Substation No. 12 416 Kingsford Smith Drive, Hamilton

Substation No. 12, the first of its type to be built in Brisbane, included the combined functions of electricity substation, tramway substation and, interestingly, public toilets. Its construction was part of the post-war expansion of Brisbane's transport infrastructure that also included Brisbane City Council orders for 30 electric trams in 1947-1948. The trams were scheduled to start arriving in 1949, so it was critical for the city to have larger substations to cope with the increased electricity demands.

Navigational hint: when stopped at the Bretts Wharf ferry terminal, look for the substation beside the large fig tree on the same side of the river.

Built in 1947, Substation No.12 was designed by Frank Costello who served as Brisbane's City Architect from 1941–1952. Costello, influenced by Dutch modernist architect Willem Dudok, is credited with providing Council with a new modern classicism architectural style. His work is reflected in other substations throughout the city: Mount Coot-tha Lookout, Eagle Farm Pumping Station and substation, Second World War air raid shelters, and the Mount Crosby Filtration Plant.

Although it was a more efficient use of the site, the dual usage of both electricity and tramway substations within one building was unusual. Even more so was the inclusion of public toilets. The commercial and industrial areas of Hamilton were bustling with traffic, trams and people, so the public toilets provided a much-needed service to this area. The substation did; however, cause some concern for residents, who complained that it would interfere with their reception of radio programs.