

## The Christchurch Tramway Extension Partnership - the dream approaches reality

Dave Hinman

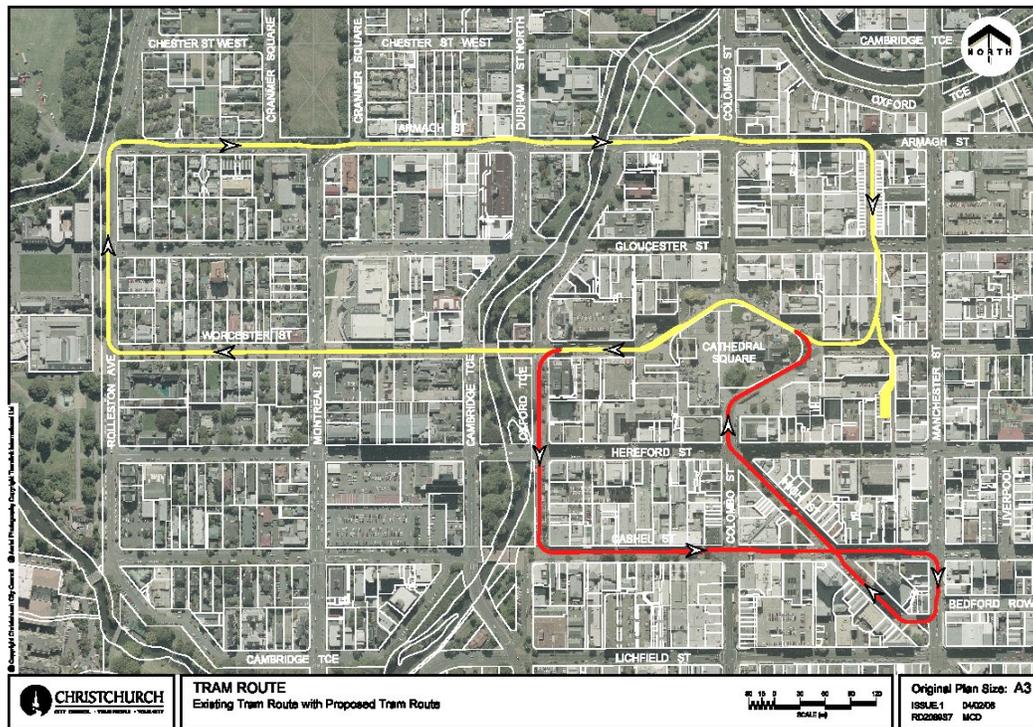
### INTRODUCTION

At the August 2008 COTMA conference I reported on the progress to date on steps being taken towards extending the Christchurch City tramway, which had opened in February 1995 as a 2.7 km loop, using 3 heritage electric trams and 2 trailers sourced from the THS, Ferrymead.

Entitled "The Christchurch Tram Extension - making the most of an opportunity - the story so far", the 2008 presentation identified seven milestones which had been achieved at that time.

The first of these was a Council decision in December 2006 to add "future proofing" to the refurbishment of the central city's pedestrian mall in High and Cashel streets by agreeing to install a concrete base suitable for a future tram track foundation.

The latest had been the Council decision arising from a public consultation process in March-May 2008 in relation to the then-favoured "Manchester" loop which proposed that the tram be extended along Oxford Terrace, then along City Mall (Cashel St) continuing to Manchester St and turning back into High Street and the Mall through into Cathedral Square and joining the existing line at the back of the Cathedral, a total distance 1.3 kms.



"Manchester Loop" Tram Extension Proposal

That decision (June 2008) confirmed legal status on the operation of trams in the mall areas, authorised the installation of rails (in addition to the concrete base) in the mall as part of the refurbishment programme, confirmed (subject to future funding) the Oxford Terrace and Cathedral Square parts of the extension, and significantly "requested further work on options taking the tram further along High Street, including the feasibility of using existing double track will in situ, with a final recommended route, with costings, to be reported back in time for the 2009 consultation of the Councils Long Term Council Community Plan (LTCCP)."

Two years on the decision has been made to construct, in two stages, a loop extension which will double the length of the existing line, the funding is in place, and the design for Stage 1 has been completed, a contractor appointed and construction is under way and on target to be open in time for the Rugby World Cup being staged in September-October 2011. Christchurch Tramway Ltd has been granted a significant extension of time to its licence to operate the tramway, including the extension and as a first stage of adding to the operating fleet, CTL and HTT are well under way with a joint venture to restore an Invercargill Birney tram.

This year's paper identifies the challenges and describes the milestones achieved by the Council, the Company and the Society over this two year period, and looks ahead to what still needs to be done to see the successful completion and commissioning of both stages of this project.

