CHAIR & MEMBERS
VICTORIA REGIONAL TRANSIT COMMISSION
June 27, 2013

#8

SUBJECT: Transit Facilities Master Plan

The purpose of this report is to provide the Victoria Regional Transit Commission (VRTC) with the results of the Victoria Regional Operations and Maintenance Facility Master Plan for **INFORMATION**.

BACKGROUND

Based on the forecasts from the Victoria Transit Future Plan endorsed by the VRTC in 2011, the Victoria Regional Transit System is expected to experience significant service hours and corresponding fleet growth over the next 25 years. To facilitate this, BC Transit anticipates growing the custom and conventional fleet from 289 to 536 vehicles by 2035, an increase of almost 90 per cent. The existing operations and maintenance facilities have exceeded or are approaching maximum capacities for bus parking, storage for parts and materials, and maintenance space. BC Transit already employs high capacity parking practices at several sites to accommodate bus parking, but there is no ability to expand parking outside existing property boundaries.

In 2012, BC Transit facilitated a master planning exercise which included a comprehensive review of the existing and future operational, maintenance and administrative facility demands required to support the growth of the Victoria Regional Transit System.

DISCUSSION

The exercise is now complete and has identified the facility growth strategies required to make the most effective use of existing facility resources, provide interim accommodation plans, and identify infrastructure options to enable BC Transit to meet the goals identified within the approved Transit Future Plan. The completed Master Plan will allow for more accurate and timely capital planning for the region, and facilitate discussions with the VRTC about meeting immediate and future infrastructure needs.

Recognizing the need to balance significant capital investment requirements with local affordability, BC Transit has investigated options that incorporate a minimum amount of investment in existing infrastructure for as a long as feasibly possible prior to commencing significant new capital construction. The existing facilities at the Victoria Transit Center (VTC) and the Langford Transit Center (LTC) have the capacity to park an additional 47 conventional buses using high capacity parking practices; however, it will push the bus/maintenance bay ratio to 21:1. This exceeds the recommended ratio of 17.5:1 and will be detrimental to the ability of Operations to provide service due to maintenance backlogs.

To expand capacity beyond existing levels by as few as 7 additional buses pushes the ratio of bus/maintenance bay to 18:5/1 and predicates the need for an additional maintenance facility. In addition, the use of high capacity parking practices, required to accommodate fleet parking today, comes at the cost of inefficiency of operations and will be made worse through the addition of more vehicles.

The existing HandyDART site is already over capacity by 16 buses and cannot accommodate any further expansion.

To meet the facility needs of the 25 year Transit Future Plan, the Master Plan identifies order of magnitude investments of approximately $75 million. These estimates exclude land acquisition, project management, design, financing, taxes and other soft costs. Next steps of this process will involve the following:

1. Analyze options to address seismic concerns at VTC and make a decision to demolish the affected areas in the East Shop and build new, or refurbish the existing facilities to a life safety level.

2. Analyze financial and operational feasibility of relocating the body shop from VTC to LTC, which includes examining outsourcing opportunities for comparison.

3. Assess if facility capacities align and support the requirements of the three year service plan and financial strategy (2013/14 – 2015/16), which has identified a 2.7% growth of service hours, corresponding to an additional 24 Conventional and 7 Custom vehicles.

4. Develop the business case to relocate HandyDART from 4206 Commerce Circle to the existing BC Transit owned property at 4196 Glanford Avenue. This move would allow HandyDART services to expand as forecasted for the next 25+ years.

5. Evaluate and complete financial analysis of reconfiguration of LTC to accommodate the removal of the storage tent, increase stores capacity, and improve service capacity and the layout of maintenance bays.

The plan recognizes that both VTC and LTC be retained as major operating facilities; however, regardless of any transit growth expansion plans, steps 1 and 2 identified above must be completed and business cases will be developed for the Fall of 2013. Further decisions regarding the expansion of maintenance, parking and service capacities of the facilities serving the Victoria Regional Transit System are required. Updates to the financial forecasts to include these capital and operating requirements will be provided in the Fall of 2013 for further discussion with the Commission.

RECOMMENDATION

It is recommended that the Commission receive the Victoria Regional Operations and Maintenance Facility Master Plan for **INFORMATION**.

Respectfully,

Manuel Achadinha
President and Chief Executive Officer

Attachment:

- Executive Summary
- Full Report located on the project website at: http://www.bctransit.com/transitfuture/vromf_latestupdates.cfm

EXECUTIVE SUMMARY

British Columbia Transit Authority (BC Transit) has retained Stantec Consulting Ltd. (Stantec) and its sub-consultant Maintenance Design Group (MDG) to provide master planning for their Victoria Operations.

The purpose of this Master Plan report is to document the development of a Master Plan assessing the existing and future needs of BC Transit's Victoria Operations and provide conceptual site layout options as well as corresponding Class D cost estimates. The sites assessed for the study included BC Transit's existing conventional transit sites - Victoria Transit Centre (VTC) and Langford Transit Centre (LTC), existing HandyDART centre, and a future conventional transit centre - Saanich Transit Centre (STC).

