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# **APPENDIX ITEM 9.6**

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## CATALINA

### Local Area Transit System Investigation

June 2012

#### Introduction

In developing the Catalina estate the TPRC seeks to demonstrate best practice in urban development that sets a new benchmark for future developments in the north-west corridor, with the implementation of key sustainability initiatives. The initiatives include transport related infrastructure and movement networks, and how these can best be integrated into and form part of a holistic solution for the development of a strong, active community.

The Catalina Structure Plan includes a central transport spine (the Green Link) running from the Clarkson train station to the coastal area of the Western Precinct. The Green Link is a core transport and activity centre and has the dual purposes of serving as a local distributor road with public open space for pedestrians, cycle paths and activity spaces, together with provision of high standard public transport. The Green Link is designed to accommodate a bus service, and potential for a high frequency special transport system to increase commuter connectivity for residents of the estate between the Clarkson train station and the coast. The expectation is that by providing good quality and high frequency public transport, a sustainable urban development can be achieved where residents do not have to rely on a second family car to travel within the neighbourhood or to commute elsewhere.

This report seeks to clarify the viability of the various options that are available in terms of transit systems for the estate, linking all of the uses within the estate to the external facilities including the train station, local shops and coast.

#### External Activity Centres

There are three main activity centres external to the estate for which it is important that good connectivity and integration is established for residents of Catalina. These are:

- Clarkson train station – this is a key piece of district public transport infrastructure, and links into the greater Perth metropolitan rail network. It is located approximately 300 meters from the north eastern boundary of the development. Good connectivity to the train station will provide residents with the opportunity to significantly decrease car usage. Due to the lineal nature of the development, being approximately 2.7 kilometres in length, only some of the residents will be within the walkable catchment of the station.
- Ocean Keys shopping precinct – located immediately opposite the development along Neerabup Drive, this district level shopping centre provides a wide range of services and facilities, including supermarkets, specialist retailers, bulky goods and some service commercial activities. In addition to the retail facilities, the area also offers civic facilities such as a library, civic centre and police station.



- Mindarie Keys – this represents a key district recreational facility providing restaurants, bars, retail and active coastal recreation access. It is located approximately 1.1 kilometres to the north of the Coastal Precinct.

It is expected that a high proportion of residents within the Catalina estate will frequent these three areas on a regular basis. By providing good public transport access to each of the precincts the estate will have taken full advantage of the amenities surrounding the estate, as well as reducing vehicle usage.

### **Transit System Options**

While the location of the main transit corridor through the estate has been established, and the key precincts requiring linkage from the estate have also been identified, the final mechanism, in terms of public transport, is yet to be confirmed. Three types of systems have been identified as having the potential to fulfil the project requirements. These are standard Transperth bus system, a developer funded Special Transit System network, and a light rail network or tramway. The viability and potential level of service offered by each of these systems is discussed further below.

#### *PTA Public Transport System*

A Transperth system would be operated and paid for by the State Government, and come at no cost to the development. Transperth already operate a number of feeder bus routes along Ocean Keys Boulevard linking the Clarkson train station to the surrounding established residential areas. Transperth has confirmed that with the development of Catalina, a standard bus service is expected to operate along the Green Link from the Clarkson train station. It is currently anticipated that this will be achieved by realigning an existing bus route to run the full length of the Green Link. The proposed route is shown in Annexure 1 as realignment of Route 481.

It is envisaged the service will be available in a staged process as construction of the estate evolves. The frequency of the route is expected to be at 20 minute intervals in peak period, and then decreasing to around 1 hour in off-peak periods. The anticipated network effectively links the Clarkson train station to Mindarie Keys, however, requires commuters to walk from the Green Link to the Ocean Keys shopping precinct. The distance between the closest proposed bus stop and the entrance of the Ocean Keys Shopping centre is expected to be in the order of 650 meters. The timing and final alignment of the Transperth bus network will be subject to final negotiations with the Public Transport Authority (PTA).

#### *Special Transit System*

In order to achieve a level of connectivity and frequency greater than that provided by a Transport service, a developer funded Special Transit System would be required to be developed.

