

As FIRP is a risk-based benefits realisation programme of works it was important to ensure that there is a fair comparison between the different options. Consequently, when assessing the potential affordability of this option, the estimates for the do-minimum option took primacy in the assessment as only funding would be sought for this stage of works. Total costs comparing Option 2 with Option 3 plus future Tranche 4 did still factor into the assessment process but was not the primary consideration.

This option is **RECOMMENDED**.

4.5 Recommendation

Table 22 outlines the score comparisons between the three options.

Table 22: Multicriteria Analysis

Critical Success Factors	Option 1	Option 2	Option 3
Strategic fit and business needs	1	5	4
Potential Value for Money	1	5	5
Supplier capacity and capability within timeframe	1	5	5
Potential affordability	1	1	5
Potential achievability	1	4	5
Total	5	20	24

It is recommended that Option 3 'Do Minimum' proceeds. Though this is not the preferred option as it does not address the full scope required to mitigate risk, affordability constraints do not allow for the total scope of Tranche 3 to be delivered in a single stage. This option does provide best public value however, as it ensures that facilities infrastructure continues to be remediated using a risk-based approach to keep health services running in New Zealand's largest hospital.

The significantly reduced scope for this option as summarised in Table 14 was carefully considered, and is the absolute minimum required to provide meaningful progress towards the full benefits realisation of FIRP and to manage key risks by:

- ASW.30 High Risk/Highly Critical Assets – minimum required to address the deferred assets nearing or, at end of life in the most critical buildings being Support Building, Starship and Greenlane Clinical Centre.
- ASW.31 Sitewide Electrical Resilience – minimum required to complete the electrical resilience for high voltage supply in the current case to ensure power security for Auckland City Hospital.
- ASW.32 Alternative Heating – undertaking the complete design for the transition from fossil fuels of ACH while delivering quick to market opportunities. This is the minimum viable work to reduce reliance on the existing steam system to improve is operational reliability in the short term.
- ASW.33 Technology – minimum requirement to implement the Reliability Centred Maintenance platform, gaining early advantage of data collection to maximise the working life of the existing assets where sensors have been installed.
- ASW.35 Asbestos – minimum works as required under the Health and Safety Work Act to support the reduced scope of the workstreams noted above.

The recommended approach does not require any additional staff.

There remains significant residual risk as this option does not achieve the full planned benefits of Option 2, which are summarised as follows:

- Critical and high-risk assets that are further deferred may fail, impacting upon clinical service resulting in patient harm.
- Full low and high voltage resilience will not be achieved, which is required for New Zealand's hospital of last resort.
- Steam transition goals will not be fully achieved, and ACH will continue to rely on fossil fuels and inefficient infrastructure with supply prices continuing to rise.
- Seismically at-risk structures and tunnels will remain onsite, occupying land that could be used for future development while representing an increased risk staff and the public in the event of an earthquake.

s 9(2)(f)(iv)

. If this process is carefully managed, the main dis-benefit of total cost increases due to deferrals of delivery can be mitigated as works are brought back into the pipeline when available funding allows for it.

5. Commercial Case

5.1 Required Services

FIRP was established as a programme/portfolio of work, with several parallel workstreams that will be undertaken simultaneously by different project teams in the PMO, consultants, suppliers and contractors. The required services are summarised in Table 23.

Table 23: Required Services

Service	Description
PMO	These resources are shared across all workstreams which includes expertise in health and safety, risk, procurement, programme, commissioning, integration, and quality.
Management	Identified key resources that are delivering works in Tranche 1 and 2 will be retained; additional requirements are anticipated to be low.
Consultants	Building services engineers, electrical engineers, architects, building engineers, civil engineers, acoustic engineers, quantity surveyors, asbestos specialists, environmental specialists, deconstruction specialists, pre-construction specialists, software developers and building management service specialists.
Contractors	Mechanical, electrical, communications, deconstruction, civil and building contractors.

Where opportunities arise or are identified in advance, the direct procurement of specialist or incumbent services will be sought to:

- Manage risk and ensure safe workstream delivery.
- Maintain and improve programme delivery timeframes.
- Improve the value for money proposition (cost).

Specialist management services will be required for asbestos, risk, cost and project, health and safety, quality, and consent management, and document controllers, all of which are currently engaged in Tranche 1 and 2 as part of the FIRP PMO. Strategically, it will be advantageous if the funding for Tranche 3 is available before Tranche 1 and Tranche 2 works are completed in 2025, to prevent the disestablishment of FIRP and the consequent loss of the expertise built up over the past eight years.

5.2 Market Context

Suppliers

FIRP designs and builds its workstreams in a competitive local environment (Auckland) and is moderately influenced by international supply lines for the specialist equipment required for some of the workstreams.

In the Auckland context there are several large-scale projects underway that have absorbed a significant proportion of industry resources. These include the City Rail Link, Auckland Airport redevelopment, Downtown Car Park site redevelopment (Commercial Bay 2.0) and IKEA. Unlike many other parts of New Zealand, Auckland continues to see an uplift in population numbers driven by migration however, many of the new arrivals do not have the specialist skills to deliver healthcare infrastructure with many qualified New Zealanders leaving the country for opportunities and higher salaries abroad. As of August 2024, there has been a net migration loss of 55,300 citizens in the June 2024 year.

