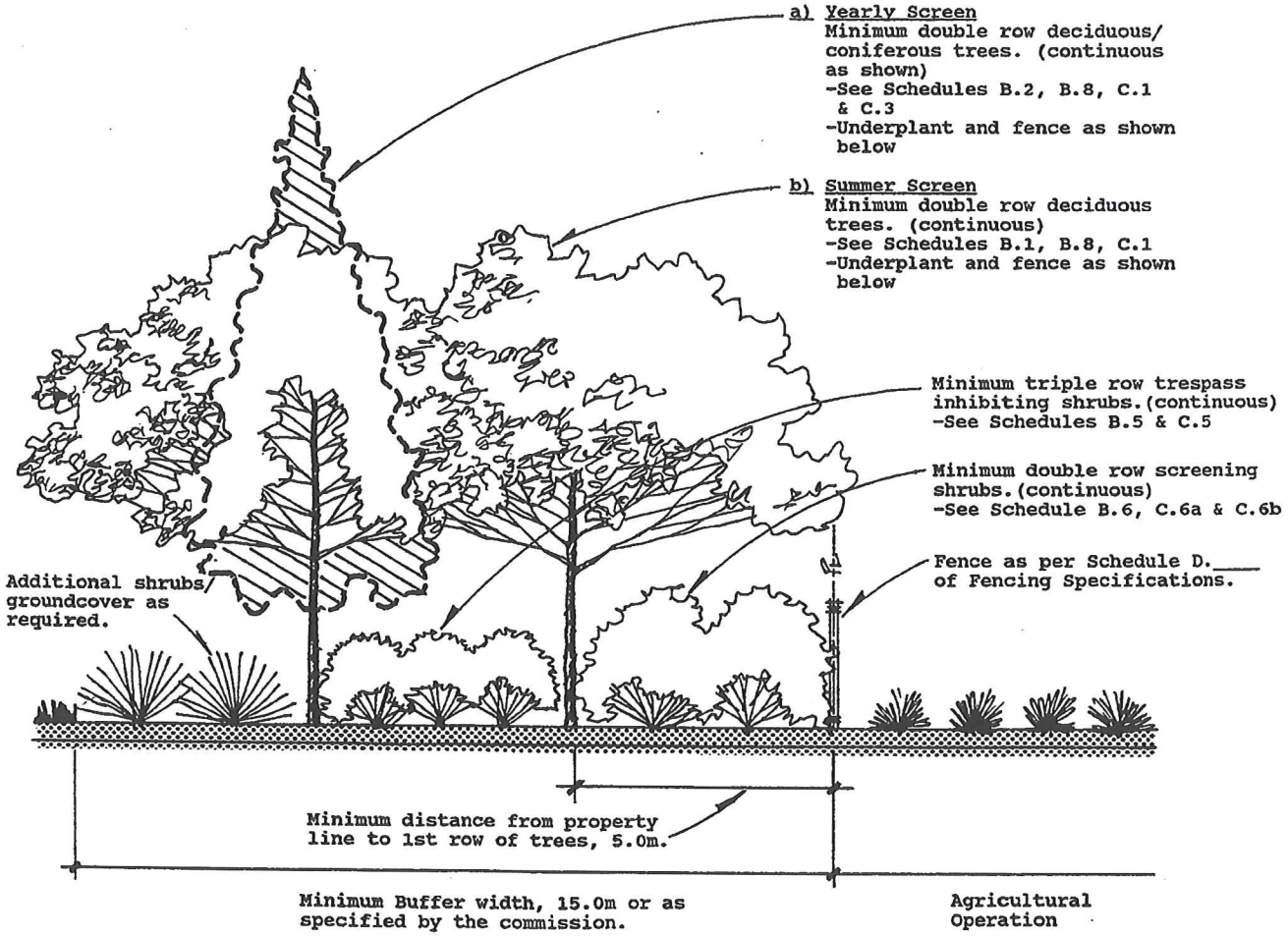

LOT 209
STEWARD ROAD EAST
PLAN 1247
LOT 204
PLAN A2777
5.5m
1.0m
BERM
13.0m
A
5.5m
1.0m
13.0m
7.5m
FENCE
PLAN 1247
LOT 210
RETAINING
WALL
DIRT ROAD
PLAN A1582
SALLOWS ROAD
BUILDING
DG BELL SUBSTATION
TRANS POLE
GATE
ELEC VAULT
GRAVEL ROAD TO PARK
DIRT PILE
PLAN C18506
PLAN 52409
LOT 1
SUBSTATION
FENCE
1.0m
502.5m
PLANTED
VEGETATION
2.5m
500m
2.0m
GRAVEL
5.5m
BERM SECTION A-A
N.T.S.

