Q. **Project D-298: Upgrade Aluminum Support Structure - Holyrood**

What, if any, action has Hydro taken to prevent corrosion and deterioration of aluminum support structures?

A. The Holyrood terminal station was constructed in three stages. Aluminum support structures are unique to the first two stages of the Holyrood terminal station construction, with stage 3 support structures consisting of galvanized steel. The aluminum structures do not corrode and deteriorate in typical weather conditions, but rather, the corrosion, and subsequent deterioration of these structures, appears to be the result of a corrosive reaction which occurs at the interface between the underside of the structure baseplate and the concrete foundation's surface. It is believed that this corrosion is due to the absence of a corrosion preventing coating, during stage 1 construction. Structures erected during stage 2 yard construction appear to have been fitted with a coating and there is no evidence of any corrosion and deterioration on these structures. Likewise, the stage 3 structures all appear to be in sound condition, given their galvanized steel make-up, there are no instances of direct contact between the concrete and aluminum.

The only solution to addressing the corrosion issue is to eliminate the direct contact between the base plate and the concrete surface, which Hydro is undertaking through this proposal.