The Master Plan will assist BC Transit in developing a long-term strategy (25 years) and help guide the planning, development, and maintenance of their transit systems in a manner that is consistent with projected needs, and aligned with the BC Transit's growth, values, and overall vision for the Victoria region.

The first step in the master planning process was to assess the existing operations and facilities at existing sites, develop future requirements, and establish design principles, criteria, and constraints through discussions with BC Transit staff.

The resultant baselines (year 2011), based on existing capabilities, capacities, and throughput, were then adjusted as necessary to reflect reasonable/acceptable industry practices (i.e. "right-sizing") before appropriate growth factors were applied to get future "snapshots" for years 2016, 2020 and 2035.

A functional program was then developed for each site as a means of determining and summarizing the future (year 2035) space requirements. Using the projected functional program, the concept layout options were defined and developed for consideration in terms of the key design aspects (e.g. properties used, facilities, and parking), the condition of the existing facilities on each site, and the feasibility and cost effectiveness of retaining all or portions of the existing structures.

The table to the right summarizes the developed concept options.

Sites	Option 1	Option 2	Option 3
Victoria Transit Centre (VTC)	▪ Use existing property only (520 Gorge Road East / 665 Garbally Road) ▪ Retain the existing administration building and the west shop. ▪ Remove the east shop and replace or renovate the central shop. ▪ Add new bays / shops / storage / administration to the west of the existing maintenance bays (west shop).	▪ Use existing property only (520 Gorge Road East / 665 Garbally Road). ▪ Demolish the existing administration building and relocate enterprise functions off-site. ▪ Remove the east shop and replace or renovate the central shop. ▪ Add new bays / shops / storage / administration to the west of the existing maintenance bays (west shop).	▪ Use existing property (520 Gorge Road East / 665 Garbally Road) and add satellite bus parking off-site (650 and 680 Garbally Road). ▪ Retain the existing administration building and the west shop. ▪ Remove the east shop and replace or renovate the central shop. ▪ Add new bays / shops / storage / administration to the west of the existing maintenance bays (west shop).
Langford Transit Centre (LTC)	▪ Use existing property only (1000 Henry Eng Place). ▪ Add new body, paint, and bus overhaul shop along north property line. ▪ Accommodate three (3) new maintenance bays within the existing maintenance area - one (1) in component rebuild bay, two (2) on east end of building. ▪ Add stores addition on southeast side of existing building to replace tent and shipping container storage units.	N/A	N/A
Saanich Transit Centre (STC)	▪ Use existing properties only (4206, 4210 Commerce Circle and 4196 Glanford Avenue) with the new main facility located at the southeast corner of the combined properties. ▪ Fuel, tire bay, body bay, bus wash to the southwest of the combined properties.	▪ Use existing properties (4206, 4210 Commerce Circle and 4196 Glanford Avenue) plus all properties to the northeast with the new main facility located along south side of the combined properties. ▪ Fuel, tire bay, bus wash to the northeast of the combined properties	▪ Purchase future properties in Saanich for a new facility to accommodate 263 buses (maintenance, light body shop and diesel and CNG fuel)
HandyDART	▪ Use only 4196 Glanford Avenue property for HandyDART operations to accommodate up to 77 buses.	▪ Use the 4210 Commerce Circle and 4196 Glanford Avenue properties for HandyDART operations to accommodate up to110 buses.	N/A

Based on the analysis, development of options, and evaluation of options further detailed in the report, it is recommended that BC Transit should work towards implementation of the following options in order to meet operational needs to year 2035.

- Victoria Transit Centre (VTC)
    - VTC Option 1 is the recommended option.
    - There is minimal benefit in terms of increased parking capacity by removing the administration building.
    - Resolve seismic issues and meet post-disaster performance requirements. VTC will not address capacity issues, but will address the need to maintain assets in a state of good repair over the long term and achieve some operational efficiencies, which is a priority over expansion at this site.
- Langford Transit Centre (LTC)
    - LTC Option 1 is the recommended layout option.
    - The layout/configuration of the existing shop does not allow for accommodation of all future needs for this site. Therefore, an auxiliary shop to house paint prep, painting, body shops, and bus overhaul shops is the recommended option. These shops will address the heavy maintenance needs of VTC, LTC, and STC fleet.
    - Additionally, it is recommended to remove the tent structure along the north property line and expand the stores footprint to the east of the existing location.
- Saanich Transit (STC)
    - STC Option 3 is the recommended option as it frees up the existing Commerce Circle properties for the expansion of HandyDART bus parking and maintenance operations and meets the projected growth requirements to 2035.
- HandyDART
    - HandyDART Option 2 is the recommended option as it is of adequate size to accommodate up to 110 buses and will utilize the existing office and maintenance facilities on the 4196 Glanford Avenue property.