SCHEDULE A: BUFFER TYPES

A.3: Airborne Particle and Visual Screen

- **a) Yearly Screen**
- **b) Summer Screen**

Buffers agricultural operations from trespass and vandalism while offering a greater physical setback between potential conflicting land uses, visually screening uses from one another and minimizing the exchange of undesirable airborne particulate matter between incompatible land uses. (Note: Coniferous trees should be used in the buffer in situations where visual and particulate screening is required on a year round basis. Solution A.3a)



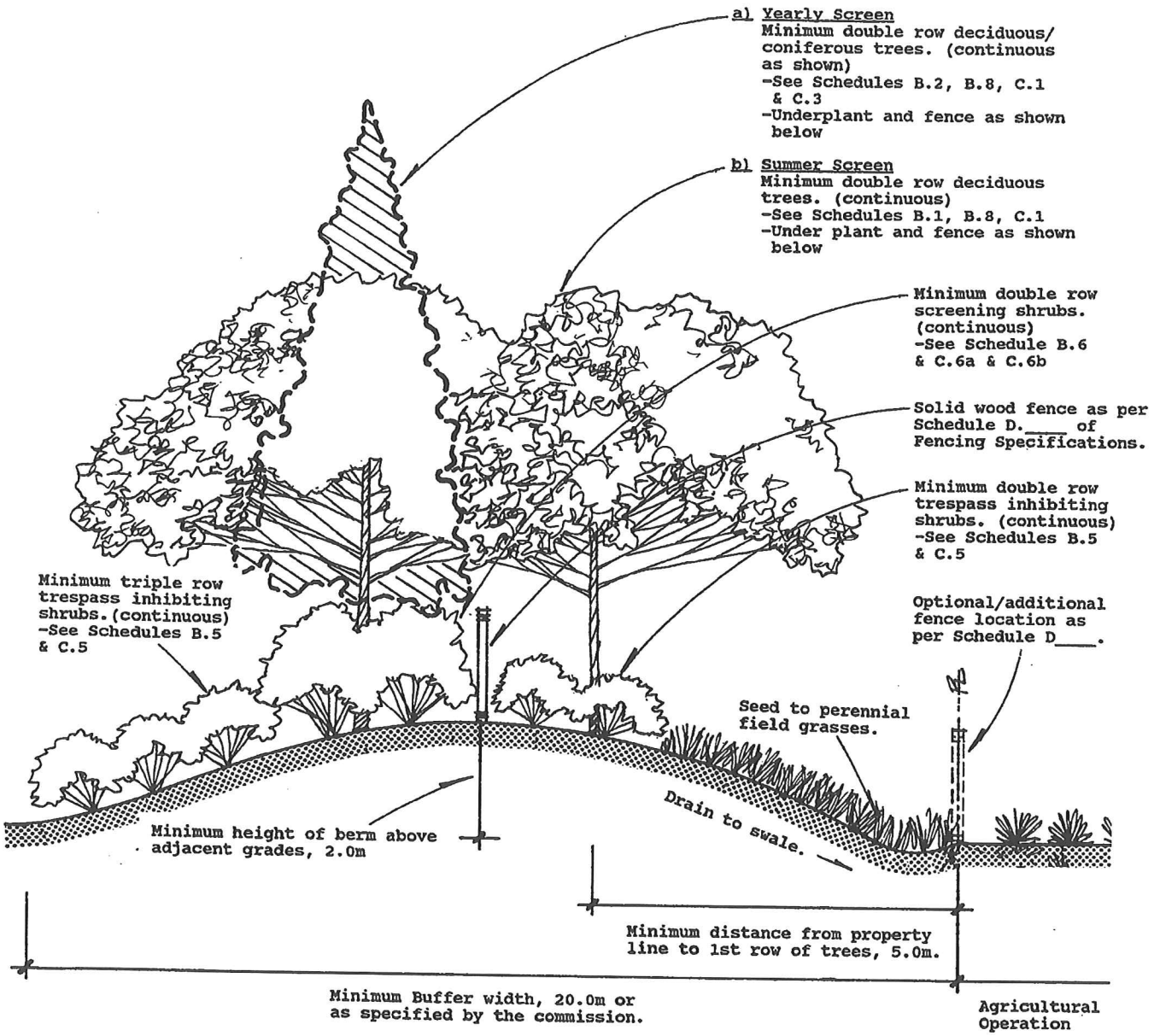
Not to Scale

SCHEDULE A: BUFFER TYPES

A.4: Noise, Airborne Particle & Visual Screen

- **a) Yearly Screen**
- **b) Summer Screen**

To Buffer agricultural land from trespass and vandalism, visually screen incompatible uses, reduce the exchange of particulate matter between adjacent land uses and reduce the transmission of noise. (Note: Coniferous trees should be used in the buffer in situations where visual and particulate screening is required on a year round basis. Solution A.4a)



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