In a national context, though New Zealand has technically lifted itself out of a recession by achieving 0.2 percent growth for the three months ending March 2024, business confidence is low due to continued high interest rates which is stifling investment. Recent research has shown the 70% of SMEs are feeling either stressed or burnt out, which is concerning as they make up 97% of all businesses in New Zealand – there is no certainty of pipeline works in the public sector which is a significant buyer of services and there have been significant budget cuts in the national purse. Consumer confidence is at similarly low levels as well, due to ongoing cost of living pressures and significant public sector jobs losses.

There is both opportunity and risk in a weakened economy as the buyer of services. Tender responses are more competitive as there is less opportunity in the market for work however, there is increased risk of liquidation events as some companies struggle with cash flow.

Typically, the type of work that FIRP delivers is not that attractive to the market as contractors (and more importantly, the services sub-contractor market upon which the workstreams will be heavily reliant) generally consider works in existing hospital environments to be particularly challenging. The requirements for staging, processes for delivery, extensive approvals requirements, and working on a live hospital site limit the capability pool of the subcontractor market. It is therefore important to ensure the continuity of the current design, PMO, and management teams to support either the incumbent contractor teams (from Tranche 1 and 2) or alternate offerings from the market to be able to perform in what is a challenging project delivery environment. However, due to the current state of the economy it is expected that market responses to tenders will be higher and more favourable than normal, as there are less opportunities elsewhere in the market for suppliers to invest their time into.

In the context of the supply chain, New Zealand is not a manufacturing country and a significant proportion of the mechanical and electrical equipment included within the recommended scope comes from overseas ports including Europe, America, China, and other areas within Asia as a whole.

Lessons Learnt

During the delivery phase of FIRP, several key lessons have been learnt that enabled the FIRP team to better navigate procurement pathways within the market, to enable quicker procurements whilst achieving enhanced outcomes. Lessons learnt carried forward in all procurement activities are summarised in Table 24.

Table 24: Lessons Learnt – Procurement

Area	Lesson
Scope definition and drafting	This is an iterative process and can be a prolonged part of the procurement process. This has been streamlined by allowing some activities to occur in parallel and by allowing the procurement committee to be more flexible in the timing and approach for approvals i.e., via circulation.
Tags and Clarification closeout (Contract Formation)	These are iterative processes and can be prolonged parts of the procurement process. Additional commercial resources will be engaged to provide administrative support.
Secondary Procurement under Rules	The greater use of Secondary Procurement under Rules (i.e., panel procurement and trade services agreements) has allowed relationships to be fostered in the market, with suppliers now more familiar with the requirements for operating on a hospital site.
Clearer differentiation between new	This has allowed project works to be completed more quickly, as there are fewer consent obligations for refurbishment works.

construction and refurbishment works	
Exemption from Rules vs Dispensation	Differentiation has enabled the delivery team to better utilise the Rules to achieve good procurement outcomes.
Exemption	Greater use of direct sourcing, where appropriate for highly technical and high-risk works, has led to overall better site safety and operational consistency.
Early Contractor Involvement (ECI)	The use of ECI to validate the constructability of design is critical for brown field sites, as constructability is not the expertise of most consultants.
Lower value band procurements (less than \$100,000)	Should follow a templated procurement and contract process and may typically be directly sourced, so that project resources can better spend their time managing more challenging projects.
Broader Outcomes	The relevant application is essential and must not be implemented as either a box ticking exercise or implemented in such a way that it cannot be achieved by most respondents to a procurement.
Procurement pipelines	Do not provide certainty, as they are typically contingent on Business Case approvals and funding and should not be shared with the market unless there is certainty. Reputational damage is a risk.

5.3 Broader Outcomes

To help deliver the broader outcomes identified and described as outcomes in the Strategic Case, the procurement process will be utilised to communicate the appropriate weighting and definition of what the Broader Outcomes requirements are.

As FIRP is an infrastructure portfolio of works, emphasis will be placed on the Social Wellbeing and Economic Wellbeing components of the Broader Outcomes. Broader outcomes that are considered in the procurement process will differ from project to project, based on the scope of works and may include:

- **Training and upskilling:** Request evidence from tenderers of any relevant graduate or ongoing professional development framework, and how these would be implemented within the project. Targets or commercial requirements can be established to guarantee that graduates or apprentices are on projects.
- **Subtrade procurement:** For larger procurements, FIRP may require the local procurement of subtrades, or (as a minimum), evidence that the opportunity to tender has been extended to local suppliers.
- **Key Personnel:** FIRP will consider bonding arrangements for key personnel who are identified as leaders that can provide benefit for upskilling the project workforce.
- **Sustainable outcomes:** Specific targets can be specified to drive behaviours for better environmental outcomes, such as waste reduction targets.
- **Outcomes reporting:** Robust reporting requirements will be established for successful tenderers to demonstrate that they have met the Broader Outcomes objectives. These reports can carry weight in future procurements, as they demonstrate a commitment to meeting the required objectives.

