

Hydrogen + Heritage



BCER 1304 at Sullivan, Surrey, Metro Vancouver, BC. Canada

Our Goals



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The Fraser Valley Heritage Rail Society's goals have two distinct themes:

GET CARS <> FIX CARS <> OPERATE CARS

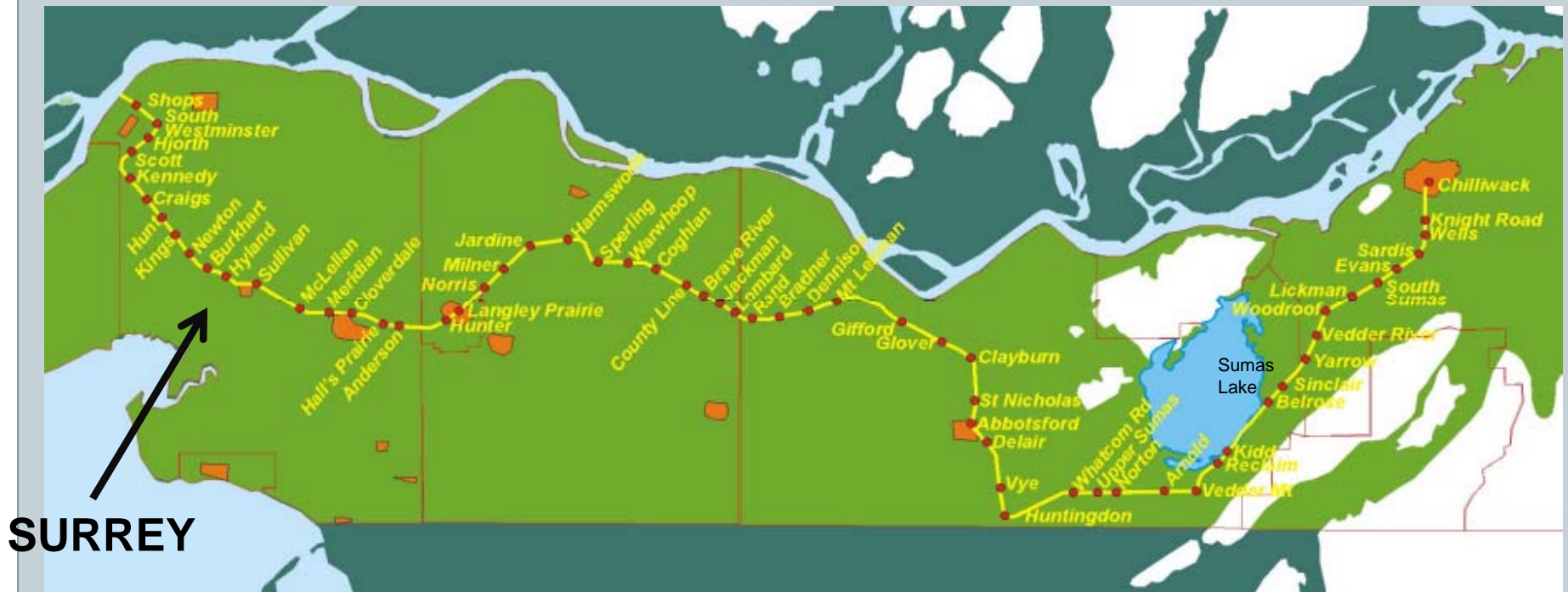
&

Be the first in North America to operate a hydrogen powered passenger service

The BC Electric Rail Line in the Fraser Valley

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1910 to 1950



Powering the Heritage Rail Cars

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The original catenary system delivered 600V DC to the four 75hp motors (one per axle). This is no longer permitted .

