1. Executive Summary

1.1 Introduction

This Tranche 2 Business Case has been developed for the Auckland District Health Board (Auckland DHB) as the next stage of the business case for investing in improving Auckland DHB hospital facilities at the Auckland City Hospital (ACH) and Greenlane Clinical Centre (GCC) campuses. This business case builds on the Facilities Infrastructure Remediation Programme (FIRP) Strategic Assessment (approved in June 2017), and the Programme and Tranche 1 business cases, both approved in August 2018.

This Tranche 2 Business Case provides an update on the Programme Business Case and describes the implementation plan for Tranche 2. The FIRP is seeking [redacted] (Tranche 2 costs total [redacted], less the Auckland DHB contribution of [redacted]) over the 5-year Tranche 2 period (2019-2024), which will cover the implementation of the Tranche 2 works.

1.2 Strategic Context

Some buildings and supporting infrastructure (engineering plant) at ACH and the GCC are deteriorating. Many of the critical assets have a history of failure or are assessed as being at high risk of failure. A significant failure could compromise service delivery, causing harm to patients, staff and visitors and impacting not only the local population but also regional and national populations.

There is no change to the planned Programme approach. The focus of the Tranche 2 investment is to **Build Resilience**. The Tranche 2 scope includes:

- ASW.12 High Risk and Highly Critical items (Tranche 2)
- GSW.02 High Risk and Highly Critical items (Tranche 2)
- ASW.16 A40 Central Plant and Tunnels
- GSW.14 Roof Top Restraint System (GCC)

The works in Tranche 2 will contribute to the overarching FIRP benefits (operational, financial and environmental sustainability, more effective and sustainable facilities and infrastructure, and a better, safer environment). They build and expand on the significant improvements being achieved through Tranche 1 and, importantly, start to address requirements for the longer-term stability and expansion of hospital facilities.

The most significant risk to the successful delivery of Tranche 2 is competing demands on the construction sector. These will impact availability of personnel resources (including architects and designers, quantity surveyors, contractors and sub-contractors amongst others) as well as physical resources (materials such as steel, concrete etc.).

1.3 Economic Analysis

Projects/workstreams included in Tranche 2, and the methodology by which they were selected, were identified in the Programme Business Case. For each Tranche 2 investment, two basic approaches were used to determine the preferred approach, depending on whether the works were determined to be 'simple' (relatively low cost or complexity, or where only one potential viable solution was identified) or 'complex' (more than one feasible potential solution).

With the exception of the access and service tunnels element of project ASW.16, the Tranche 2 works were assessed as 'simple'. A preferred way forward for each area of work within Tranche 2 has been identified, and indicative costs produced based on a combination of known costs and estimates.

A number of options for the routing of the access and service tunnels were identified, with the two main options being along the roadway from Building A01, between buildings A08 and A07 towards the proposed location for the future central plant (Building A40), or alongside the road through the sites of the current Buildings A07, A09 and A13. The latter option was preferred due to significantly reduced disruption and lower costs.

1.4 Commercial Approach

There are no material changes to the procurement strategy and approach as described in the Programme and Tranche 1 business cases. The central plant building and tunnels are planned to commence at the start of Tranche 2, with the remainder of the Tranche 2 works scheduled to commence later.

The new central plant and tunnels involve heavy civil and building works packages, in addition to the complex building services installation and commissioning that has been described in the earlier business cases. These heavy works packages will be procured using appropriately experienced resources. The preferred approach for the procurement is to separate the workstream into separate projects and to appoint contractors who are experienced in their respective fields for each project. This will allow the DHB to obtain the best and most appropriate teams for the delivery of these key projects and will also reduce risk for the DHB.

The procurement of the remainder of the works in Tranche 2 will be determined on a case-by-case basis and will include a combination of open tenders, closed tenders and direct procurement from panels, pre-qualified suppliers or direct procurement. Experience from Tranche 1 procurement and delivery will be brought into Tranche 2 strategies. The main procurement activities for Tranche 2 will commence from the end of Quarter 3 2019, assuming approval of the business case in mid-2019.

