7. REINSTATING INFRASTRUCTURE IN CHRISTCHURCH

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PURPOSE OF REPORT

- The purpose of this report is to seek the Council's endorsement of the contract delivery model to reinstate infrastructure damaged in the Canterbury earthquakes of 4 September 2010 and 22 February 2011.
- 2. The report also recommends that the Chief Executive be given the authority to enter into and approve agreements and arrangements for the reinstatement work required.

EXECUTIVE SUMMARY

- The Council has now entered the recovery phase of its response to the earthquake. Urgent
 work is required to reinstate infrastructure that was either damaged or destroyed in the various
 earthquakes.
- 4. Government sought advice from New Zealand Transport Agency (NZTA) on its view of the appropriate contract delivery model for the infrastructure reinstatement. Council staff have been working with NZTA to assess the options, risks and opportunities of various delivery models.
- Council staff and NZTA recommend that a city wide Alliance Agreement be developed with those contractors already engaged under the head contractor model to manage the reinstatement of the earthquake damaged infrastructure.
- 6. This proposal, and the process to be followed for its implementation comply with the relevant provisions of the Canterbury Earthquake Recovery Act 2011 and Orders in Council made under the Canterbury Earthquake Response and Recovery Act 2010.

STAFF RECOMMENDATION

It is recommended that the Council resolves that:

- (a) It ratifies the Chief Executive's proposal for an Alliance to be formed to deliver the reinstatement of the City's damaged infrastructure.
- (b) The Chief Executive is authorised to approve and enter into such agreements and arrangements as are necessary to implement the proposal.
- (c) The Chief Executive is to report regularly to the Council on progress with regard to the reinstatement work.
- (d) The Chief Executive is to exercise his authority in accordance with the relevant provisions of the Canterbury Earthquake Recovery Act 2011 and Orders in Council.

BACKGROUND

Pre 22 February Response

- 7. At the Council meeting of 4 November 2010 the Council adopted the proposal that collaborative working relationships be developed with contractors engaged to manage the re-instatement of infrastructure damaged in the 4 September 2010 earthquake in four of the worst affected areas.
- 8. The collaborative working arrangements were designed to achieve the Council's strategic objectives, namely:
 - Contractors are deployed within the community in the shortest possible timeframe. The aim
 is to provide confidence to the community that the significantly damaged areas of
 Christchurch will be fixed in as short a period of time as possible.
 - Enough resource is procured to ensure that works are completed in the shortest possible time frames.
 - The local contracting market is utilised to its maximum extent, with fair reward for contractor performance.
 - Work and resources are coordinated with neighbouring local authorities to ensure conflict of priorities does not arise across the wider region.
 - Effective contract and relationship management practices are used to successfully manage quality, cost, and overall performance of contractors to deliver value for money.
- During November and December 2010 the Council entered into negotiations and executed contracts with:
 - McConnell Dowell Constructors Ltd and The Fletcher Construction
 - Company Ltd Joint Venture (Avonside/Dallington/Burwood)
 - Fulton Hogan Ltd (Bexley/Southshore)
 - Downer EDI Works Ltd (Brooklands/Spencerville)
 - City Care Ltd (Halswell).
- 10. The scope of the contracts included:
 - All wastewater pipe renewals.
 - Inspection and repair of laterals from sewer main to private gully traps (subject to agreement from EQC).
 - All water main and sub main renewals in the damaged zone.
 - All storm water pipe repairs in the affected areas.
 - All road corridor repairs including road reinstatement, footpaths and lighting if required.
 - Other works that are sensible to integrate into a phased reconstruction.
 - Obtain all consents required to support construction and design work recognising that consents can be obtained in parallel to construction works as outlined in the Canterbury Earthquake Response and Recovery Act 2010 and associated Orders in Council.
- 11. An Infrastructure Rebuild Management Office (IRMO) was established to oversee the rebuild. This office was charged with oversight of design, construction management, finance, communication, programming, procurement and project administration. This team of 20 to 30 staff was resourced from within the Council and the consulting industry.
- 12. At 22 February 2011, all of the Head Contractors were well advanced with their investigations including further condition assessments and survey, and two of the four Head Contractors had commenced physical works on the ground and the remaining two were planning to start late February.
- 13. The aftershock of 22 February 2011 has resulted in much greater damage than that of the 4 September 2010 earthquake. Damage to the underground services and roads has almost quadrupled, and the areas damaged are much more widespread across Christchurch and no longer easily defined within geographic/Head Contractor boundaries.