Other options:

Diesel: Cheap, dirty, not authentic...not preferred **but used on the first heritage car, BCER1225.**

Hydrogen Fuel Cells and Battery Hybrid: Expensive and regulatory burden could be heavy. **This is our preferred option for the 2nd car, BCER1304**

The Current Configuration

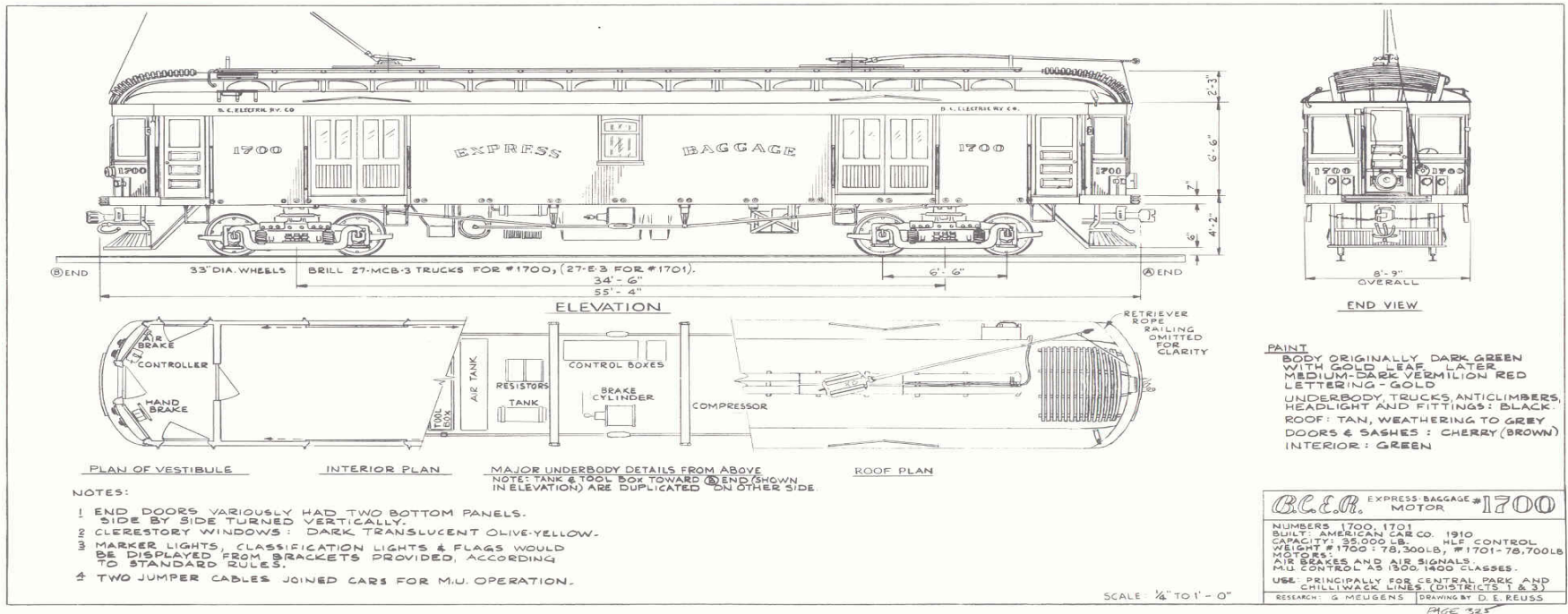
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Restored 1913
St Louis railcar
BCER 1225
and “disguised”
diesel donkey
(250kw)
at Cloverdale



The Baggage Car as a Power Car

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To utilize the large space inside the baggage car to house a power generator set and fuel system. This will provide the 600DC required to drive the 2 electric motors on each truck.

Why Consider Hydrogen?

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The Vancouver region has an established hydrogen infrastructure that is being “showcased” during the Vancouver/Whistler 2010 Winter Olympic Games.

Both Ballard and Cummins/Westport are located in Metro Vancouver and are able to meet the requirements for a price!

Sacre-Davey’s integrated Waste Hydrogen Utilization Program (iWHUP) produces fuel cell grade hydrogen in North Vancouver.

The rail line runs alongside a hydrogen refuelling station at BC Hydro’s Powertech facility in Surrey.

Operating the Restored Railcar

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Our Friends

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The City of Surrey is a great supporter of the Fraser Valley Heritage Rail Society and continues to place great value in the project.

Local businesses have also been active supporters particularly with “in kind” donations of time, expertise and materials.



Useful Links

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Fraser Valley Heritage Rail Society

- www.fvhrs.org

City of Surrey, BC

- www.surrey.ca

British Columbia Hydrogen Highway

- www.hydrogenhighway.ca