FIRP is operating in an increasingly competitive delivery environment within the Auckland market. Construction activity levels have increased from 2018 levels and this growth is forecast to continue. The two major procurement risks facing FIRP are a poor and low response from the market, and main and subcontractor availability due to current market conditions.

1.5 Financial Case

The Tranche 2 programme costs are estimated at [redacted] in asset replacements with an additional [redacted] of net operating costs (excluding capital charge and depreciation) over the next 25 years. The main change in Programme financials with Tranche 2 is the depreciation phasing, resulting from separation of the central plant assets (life of 20 years) from structural assets (life of 50 years). The main assumptions per the Programme and Tranche 1 business cases remain, that is, the programme is only affordable with financial support. It has therefore been assumed that there is no capital charge levied on FIRP impact and operational Ministry of Health (MoH) funding will be provided to cover depreciation impact.

The financial expenditure for Tranche 2 is summarised in Table 1. All figures are subject to further update and refinement as the Tranches are developed.

Table 1: FIRP Tranche 2 Cost Summary

	2019/20 Year 1	2020/21 Year 2	2021/22 Year 3	2022/23 Year 4	2023/24 Year 5	Total
Grafton	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]
Greenlane	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]
Total Tranche 2 Costs	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]	$ [redacted]

1.6 Management Approach

Programme management will be undertaken as described in the Programme Business Case. There are no material changes to governance or programme management arrangements.

The Tranche 2 key milestones and approximate dates are summarised in Table 2.

Table 2: Tranche 2 Key Milestones

Tranche 2 Key Milestones	Approximate Date
Auckland DHB Board Approval Tranche 2 Business case	April/May 2019
Government Approval of Tranche 2 Business Case	July/August 2019
ASW.16 Central Plant and Tunnels Design Completion	May 2020
GSW.14 Roof Top Restraint System (GCC) Commencement	July 2020
ASW. 12 High Risk and Highly Critical items (Tranche 2) Commencement	June 2021
GSW.02 High Risk and Highly Critical items (Tranche 2) Commencement	July 2021
ASW.16 Tunnel Construction Completion	February 2022
ASW.16 Central Plant Construction Completion	June 2022
ASW.16 Commissioning of Central Plant and Tunnel Completion	February 2023
ASW. 12 High Risk and Highly Critical items (Tranche 2) Completion	March 2024
GSW.02 High Risk and Highly Critical items (Tranche 2) Completion	April 2024

1.7 Conclusion

This Tranche 2 business case summarises the works proposed to be completed between 2019 and 2024. These works focus on Building Resilience including the development of the new central plant building, tunnels and the centralisation of systems.

Tranche 2 will increase robustness of services and the ability to maintain critical operations and functions. It will enable 'Rapid Recovery' by improving the ability to return to and/or reconstitute services, with robust contingency plans for quick and efficient recovery. The investment will achieve redundancy of critical systems and functions.

These investments complete the highly critical works projects to be delivered as Tranche 1, as these two tranches combined focus on 'keeping the business running'. The Tranche 2 investments will result in a significantly more stable and much lower risk environment for the ongoing delivery of healthcare. The investment will also position the DHB well for the later tranches, which move towards supporting and enabling future development.

The Tranche 2 works will, together, create a much more stable and resilient infrastructure with significantly more capacity and capability to support hospital growth. Alongside the FIRP, Auckland DHB is developing a ten-year plan to increase capacity. The Building for the Future (BFTF) Programme aims to deliver the additional adult inpatient, operating room and related supplementary capacity required over the next ten years, to address the projected increase in patient demand. The proposed investment will create a better environment and deliver improved health outcomes for people living in the Auckland DHB catchment, the wider Northern Region (for regional services), and across New Zealand (for national services).

The investment in Tranche 2 will increase the resilience as well as supporting overall capacity, ensuring that the DHB has the ability to grow its services (and facilities, as outlined in the Auckland DHB Site Master Plan) as required to meet increased demand.

The combination of Tranche 1 and 2 works will position Auckland DHB well for future investment. The works across the two tranches will reduce the impact and costs of future investments, by building a sound infrastructure foundation and completing some of the works that would otherwise be included in later projects (e.g. removal of asbestos, access to secure, resilient power source etc.).