5.4 Procurement Strategy

Programme Procurement Approach

The programme procurement approach was described in the FIRP Strategic Procurement Plan⁴, agreed with the New Zealand Government Procurement and Property and approved as part of the Programme Business Case.

FIRP is principally responsible for the initiation process of projects within FIRP, and the approvals to proceed with procurement of resources for projects. All procurement activities will comply with the Northern Region Procurement Policy (May 2022), the Facilities and Development Procurement Procedure (v7 June 2021), and the Government Procurement Rules⁵. The Government Directive ensuring skills training, diversity and development for the region is considered as part of the process.

There is no single procurement/delivery approach for FIRP, as there are several workstreams with varying levels of complexity. This means that the approach to the market will differ from project to project. Applying lessons learnt from Tranche 1 and 2, the methods for approaching the market to undertake works will fall into one of the following categories (depending on scope and risk):

- **Secondary procurement via the existing consultant and procurement panels:** Consultants and contractors on these panels are already prequalified, and the panels are typically used for low to medium size and risk projects.
- **Large, high risk, or complex projects:** The market will be approached via GETS and will typically be a one-stage procurement unless there is a high level of complexity, in which case it will likely be a two-stage process. For larger tenders, a separate probity auditor is present at all procurement meetings.
- **Low risk and/or low value works:** Direct procurement will be undertaken with incumbents with quotes requested from at least two suppliers where possible.

As designs develop for the workstreams within Tranche 3, opportunities to amalgamate and bundle scope to increase the attractiveness to the market is ongoing. Consequently, procurement strategies will evolve as more investigative work and market analysis is undertaken. Detailed procurement strategies and plans are documented for the various workstreams for the record as part of the Project Lifecycle, which is the responsibility of the FIRP delivery team. Procurement will not commence until the procurement committee has signed off all relevant plans and documentation.

Tendering Process

Suppliers must meet the pre-conditions for their bid to be considered. These may vary for specific procurements but are likely to include some or all the preconditions summarised in Table 25.

⁴ Strategic Procurement Plan for Auckland District Health Board HB Grafton Hospital and Greenlane Hospital Infrastructure Services Upgrade: Paul Perniskie, Procurement Advisor, 01.09.2017

⁵ Government Procurement Rules 1 October 2019 Ministry of Business, Innovation and Employment. <https://www.procurement.govt.nz/assets/procurement-property/documents/government-procurement-rules.pdf>

Table 25: Potential Preconditions

s 9(2)(b)(ii)

Table 25: Potential Preconditions

The table content is redacted with a large diagonal watermark reading "Not Released".

Bids that meet all the preconditions ('qualifying bids') will be evaluated using agreed and documented evaluation criteria and weightings.

Evaluation Team

FIRP has multiple teams that evaluate and provide recommendations for preferred suppliers. These depend on which workstream is undertaking a procurement activity, as each workstream includes a technical specialist. FIRP has a single procurement team that sits across all activities to ensure some commonality. Table 26 provides overview of team roles and when they are used.

Table 26: Evaluation Team Roles

Role	When used	Organisation
Senior Responsible Officer	Large, complex, or high-risk procurements.	Health NZ IIG
Programme Director	Large, complex, or high-risk procurements.	Health NZ IIG
Procurement Chair	All procurements.	Health NZ IIG
Commercial Manager	All procurements.	FIRP
Workstream/Project Manager	All procurements.	FIRP
Project Engineer	All procurements.	Health NZ IIG
Quantity Surveyor	All procurements.	FIRP
Subject Matter Experts	Complex procurements.	Independent

Role	When used	Organisation
Probity Auditor	Large, complex, or high-risk procurements.	Independent

Evaluation Criteria

Evaluation criteria will be used to aid the selection of the optimal procurement model. The evaluation criteria and weighting will vary from project to project, with the complexity and level of risk being the two main variables that change the weighting of the assessment. The criteria will be reviewed and may be amended as part of detailed procurement planning but are expected to include the criteria described in Table 27.

Table 27: Evaluation Criteria

s 9(2)(b)(ii)

The price evaluation criterion varies depending on the extent to which the project poses a risk to clinical services. Generally, the price evaluation criterion does not go lower than 20 per cent and, for simple procurements, could be as high as 100 per cent. For the most complex and high-risk projects where quality is the most important factor, the evaluation of the procurement will be done independent of the price, which will not be considered as part of the overall ranking of the respondents (Brooks' Law). The evaluation team will use a consistent rating scale to evaluate suppliers' bids, detailed in the supporting Procurement Plan

Procurement Delivery Model

There will be more than one delivery model for the Tranche workstreams, as each workstream has different levels of complexity and risk that will factor into the agreed delivery models. The following delivery models are expected to be utilised as follows:

- **ASW.30 High Risk and Highly Critical Assets:** Early Contractor Involvement for bundled assets that are similar and Construct Only arrangements for individual asset replacement activities.
- **ASW.31 Sitewide Electrical Resilience:** Construct Only arrangements with design being undertaken by separate consultants.

