



COASTLAND

Fabricating & Design Group Ltd.

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To Whom it May Concern:

Re: Rapid Transit Vehicle and Guideway as proposed by MurchTech

Coastland Fabricating & Design Group Ltd. (and its predecessor company, IMAC Design Group Ltd.), has done business with Mr. John Murchie for over a dozen years and in that time we have come to know him as a good businessman as well as an innovator and inventor. He has established a consulting group known as Murch Tech Consulting Corporation registered in the Province of British Columbia.

John asked us to critique his concept for a new rapid transit system for which he holds patents on the CST technology incorporated into the ultra light weight body structures of the train units.

He wanted to know from a fabrication perspective if we could foresee any difficulties with the overhead guideway and suspension system. His design has now evolved into what we now believe is a highly viable and inexpensive rapid transit system that should revolutionize the way people move in and about their cities.

The advantages to his design are many and significant:

- **Inexpensive.** We can build and install the guideway towers and rail for as little as \$5-7 million per mile, roughly 35 percent of what Metro Vancouver's Skytrain system now costs. Imagine, instead of the proposed UBC Skytrain extension costing \$2.8 billion it could be done for well under \$1 billion. In fact, both the UBC extension as well as the Evergreen line could be built for less than the Skytrain extension out to UBC!
- **Light Weight.** Weight savings come from the patented Composite Steel Technology (CST) built into the passenger cars. A 90 passenger urban car will weigh under 10,000 lbs which allows for a far lighter support structure than any other system in the world. The lightness of the car and support structure not only translates into lower construction costs but equally important it allows this system to go where traditional systems can't go such as on existing bridges, over top existing railway lines and over unstable ground.

- **Rapid construction time.** Because the towers, rails and footings are steel these components can be fabricated in a shop environment on an assembly line basis. Once delivered to their erection site their light weight allows small portable cranes to handily install them with minimal interruption to people's daily life and ground traffic flow. We estimate that once footings are in place we could complete one mile of elevated guideway in less than 2 weeks.
- **Safety.** As an elevated system there are no concerns with respect to vehicular or train traffic.
- **Aesthetic Appearance.** In contrast to the scenic nightmare created by the massive concrete columns and guideway of Vancouver's Skytrain, the light weight of our system allows for small towers connected by an attractive architectural guideway.
- **Employment opportunities.** This system will have universal appeal to cities and governments across North America and around the world for all the reasons listed above. While the fabricated steel would be done by multiple shops on a regional level the cars themselves would be manufactured here in the lower mainland. This would require a large investment in plant and equipment and create substantial employment opportunities for professionals and trades people.
- **Additional Advantages.** For longer inter-urban travel, the guideway could also be used as a carrier for some services such as hydro, thus eliminating the need for separate towers and the associated landscape clutter.

The Murch Tech design is already gaining interest abroad and Coastland Fabricating & Design Group is working with John and his partner group to assist in that sales effort. We strongly encourage our local governments and transportation agencies to take a very close look at this system and compare it to what we have now and what is planned for the future. Clearly, with severe budget restraints facing Translink both for construction and operational needs, the Murch Tech design offers very significant savings.

We welcome your comments and questions. Please feel free to contact me at any time.

Yours truly

Peter Madden
General Manager
Coastland Fabricating & Design Group Ltd.