Post 22 February Response

- 14. The significance of the aftershock of 22 February 2011 has demanded a different response from both central and local government. The Canterbury Earthquake Recovery Authority (CERA) has been established to oversee the recovery.
- 15. Within this context, one of the Council's roles is to rebuild the City's Infrastructure. It is anticipated that the Council will be required to prepare and submit to CERA an Infrastructure Rebuild Recovery Plan for their approval.
- 16. With so much at stake and what is likely to be a significant Crown contribution to the infrastructure rebuild, Government sought advice from the New Zealand Transport Agency (NZTA) on the appropriate form of delivery vehicle for the Infrastructure rebuild. The NZTA was well placed to give advice given its capability and experience in outsourcing in the sector.
- 17. At the same time as the NZTA was preparing advice, the Council was reassessing its options. The NZTA and the Council collaborated to ensure the best advice was prepared.

Options for Reinstatement

- 18. Consideration was given to scaling up the current contract arrangements to reflect the increased scale of the works. This was rejected because the current approach does not optimise the client / contractor interaction and the scarcity of resources that will be in high demand given the extent of work now required. More efficient management methods are required for implementation.
- 19. In reviewing the various methods of procuring infrastructure and professional services, the NZTA through its State Highway Portfolio Procurement Strategy 2010 document, developed a matrix of 11 criteria that needed to be considered. They have tested the Christchurch infrastructure reinstatement task against these 11 criteria, and there is a strong indication that the Alliance delivery model will deliver the best outcome. The most weighted priority is time for temporary works completion and time for complete reinstatement. This priority drives the decision towards an Alliance. Other key factors considered that promote the alliance model were the:
 - Strong positives in bringing together different organisations to work on common goals.
 - Large scale of the project.
 - High degree of complexity and risk.
 - High potential for innovation.
- 20. Alternative delivery forms were considered including Early Contractor Involvement, the Managed Contractor model, and Design and Construct. While efficient models for some applications, they would fail to deliver the speed of response that an Alliance provides, would introduce more layers of complexity in administration and would not achieve as much alignment in objectives between the various parties involved.
- 21. While the focus is on the horizontal infrastructure (pipes and roads), the Alliance model will also provide opportunities for enhanced delivery of other private infrastructure services such as power and telecommunications (including broadband) which are located within the road corridor, as collaboration in planning and construction is certain to deliver added value for money. The Alliance model readily allows for scope changes which should support value for money for all parties, and present a full-integrated rebuild solution. At this stage works that will be outside of the scope of the Alliance would be the Christchurch Wastewater Treatment Plant, Ocean Outfall, Lyttelton Wastewater Treatment Plant, Compost Facilities, Landfill and Buildings. These works are better managed as discrete projects because of the nature of the work.

The Alliance Model

- 22. Alliances are a form of collaboration between client(s), consultant(s) and contractor(s) who mutually agree to undertake the work to target levels of quality, cost and time. Additional rewards/sanctions are put in place should performance exceed/fail to meet the targets. This leads to a high degree of trust between the parties and a focus on performing to the highest expectations.
- 23. The NZTA Alliances to date have all been successful. The most recently completed alliance, the Manukau Harbour Crossing, was delivered nearly 12 months ahead of schedule and under budget. The Newmarket Viaduct project is also being delivered through an Alliance and is currently six months ahead of schedule; and this procurement method is being used for the Waterview Connection project.
- 24. Equally relevant is that the NZTA is using an Alliance to manage the Auckland Motorway network. This operate, maintain and improve contract has many similarities with the infrastructure reinstatement in Christchurch, and has already produced substantial savings and innovation.
- 25. The Council also has experience in alliancing, with the City Mall constructed using this delivery model.
- 26. The increase in scale since 22 February 2011 will result in a longer time for full reinstatement. It is essential that collaboration between all interested parties is maximised to reduce delays and reworks to a minimum. The Alliance model will create incentives for reducing start up times and for finishing ahead of deadlines.
- 27. Given the scale and social impact of the reinstatement project, it is important that opportunities in the non-cost area are not lost. There must be a focus on customer and stakeholder relations, communication of plans and progress, maximising the use of the local labour force and contractors, and driving an increase in general workforce skill levels as a consequence of the work. The Alliance model is able to provide powerful incentives that encourage high performance in these areas.
- 28. It is the opinion of both Council staff and the NZTA that adoption of the Alliance model will reduce overheads, streamline approvals, increase the participation of the private sector at all levels of decision making and would be the most agile for dealing with the evolving scope of the works. Both are also convinced that the model will provide the best opportunity for the multiple objectives of the clients to be realised.