- **ASW.32 Alternative Heating:** Early Contractor Involvement or Construct Only arrangements will likely be utilised for this workstream.
- **ASW.33 Technology Upgrades:** Construct Only arrangements, with the design being undertaken by separate consultants.
- **ASW.35 Asbestos Removal:** Construct Only arrangements, with the design being undertaken by separate consultants.

5.5 Commercial Arrangements

Contract Provisions and Key Contractual Issues

One of the core functions of the Health NZ IIG is to develop standardised forms of contract nationally for all projects undertaken for Health NZ. Established forms of contract that are currently used in FIRP will be used until formal instruction is received to change the approach.

FIRP currently employs various forms of standard contracts such as Minor Works, NZS 3910:2023, NZS 3915: 2005, and NZS 3916. It also uses maintenance agreements, trade service agreements, and supply framework agreements, as well as Conditions of Contract for Consultancy Services and Engineering New Zealand Short Form Agreements for consultants. FIRP has a well-developed and balanced set of special conditions and preliminary and general clauses, which represent the Principals Requirements and are read in conjunction with standard Contracts including NZS3910 and NZS3915. As FIRP has entered into dozens of contracts with Contractors over the past four years, the industry is familiar with and will accept them.

The form of contract adopted for each workstream and/or project within Tranche 3 will vary depending on the nature of the work involved and the optimum balance between time, whole of life cost, quality of product, technical design compliance, functionality and performance, and risks.

Contracts will be based on a standard set of clauses, amended to suit the specific nature of the work and to minimise disruption to hospital operations. This may require, for example, some work to be completed out of normal business hours, the availability of standby equipment (such as generators or chillers in case of issues during installation, to minimise any down time for hospital service), or special traffic management arrangements to be put in place before works commence. The overarching approach for FIRP is as follows:

- Contract durations will vary, depending on the nature of the activity being undertaken. Once completed, contracts will typically have a Defects Notification Period of 12 months and a warranty period. For critical works, the Defects Notification Period may be extended to 24 months, with enhanced maintenance and aftercare requirements.
- All projects require extensive pre-planning, construction plans, method statements, permits to work, pre-start meetings and health and safety plans, which are outlined in the Principal's Requirements.
- Standardised insurance requirements, Practical Completion, handover requirements, warranties and guarantees durations have been established.
- Contract provisions have been added so that all Contractors are required to adhere to campus specific (ACH/GCC) standard operating policies, procedures, and permit systems.
- Reporting requirements are also specified so that reports across all projects can be compiled and reviewed by senior management. Examples of this are the health and safety induction process, and incident and near miss reporting.

- Other special provisions are included in all contracts regarding codes of conduct on site, patient privacy, insurance and bonding requirements, broader outcomes, intellectual property, and the confidentiality of information.
- Special payment provisions are included so that invoices can be processed at the end of each month and paid by the 20th of the month following. The payment of invoices has a pre-qualification whereby all health and safety documentation must be submitted as part of progress claims.
- Provisions have been made on bonding key personnel to ensure that the resources promised during the tender process are on the project.

Potential for Risk Sharing

The Construction Sector Accord is providing new ideas to improve project outcomes and calls for fairer contracts, more early contractor involvement, increased collaboration and teamwork, less risk transfer to the contractor, and improved profit margins for the industry.

How the risk is shared between the Principal, Consultant, and Contractor will vary from project to project and will be assessed on a case-by-case basis. Table 28 provides an indicative risk allocation approach for the construction phase of a large project, as an example of what this could look like.

Table 28: Risk Allocation - Sample
s 9(2)(b)(ii)

Potential Payment Mechanisms

Payment will be made through a series of progress payments in alignment with the timeframes outlined in the Constructions Contracts Act. Progress payments will provide for a percentage of the amount certified as due to the Contractor to be deducted from the amount due and kept by the client. The purpose of the retention is to ensure that the Contractor properly completes the activities needed from them under the terms of the Contract. The Contract will likely also include provision for off-site payment of materials where payment is made for materials not yet installed. FIRP has a Quantity Surveyor to value progress payment claims.

Procurement stakeholders

The key stakeholders involved in the procurement process are noted in Table 29.

Table 29: Stakeholders Involved in Procurement Process

Role	Description	Stakeholder
Responsible	The person or people responsible for undertaking the procurement.	IIG FIRP Procurement Manager
Accountable	The person who has the authority to make decisions and is accountable for the outcomes.	Programme Director for Tranche 3
Supportive	The person/people that do the real work.	Workstream Managers
Consulted	The person/people who must be consulted to add value or get 'buy-in'.	FIRP PMO team

Indicative procurement timeline

The procurement milestones will depend on the form of contract selected for each workstream/project within Tranche 3. Each project will go through a series of phase gates to confirm scope and approval to progress. An example of the consultant and contractor indicative procurement dates for the Tranche 3 works is provided in Table 30.