## **ACHIEVING THE TRAM EXTENSION - CHALLENGES AND MILESTONES**

The Council's decisions to extend the tramway have continued to be an iterative process, and there have continued to be many challenges as well as opportunities along the journey. A further series of key milestones can also be identified.

### **The Challenges**

- a) For the Council. As Councillors had not favoured the "Manchester Loop" as consulted on, both because of perceived traffic concerns and a community push to take the line further, the next challenges were to come up with a route that would both satisfy traffic safety and the reasonable needs of the community at manageable cost. The question of whether the potentially attractive proposition of scraping off the existing surface of the balance of High Street so that the existing tracks laid in 1932 and with plenty of residual life, could be reused raised considerations of sustainability, heritage, cost and practicality. There was also the challenge to assign funds to this project, given the many competing demands and the challenge of dealing with opposition (limited though it was) to the extension of the tram.
- b) For ChCh Tramway Ltd. The implications of an ever increasing route length - need for more vehicles (how and where to source them) staff and vehicle storage, costs v. projected income, the need to negotiate a long term lease, the "threat" of suggested change to modern LRT and commuter pricing.
- c) For the THS/HTT. Wanting to be "part of the action (i.e. use of THS trams), tram selection, negotiating a package with CTL, funding and labour restraints

### **The Opportunities**

- a) For the Council. These included using the tram as a central city revitalisation tool, enhancing tourism, a Rugby World Cup target to aim for and a possible forerunner to modern light rail.
- b) For ChCh Tramway Ltd. Ability to market a more comprehensive product, working with new stakeholders, potential for increase patronage, including more locals, and the joy of the drivers no longer just having to turn left!
- c) For the THS/HTT. More trams restored and operating, income to employ more people and leverage off for other projects, building relationship with CTL

### **Milestone 8 - Rails ordered, mall design changed to include them**

New RI 60 grooved rail was ordered from Yarra Trams, Melbourne, and detailed mall design now incorporated the tram lines - from July 2008.

### **Milestone 9 - Cashel St mall work under way**

Negotiations were concluded for the removal of the Cashel air bridge and the tram base, this time including rails, began to be installed in the mall (Cashel Street) (from August 08). The air bridge removal had been quite a challenge with one of the property owners not keen to see it removed because of the impact this might have on his first floor tenants. In the end it was all about valuations and compensation, but the removal has not only facilitated the tram installation but has resulted in a much improved outlook for the Mall.

### **Milestone 10 - route options discussed at Council seminar**

Four options for extending line beyond Cashel/High Corner were discussed at a Council seminar in November 2008. From this the plan for a 2-staged extension to go as far as the RC Cathedral in Barbadoes Street emerged.

### **Milestone 11 - Council resolution to include enlarged tram route in LTCCP**

At its Feb 26 2009 meeting, the Council resolved, subject to public consultation, to confirm the overall route of the tram extension, to be built in two stages, firstly to Tuam Street, via High, Lichfield and Poplar Streets, and secondly to Barbadoes Street (Music centre, Cathedral and CPIT), with detailed alignments to be confirmed. It further resolved to include funding for both stages of the project in the draft 2009-19 LTCCP, a total sum of \$11.5M. Stage 1 to be complete and operating in time for the Rugby World Cup in September-October 2011.

### **Milestone 12 - LTCCP submissions process**

Submissions sought on LTCCP, including tram proposals 10 March- 16 April 2009.

90 submissions were received relating to the tram - 65 in support, 25 opposed. 35 of these presented at LTCCP hearings, 15 being opposed and 20 in favour.

Those opposed were concerned about:

- Financial issues (15) - Cost of project, wasting money, current financial situation, additional ratepayer subsidy, cost of trams and storage
- The Tourism focus (19) - Preference for "real" public transport (buses, free shuttle, light rail), cycling, walking, and use of transport budget for this project
- Safety issues (6) - Mainly about cycles and tram tracks, also mixing trams and pedestrians (City Mall, Poplar Street)
- Route selection (6) - Tram not going to the right places (3), Stage 2 unnecessary (3).