Value for Money

- 29. It is expected that the Alliance will support the Council's strategic objectives and achieve value for money by demonstrating that:
 - In the current environment, there is extremely high value in adopting an integrated approach to the rebuilding of Christchurch.
 - The original contractors were procured in the last year using an approach approved by NZTA.
 - These contractors are the most appropriate contractors to use for this work in the local market.
 - The Alliance model has sufficient checks at agreed milestones to confirm value for money as the work progresses.
 - Benchmarking of labour, plant and materials would increase competition between head contractors and drive efficiency and effective use of resources.

Setting up an Alliance

- 30. An Alliance will be formed by bringing together the existing five infrastructure rebuild contractors (provides for splitting the MacDow Fletcher joint venture back into two stand-alone companies) with the Council (as the owner of the infrastructure) and CERA (once fully operational, as the government's recovery manager and funder) and/or the NZTA.
- 31. It is proposed that the number of head contractors be limited to those five currently involved given that this number is considered the maximum for a well-functioning Alliance.
- 32. The incumbent head contractors are aware at CEO level of the work to explore an alliance and are supportive of the delivery model.
- 33. The Alliance would report to both the Council and CERA as joint clients. The Council, as ultimate owner of the assets, would retain control of the scope and standards of the work to be performed.
- 34. The Council and NZTA's probity advisor for this process is Shaun McHale of the McHale Group. His role will be to approve and provide probity sign-off at various points of the project. The Council's legal advisor for this process is Michael Weatherall of Simpson Grierson. His role will be to provide advice at various points of the project including formal review of the Alliance contract documents.
- 35. Staff are also using an independent expert to audit various aspects of the pricing models.

Funding

- 36. The estimate of the infrastructure rebuild is between \$2-3 billion. This estimate will be continued to be refined to a point that it can be confirmed as a budget.
- 37. Council staff are preparing the funding strategy for immediate emergency response costs, the impact on its costs and revenues during the recovery phase and the cost of the infrastructure rebuild programme. The infrastructure rebuild programme will be funded through a combination of insurance, government subsidies (NZTA and other) and increased Council borrowing. This will be presented to the Council as part of the 2010/11 Annual Plan and subsequent Long Term Plan (LTP).
- 38. Until this strategy is confirmed, the Council needs to continue with high priority infrastructure repairs for example, repairs to sewer pressure mains and the Christchurch Wastewater Treatment Plant.

Legal Considerations

- 39. One of the purposes of the Canterbury Earthquake Recovery Act 2011 is to provide appropriate measures to ensure that the Council responds to, and that Christchurch and its community recover from, the impact of the Canterbury Earthquakes.
- 40. That Act states that Canterbury Earthquakes "means any earthquake in Canterbury on or after 4 September 2010 and includes any aftershocks.
- 41. The Canterbury Earthquake Recovery Act 2011 repeals the Canterbury Earthquake Response and Recovery Act 2010. However section 88 of the new Act states that every Order in Council made under the 2010 Act, and still in force, is to be treated as having been made under the new Act. This includes the Canterbury Earthquake (LGA 2002) Order 2010.
- 42. Section 101(1) of the Local Government Act 2002 requires the Council to manage its revenues, expenses, assets, liabilities, investments, and general financial dealings prudently and in a manner that promotes the current and future interests of the community.

- 43. Under section 101(2) of the Act the Council must make adequate and effective provision in its LTCCP and Annual Plan (where applicable) to meet the Council's expenditure needs identified in those plans.
- 44. The Canterbury Earthquake (LGA 2002) Order 2010 states that section 101(1) and (2) are not to prevent the Council from doing anything inconsistent with its LTCCP or Annual Plan. That also means that the Council is not required to undertake a special consultative procedure before it makes its decision.

Consultation / Further Approvals

- 45. The NZTA has completed consultation with industry groups and received support for the proposal. The Commerce Commission is also aware of this proposal and sees no issues.
- 46. The NZTA's procurement manual requires that approval is sought to enter into an alliance agreement. A proposal has been forwarded to NZTA to seek this approval and indications are that it will be addressed at its Board meeting on 5 May 2011.
- 47. The NZTA's advice has been prepared in the form of a Cabinet Paper and was considered on 18 April 2011.