Table 30: Tranche 3 Key Procurement Dates – Indicative for ASW.32 LabPlus Construction Works

Procurement Milestone	Indicative Date
Pre-Procurement	
Procurement Plan approved	January 2026
Advance notice published on GETS	January 2026
Tender	
Tender advertised on GETS	February 2026
Tender closing date	March 2026
Evaluation	
Recommendation accepted/denied	March 2026
Post-Evaluation	
Contract award	April 2026
Contract start date	April 2026

Due Diligence

Depending on the complexity and risk of the projects within the workstreams, additional measures may be enacted to ensure that quality outcomes are achieved from the procurement. These include (but are not limited to):

- Engaging with other districts for feedback on respondents and any lessons learnt.
- Seeking advice from previous clients on respondent performance.
- Undertaking site visits to proposed storage yards where critical equipment may be located during the works.
- Undertaking financial checks to confirm the liquidity of respondents.
- Requesting or researching the history of any arbitrations within the past five years by respondents.

5.6 Infrastructure Commission Contribution

The Infrastructure Commission has previously received briefings on the FIRP.

6. Financial Case

6.1 Overall Financial Summary

The expected WOLC of the revised Tranche 3 scope is s 9(2)(b)(ii) over 20 years. This is partly due to approx. \$11.451 million of energy cost savings over the life of the project. These help to offset the initial capital costs of s 9(2)(b)(ii).

The recommended option is only affordable if further funding is provided by Health NZ. The overall affordability is summarised in Table 31.

Table 31: Summary of the Overall Affordability of Tranche 3

Item	Value
Capital costs (\$000) – excluding seed funding	s 9(2)(b)(ii)
WOLC (\$000)	
Assessment period (years)	
First full year incremental operational cost – excl. capital charge; incl. depreciation (\$000)	
Depreciation charge (\$000)	
External revenue (\$000)	-

6.2 Key Financial Changes

Impact on Tranche 3 Cost

The revised scope of Tranche 3 has evolved from the approach outlined in the Programme Business Case, in response to the changing environment and priorities. s 9(2)(b)(ii), s 9(2)(f)(iv)

Impact on Programme Costs

s 9(2)(b)(ii), s 9(2)(f)(iv)

6.3 Key Assumptions

The Financial Case outlines cost, revenue, and funding assumptions and estimates based on the assumptions summarised in Table 33.

Table 33: Financial Case Assumptions

Assumption	Value (\$000)	Source/Commentary
Real discount rate	2%	
Escalation	4%	Average.
Wage growth	-	Not applicable.
Demographic increase	-	Not applicable.
Appraisal period	-	Not applicable.
GST and tax	15%	
Capital charge	-	Assumed funded for new investments, and therefore excluded from financial calculations.
Depreciation – physical infrastructure	49,084	Building fitout and building services.
Depreciation – clinical equipment	-	Not applicable.
Depreciation – digital investment	-	Not applicable.
Total employed workforce	-	Not applicable.
Total outsourced workforce	-	Not applicable.
Outsourced services	-	Not applicable.
Clinical supplies	-	Not applicable.
Non-clinical supplies	-	Not applicable.
Repairs and maintenance (R&M)	s 9(2)(b)(ii)	
Utility Savings	(11,451)	New chiller electricity use at 50% of existing plant metered electrical load for ASW.30 High Risk and Highly Critical Assets. In addition, energy savings are achieved by ASW.32 Alternative Heating.
Dispose/Demolition	-	Not applicable.

Capital Costs

The estimated capital cost of Tranche 3 is s 9(2)(b)(ii), as summarised in Table 34 and Table 35. The costs are built up from several sources, including known prices (where supplier quotes have been received), vendor indicative pricing, Health NZ IIG expertise, and external expertise, Rider Levett Bucknall, Beca and Resource Coordination Partnership.

Capital costs (including contingency and escalation) have been estimated in alignment with the IIG Cost Estimating Guideline (July 2023). An independent quantitative risk assessment workshop was held, with the outcome supporting the contingency allowances that have been made within the estimates

Table 34: Summary of Capital Costs (nominal, totals may not sum due to rounding)

Item	\$000, nominal
Construction	s 9(2)(b)(ii), s 9(2)(f)(iv)
Construction Contingency	
Fees	
Technical and Internal Resource	

Item	\$000, nominal
Programme Contingency	s 9(2)(b)(ii), s 9(2)(f)(iv)
Escalation	
Total	

Table 35: Summary of Capital Costs (by workstream)

Item (\$000, nominal)	ASW.30 (assets)	ASW.31 (elec)	ASW.32 (heating)	ASW. 33 (tech)	ASW. 35 (asbes)	PMO	Total
Construction	s 9(2)(b)(ii), s 9(2)(f)(iv)						
Construction Contingency							
Fees							
Technical and Internal Resource							
Programme Contingency							
Escalation							
Total							

Incremental Operating Costs

The operating costs shown in Table 36 reflect additional incremental operating costs (relative to business as usual) as a result of the investment. It includes net utility savings of approx. \$11.451 million which are largely due to the ASW.32 Alternative Heating components included in the investment. These include replacing the steam heating systems of two buildings at ACH with electric heat pump systems. As well as achieving emissions reductions, this materially reduces natural gas and carbon charges. Even allowing for the additional electricity costs the net impact remains positive. The replacement of air-conditioning chiller plant at GCC with more modern plant with significantly improved performance, also contributes to the utility savings.