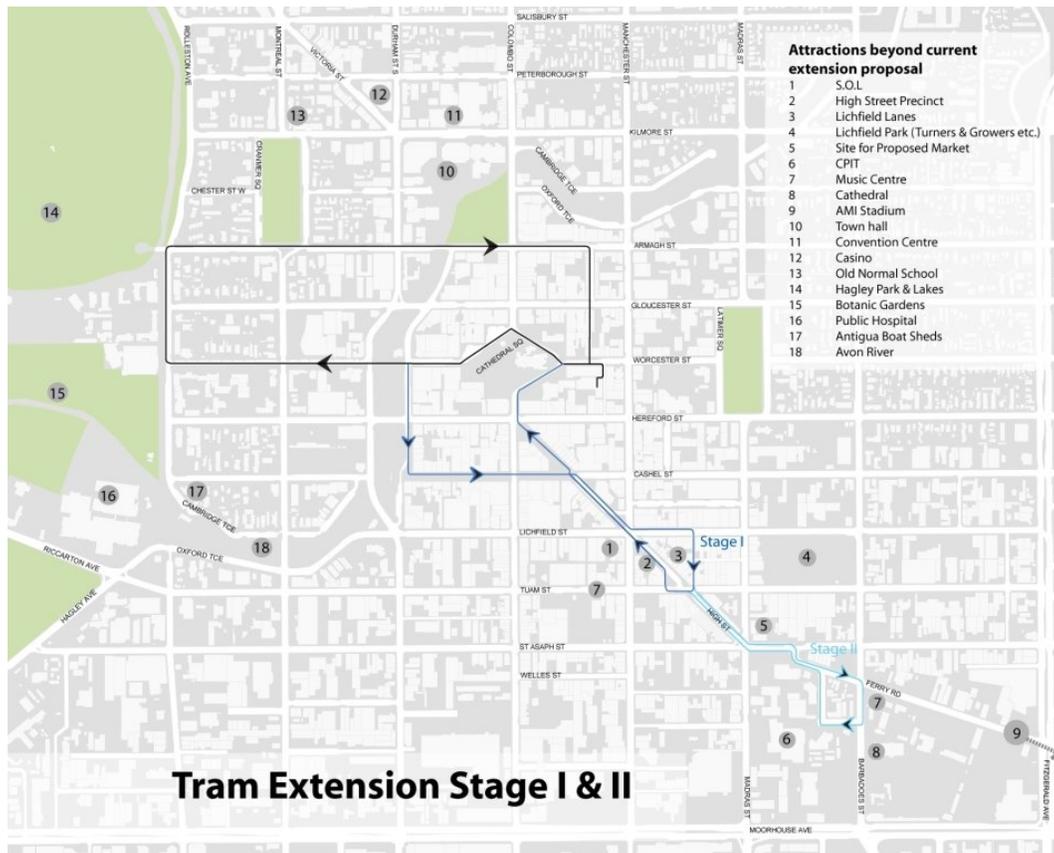
### **Milestone 13 - Council LTCCP decision.**

The Council's 2009-19 LTCCP meeting of 30 June 2009 confirmed the tram decision,

*"(a) That the Council adopt the proposal to extend the City Tram route as far as the intersection of High St and Tuam St by 2011 to open in time for the Rugby World Cup as per the Statement of Proposal and that funding for the second stage of the extension (through to the Catholic Cathedral) also be confirmed as per the Statement of Proposal.*

*(b) That following the adoption of the proposal above the Council grant delegated authority to the Chief Executive to enter into such contractual arrangements with such parties as he shall consider necessary or appropriate to implement the above decision of the Council."*

*Carried - 11 votes to 2 with one abstention*



**Milestone 14 - design and construction project team under way, detailed consultation with affected parties**

With the funding and timetable in place, a council staff project team was set up in the Capital Programme group to oversee the design and construction phases of the extension beyond City Mall. Detailed design commenced and further consultation began along the route. This became quite challenging, when despite the lack of opposition expressed through the LTCCP process, some local owners and businesses started raising concerns about the tram alignment, particularly where it involved the loss of car parks. This became evident in High Street between Cashel and Lichfield where double track required a change from angle to parallel parking and a consequent reduction of parks by 21 spaces and in Lichfield Street where for safety reasons the northern parking lane was proposed for the tram alignment, removing 15 spaces. In the latter case the Council succumbed to pressure from a landowner and decreed that the parking lane had to remain. The ultimate solution was to narrow the traffic lanes and add a dedicated tram lane, outside the parking lane. A small number of stakeholders were also concerned about the impact of the tram in the very narrow Poplar Street and this has been countered by on going dialogue, careful design and research into effects such as noise and vibration testing of the existing tram. After detailed study and engineering reports, a decision was made not to re-use the existing rails in the next section of High Street - not because of poor rail (it was in very good condition) or foundations (not reinforced to modern standards but shown to be satisfactory and signed off), but because of levels - the road level had been raised some years ago when kerbs and channels were replaced and it was not considered economic to either provide additional drainage or lift and re-lay the existing rails. Although there will be a cost in removing the old tracks, their very existence in High Street had deterred the installation of potentially conflicting services.