The PTA has advised that it is highly unlikely that an STS network would be funded as one of their normal metropolitan services, while not providing similar level of services to nearby residential catchments. The provision of this service would therefore need to be developer funded. This would involve the development of an agreed route, and then purchase of buses and the appointment of a suitably experienced and qualified operator. The funding will require an upfront investment for the purchase of buses and the ongoing operating costs relating to network. Preliminary investigations have found that depending on the extent of the network, the upfront outlay for purchase of buses is likely to be between \$1.5m and \$3m, with ongoing operating costs of \$1m-\$2m per annum.





### *Light Rail Network*

The Structure Plan for Catalina identifies the possibility of catering for a light rail system along the Green Link to connect the Clarkson station with the coast. This system would take the form of a light rail or tramway and be located within the Green Link reserve. While the land area is available to accommodate such a system, the landscape element of the Green Link would be severely impacted.

Prior to being able to quantify the cost of a light rail system it would be necessary to undertake further investigations on the exact form of the system and the level of supporting infrastructure that would be required to facilitate its operation. The initial establishment cost would be solely the responsibility of the TPRC, while other considerations are:

- Body responsible for ongoing operations.
- Maintenance of rolling stock.
- Maintenance of fixed infrastructure (i.e. track network).
- Ongoing operator provisions.

It is important to note that the only system of this type which is currently under detailed design in Perth is a system linking Morley to the CBD along Alexander Drive. This line will have a fully developed catchment which includes major shopping precincts, extensive areas of medium and high density including age person facilities, and a university. In comparison the Catalina estate will not have a substantially developed catchment for at least 10 years, and even when this occurs the total area of the catchment is highly unlikely to be large enough to justify the investment in the system.

Investigations show the cost of similar systems range from anywhere between \$7.5m per kilometre and \$35m per kilometre. While it is not possible to quantify what a system at Catalina would cost without undertaking a detailed analysis, it is likely that the final cost would be at the low end of this range or potentially less, given there will be no land acquisition costs and limited service relocations. Even under this circumstance a light rail or tram system will not be cost competitive with the bus service options listed above.

Should the commercial viability of these types of systems change in the future, the existence of the Greenlink will enable a network to be retrofitted into the development in a cost efficient manner relative to other developed areas.

### **Options Available to the Council**

A number of options are available to the Council for provision of public transport to the Catalina estate. These are summarised below:-

- **Option 1.** Accept the PTA as the sole provider to the Catalina estate and enter into discussions with PTA regarding the timing of provision for public infrastructure to the estate, along with seeking confirmation of the final route and frequency once development of the estate is complete.
- **Option 2.** Undertake a qualitative strategic assessment, comparing the levels of serviceability that would occur under a Transperth provided service and a number of STS routes. The analysis would cover servicing levels under each scenario and anticipated cost to the development.



In order to be effective this option would need to incorporate a level of consultation with the PTA to ensure the findings are accurate. A budget of \$20,000 would need to be allocated to this task.

- **Option 3.** Undertake the analysis specified in Option 2 however, include the option of a light rail network along the Green Link into the report. An increase to the budget of \$25000 would need to be allocated to this task.

### Recommendation

Satterley Property Group recommends that the TPRC accept the estate being serviced from a public transport perspective by a standard PTA Transperth bus service. This recommendation is based on the following criteria.

- PTA has already indicated that a bus route along the Green Link will be provided over the life of the development. The likely frequency of this route is expected to be every 20 minutes at peak periods, providing a reasonable level of service for regular commuters, along with providing good connectivity between the train station and the coast.
- The proposed Transperth route will connect the Clarkson train station to Mindarie Keys. The route will also allow users to stop within a reasonable walking distance of the Ocean Keys shopping precinct.
- There is no statutory requirement for Catalina to provide a level of service above and beyond the service which Transperth provides.
- The establishment of an STS network will require a significant upfront investment from the TPRC along with substantial ongoing running costs. This option is likely to ultimately prove financially unsustainable.
- The establishment of a tram or light rail system along the Green Link is not a preferred option as it will prove costly in terms of establishment and ongoing operation, not achieve decreased walking distance to the Ocean Keys shopping precinct below that provided by the standard system Transperth system, and detract from the landscape element of the Green Link. There is also risk associated with the provision of a long term operator for the system if it proves not to be commercial, particularly as the TPRC will eventually seek to exit the development.