s 9(2)(b)(ii)	

Table 36: Summary of Incremental Operating Costs (nominal, totals may not sum due to rounding)

Item	\$000, nominal
Total employed workforce	-
Total outsourced workforce	-
Outsourced services	-
Clinical supplies	-
Non-clinical supplies	-
Repairs and maintenance	s 9(2)(b)(ii)
Utility Savings	
Dispose/demolition	
Total (excluding depreciation, interest)	
Interest (this is not a capital charge)	
Depreciation	
Total (including depreciation, interest)	

Cashflow

Tranche 3 spend has been projected based on resourcing as well as the procuring of assets. Due to the timing of commencement and completion of the workstreams, some elements of Tranche 1 and 2 investment are ongoing, and cashflow for these projects will overlap with the cashflow for the new workstreams commencing as part of Tranche 3. The overlay of cashflow for the three tranches is shown in Table 37.

Table 37: Tranche 1, 2, and 3 Cash Flow

FIRP Tranche	\$000, nominal					
	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	Total
Tranche 1	s 9(2)(b)(ii)					
Tranche 2						
Tranche 3						
Total						

The Tranche 3 spend assumes a commencement date of April 2025. If there is any delay in funding approval, this will impact on the cashflow across years. A material delay in approval will impact both the timing of spend within and between years, and on the overall Tranche cost (which will increase based on the expected escalation costs). Based on current estimates, the anticipated cash flows for Tranche 3 are set out in Table 38 and Table 39.

Table 38: Annual Capital Funding Requirements (nominal, totals may not sum due to rounding)

Item	\$000, nominal					
	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	Total
Capital Cost	s 9(2)(b)(ii)					
Construction						
Construction Contingency						
Fees						
Technical and Internal Resource						
Programme Contingency						
Escalation						
Subtotal						

Table 39: Annual Capital Funding Requirements (by workstream)

Item	\$000, nominal					
	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	Total
ASW.30 High Risk & Highly Critical Assets	s 9(2)(b)(ii)					
ASW.31 Sitewide Electrical Resilience						
ASW.32 Alternative Heating						
ASW.33 Technology Upgrades						
ASW.35 Asbestos Removal						
PMO						
Total						

Table 40: Annual Incremental Operating Cost Requirements (nominal, totals may not sum due to rounding)

[illegible]

The Whole of Life Costs are summarised in Table 41.

Table 41: Whole of Life Costs (real, totals may not sum due to rounding)

[illegible]

6.4 Funding Sources

It is proposed that the additional funding required be sought as outlined in Table 42.

Table 42: Summary of Proposed Funding Sources

Item	Amount (\$'000) by year										5 Year	5 Year	Total
	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	FY 31/32	FY 32/33	FY 33/34	FY 34/35	FY 36/40	FY 41/45	
Capital Funding Required													
Depreciation	s 9(2)(b)(ii)												
HCE (capex)													
Donation													
Alternative finance													
Other (specify)													
Total capital funding													
Operating funding required													
Health New Zealand	s 9(2)(b)(ii)												
HCE (capex)													
Donation													
Alternative finance													
Other (specify)													
Total operating funding													

7. Management Case

7.1 Project Governance and Management

Programme Management Approach

Tranche 3 will continue to implement the project management methodology that has been used to successfully deliver Tranche 1 and 2. This approach has been documented in full in the FIRP Programme Execution Plan (PEP).

Tranche 3 is a portfolio of projects that are packaged into workstreams. These will be delivered following the Project Lifecycle approach as shown in Figure 7.

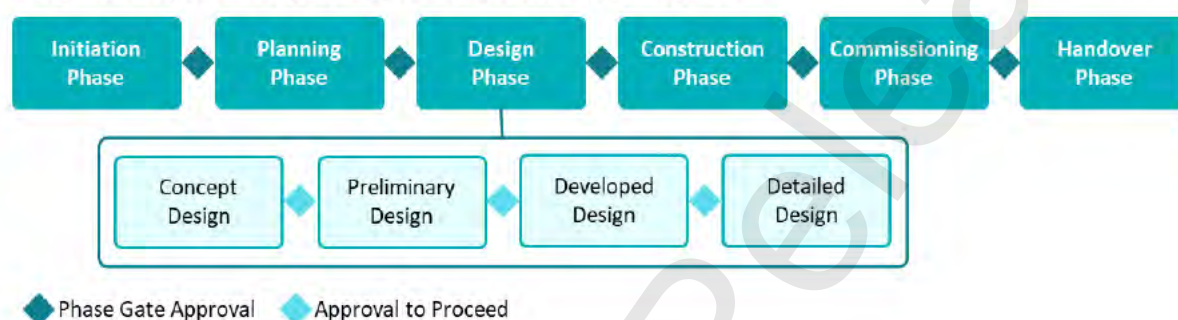


Figure 7: Project Lifecycle

Not all projects will require the same amount of administrative management or governance oversight. To ensure that resources are focused on the higher risk projects, the Project Assessment Tool (PAT) will be utilised in the Initiation Phase of the project lifecycle, to rate the planned project. The PAT makes assessment based on:

- Operational and clinical impacts.
- Programme dependencies and risks.
- Complexity of delivery.
- Cost.
- Resource requirements.