**Milestone 15 - Mall completed and “opened”**

With High Street reconstructed, minus tram rails, the next milestone was to complete the Cashel Street portion of City mall, including tram tracks. This was achieved by mid November 2009 and included the installation of a diamond crossing, supplied by Davies & Baird, and Yarra Trams, Melbourne, at the Cashel-High intersection. This all culminated in an official opening by Mayor and operation of a horse drawn tram in the week prior to Christmas, as a Mall promotion. The challenges here included ensuring the work was completed prior to the

pre-Christmas busy period (a promise made to the retailers), and to put together a partnership between the Council, the tram company, the Central City Business Association (sponsors) and Ferrymead (suppliers of the horse tram), finding suitable horses and with the support of the NZTA (rail safety regulator) to make the event happen. It was judged a great success and has since been used by the Business Association and other supporters to help convince doubters of the pulling power of the tram as an attraction.

#### **Milestone 16 - High Street Mall revisited**

With the contractors back on site after the Christmas break the High Street paving was lifted and rails installed Jan-March 2010. Over the Easter long weekend, tracks were laid across the Colombo-Hereford-High intersection. One challenge was to keep retailers on side during the additional works in High Street and this was achieved by good communication and retaining access paths linking both sides of the street. Another was to explain the destruction of recently installed Timaru stone pavers at the Colombo Street corner, an area which did not have the tram foundation installed, nor the levels adjusted for future tram rails!

#### **Milestone 17 - Tender process for the balance of Stage 1**

With the current contract limited to the City Mall locality a registration of interest followed by a limited tender process was followed, with tenders closing on March 24. By the time tenders were called (end of February) the challenge of completing the detailed design of Stage 1 had been achieved. Two tenders were received - from Downer EDI Works (contractor for the Mall and partner in the recent successful bid for Melbourne tram operation) and an Australasian consortium involving Coleman Rail (Melbourne) and City Care (ChCh). Downers were the successful tenderer.

#### **Milestone 18 - Design changed to mass concrete and smaller section rail**

Moving out of the paved City Mall area has provided the opportunity for a simplified track design and a single pour mass concrete has been adopted for most of the balance of the extension. The rail type has been changed to "RI57A" a profile manufactured especially for Melbourne by Voestalpine, Austria, and featuring a narrower groove, more cycle friendly than the heavier RI60

#### **Milestone 19 - Partnerships confirmed with CTL and Ferrymead**

With the current operating licence held by Christchurch Tramway Ltd due to expire in 2015, agreement was reached with the Council to extend the licence by a further 30 years, conditional upon the tram company providing the additional trams needed and storage (a second tram shed) for them. Agreement has also been reached for the continued supply of trams by Ferrymead and for the first of the additional trams needed, to be a joint restoration project by CTL and Ferrymead. There were challenges in concluding the unilateral licence agreement without re-tendering and in putting together a workable funding package for the joint tram project. A second tram lease has been arranged with the Sydney Tramway Museum.

#### **Milestone 20 Cathedral Square issues**

One of the few areas where a formal consenting process was required was Cathedral Square, the whole of which is designated as a heritage area. Issues included the design and location of traction poles (including on Cathedral land) and dealing with a very sharp turning radius behind the cathedral which needed to be eased for the tram as it joined the existing line. Compromises between traffic engineering requirements for more road space and urban design wanting to retain and enhance a pleasant public space needed to be made.

#### **Milestone 21 - Stage 2 - Council confirmation of amending route to pass through CPIT and exiting at Madras/St Asaph High intersection**

The idea of routing the tram through the CPIT campus had been raised by the Polytech during the 2009 consultation and after extensive technical debate, more particularly about the creation of a direct access on to the Madras-St Asaph-High intersection, seen by some as creating traffic safety and delay issues, the Council resolved to adopt this route in June this year. This has enabled detailed discussion and planning to take place between the Council and CPIT who are keen to proceed with the access which will be part of a wide pedestrian/cycle boulevard and scheduled for early construction.

### **Milestones still to be achieved**

the challenge is to complete construction on time and within budget. There are still some issues to be resolved with some disaffected landowners, and some detailed design and location matters, including the provision of disabled access remain to be finalised. For stage 2 detailed design has yet to be started together with any necessary further consultation prior to the tendering and construction phases. Also yet to be resolved is the site and design for the additional tram shed (likely to be in the Stage 2 area), and the question of further tram acquisitions. With Council elections due to take place in October, and a strong left of centre Mayoral candidate and his team less enthusiastic about the tram than the present Council, the possibility of this influencing Stage 2 of the project should not be ruled out. CTL and CCC need to achieve NZTA signoff of their safety cases which need to reflect the extension and its proposed operating procedures.

FOOTNOTE: This paper was in its final stages of preparation when the earthquake struck suddenly early on Saturday morning. There will be an update at the conference on the impact of the earthquake on tram operations and on the tram extension programme. There has been no apparent damage to the tramway (including the extension) or to the tramway at Ferrymead,