

1817 Planer Crescent - West Kootenay Power & Light Substation



West Kootenay Power & Light Substation 2019

Heritage Register - Building

- 1) **Historical Name:** West Kootenay Power & Light Substation
- 2) **Common Names:**
- 3) **Address:** 1817 Planer Crescent
- 4) **Date of Construction:** 1897
- 5) **Design, Style, Architecture, Architect:** Industrial Romanesque Revival

STATEMENT OF SIGNIFICANCE

Description:

The West Kootenay Power & Light (WKP&L) Substation is a one-storey Romanesque Revival style brick building with a gable roof located in a residential neighbourhood in the Upper Rossland neighbourhood, in Rossland BC. The building sits at the western edge of Planer Crescent.

Heritage Value:

Constructed in 1897, the West Kootenay Power & Light Substation is highly significant as a key element of the electrical system developed by the newly created WKP&L Company to

provide an abundant and reliable source of power for the many working mines on Red Mountain. The building is also valued as testament to the WKP&L Company (inc. 1897), the first hydro-electric utility company in the province, and at that time, the most powerful electrical distribution system in the province and the longest high-voltage transmission line in the world. Electrical power developed through hydro generation, was a new innovation at this time and WKP&L was at the leading edge of its development in North America - particularly in its ability to service both industry and community settlements.

The Substation holds economic, social and historic regional heritage value, for representing a major catalyst to the early boom period in the West Kootenay - WKP&L's electrical system. The electrical service was not only very significant to cost reductions in local mining operations, but the the Rossland Substation being an early, reliable and consistent source of deliverable/usable electricity also serviced the City of Rossland, the smelter in Trail, the Nelson tramway, and residents and businesses in other nearby communities. The fact that the WKP&L Co. established its headquarters and substation in Rossland, is a reminder of the important administrative, economic, and executive position that Rossland held in the region at the end of the nineteenth century.

The location of the building is of heritage value for two reasons: at the time of its construction it was considered to be "north of the city", at a safe distance from the main area of development; and it was and still is at a high point on a hillside which would have been advantageous as a transmission point for the electrical line coming from the Bonnington Falls hydro plant 56 km away. Its heritage value is augmented by its sitting next door to the surviving historic home of Lorne Argyle Campbell (1870-1947) built by WKP&L, who was brought out from Ontario in early 1898 where he was chief engineer at Canadian General Electric, to become the company's general manager and to supervise the construction of the hydroelectric power plant on the Kootenay River. Campbell, who went on to become became the company president and also served as BC Minister of Mines and of Finance, is recognized for providing the leadership in electrifying the West Kootenay region while overseeing the growth and success of the company for over 50 years, until his death in 1947.

The Substation is valued for its industrial use from 1897 until 1930 when a new automated substation was built to meet the needs of the electrical system, but it remains, along with the Campbell home next door, as a visual reminder of a company and service provider that has its roots in Rossland.

The design and construction of this building are also important to its heritage values. The Industrial Romanesque Revival design, carried out in brick, speaks to its function as an electrical substation where a non-combustible material is crucial to its longevity, and a desire to demonstrate an air of permanence and solidity within a boom town characterized largely by rapidly-built wood houses and commercial buildings.

Character-Defining Elements:

- Original elevated location above and away from Rossland's historic downtown.
- Industrial use until 1930, commercial use until 1990s, residential detail use since 1990s.
- Industrial Romanesque Revival Style design features, including bilateral symmetry, arched window and door openings.
- Gable roof; the gable ends are punctuated by former openings for electrical cables.
- Stone foundation.
- Evidence of original design elements, including locations of original chimneys.
- Evidence of its use as an electrical substation, including surviving porcelain tubes and glazed terra cotta pipes visible on the exterior walls, and four triangular wooden hoods that protected them (only one survives on the west facade).
- Heritage plaque on exterior of building



West Kootenay Substation c.1900

HISTORY

In 1897 the substation was built to facilitate the electrification of Rossland. The electrical system had four basic components- the dam and power house at Bonnington Falls on the Kootenay River, the transmission line from the power house to the substation, where the power was reduced or stepped down using manually operated transformers and the distribution network which provided usable electricity for customers. The substation initially housed 20,000 volt lightening arrestors which protected the insulators and conductors from damage from lightening. This substation allowed Rossland to grow beyond a resource town into a city. Electrification was essential to the success of the mining operations which fueled local development, business and governance. Rossland was illuminated by electric lights for the first time in 1898.

Lorne Campbell was hired in 1898 to serve as manager of operations. He later went on to be company president. He lived in and served Rossland for over 50 years. He also served as B.C. Minister of Mines and Finance and was instrumental in the massive industrial development of this region.

1907 the substation was hit by lightening. It hit a transformer on top of a pole on Columbia Avenue. The regulator was knocked out and the large cog wheel was broken into pieces. It burned out fuses in the power house and all the lights in the city went out. Thirty telephones were put out of commission. The motors of the major mines all stopped but were up and running again in fifteen minutes. The lights of the city were restored in two hours.

In 1929 the substation operations were shut down at this location and moved to Columbia Avenue. The equipment was dismantled in 1930 and shipped to Allenby. From 1930 to 1990 the building was used for storage.

In the 1990s the building was sold as a private residence.