Projects will be rated between one and four (from least to most oversight), with the level of oversight for the delivery of these projects broadly summarised in Table 43.

Table 43: Tranche 3 Oversight Requirements

Oversight	PAT 1	PAT 2	PAT 3	PAT 4
Management	Light	Medium	Medium	High
Assurance	Light	Light	High	High
Reporting	Light	Light	High	High
Benefits Management	Light	Medium	Medium	High
Financial Management	Light	Medium	High	High
Stakeholder Management	Light	Medium	High	High
Risk Management	Light	Medium	High	High
Resource Management	Light	Medium	High	High
Change Management	Light	Medium	High	High

The PAT score will be revisited during the Design Phase and again before the Construction Phase begins, as the project risk profile will change as more information becomes available and

uncertainty is removed. As projects are completed, lessons learnt are documented and improvements carried forward into new projects.

Governance Arrangements

The governance arrangements described in the Programme, Tranche 1 and Tranche 2 business cases have been revised to reflect the establishment of Health NZ IIG. The governance arrangements also reflect the increased emphasis on meeting the principles of Te Tiriti o Waitangi.

The Programme Team Structure is designed to ensure adequate leadership and a robust management framework. The revised structure for the delivery of Tranche 3 is outlined in Figure 8. This aligns broadly with how works are being delivered in Tranches 1 and 2.

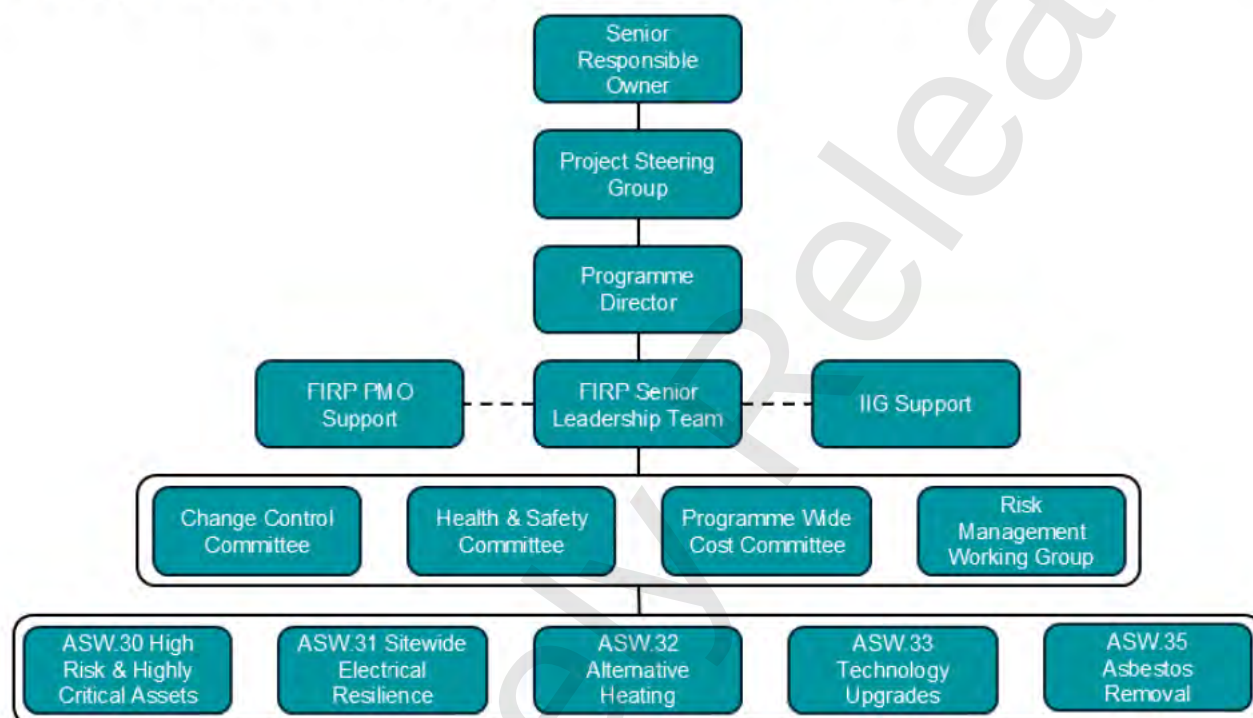


Figure 8: FIRP Governance and Leadership Structure

The Senior Responsible Owner (SRO) is ultimately accountable for the successful delivery of Tranche 3 and chairs the Project Steering Group, which provides strategic direction and governance functions in support of the SRO.

Key Roles and Responsibilities

The key roles and descriptions of responsibilities within FIRP are summarised in Table 44.

Table 44: FIRP Governance Roles and Responsibilities

Role	Responsibility
Senior Responsible Owner	The SRO is the Chair of the FIRP Steering Group, represents FIRP to Health NZ IIG and is the channel for escalation of issues to the Health NZ IIG. The SRO reports directly to the Chief Infrastructure & Investment Officer and provides Programme oversight and Governance Ownership, manages FIRP stakeholders, and ensures alignment with wider regional plans and goals, business case objectives and benefits realisation. The SRO has overall responsibility for ensuring that FIRP delivers to budget and adheres to relevant delegated authorities.
Project Steering Group	The Project Steering Group has strategic governance oversight of FIRP, to provide assurance to the SRO that FIRP remains on track to achieve the desired outcomes and benefits. It is responsible for providing timely recommendations of resolution for escalated matters that are formal authorised by the SRO.
Programme Director	The Programme Director is responsible for establishing appropriate prioritisation and effective programming of the work and project activities (including reviewing and approving of the project programmes), providing strategic overview on the management of the programme to budgets, approving adjustments and interfacing with the finance team as required. The Programme Director controls and reports on expenditure against budgets, manages the FIRP PMP and the governance and delivery process.
FIRP Senior Leadership Team (SLT)	The SLT is led by the Programme Director and is responsible for ensuring the implementation of the various strategies and plans established by the Project Steering Group. The SLT is the final point of escalation within the FIRP PMO Team structure, interfacing with the Project Steering Group and wider Health NZ IIG.
FIRP PMO Support	The FIRP PMO Support Team is comprised of key role specialists that support delivery across all workstreams for FIRP and is comprised of such specialists including a Programme Manager, Risk Manager, Commissioning Manager, Quality Manager, Systems Integration Manager, Disruption Manager, Health and Safety Managers, Communications Manager, Clinical Liaison Manager and accountants/finance support functions.
IIG Support (Project Engineers)	The Project Engineers for the site have specialised site knowledge and understand how to manage infrastructure risk to clinical operations, providing key insights on how 'get things done' in a live hospital environment. They are primarily responsible for providing technical engineering support of existing assets and systems to inform design and disruption planning.

Project Personnel and Resources

Tranche 3 projects will be delivered utilising a workstream and project approach. Workstream Managers will be established and will be supported by the FIRP team and other specialist consultant roles. Each project will have a Workstream/Project "Tight-5" structure, as depicted in

Figure 9. The Tight-5 comprises the core members of each project, who are collectively tasked with ensuring the successful delivery of their respective projects.

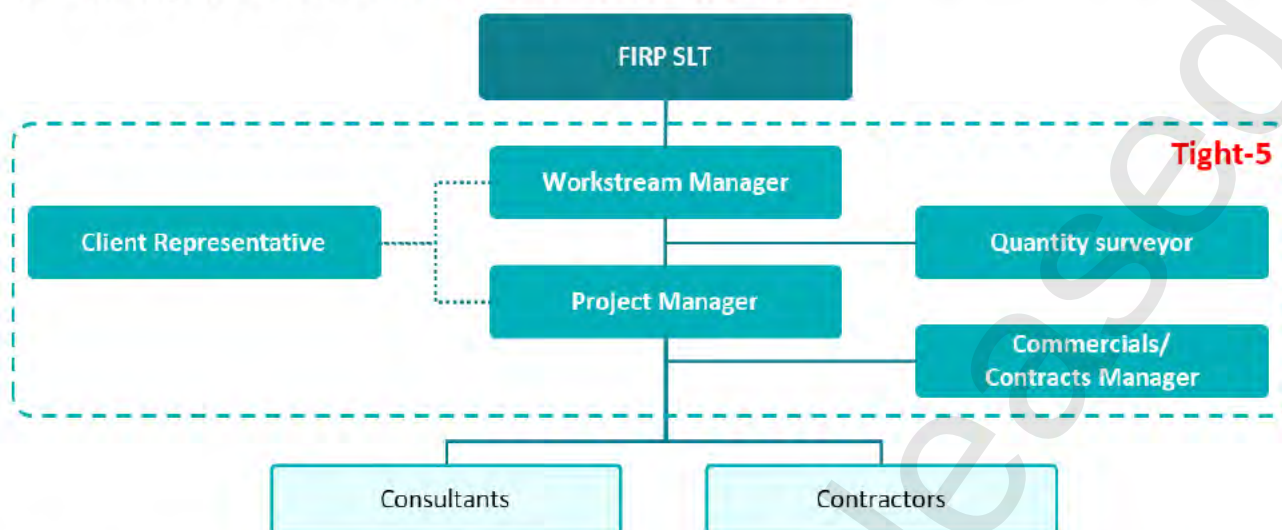


Figure 9: Typical Workstream Delivery Structure

The key responsibilities of the members of the Project Tight-5 are summarised in Table 45.

Table 45: Delivery Roles and Responsibilities

Role	Responsibility
Workstream Managers	Workstream Managers are accountable for their Workstreams and as such, are the single pathway for the issuing of instructions relating to workstreams. They work directly alongside Client Representatives from the Health NZ IIG Engineering Team (who have technical expertise). They are responsible for: • The management of resources within their workstream. • Ensuring project compliance and alignment with all policies and procedures established by the FIRP SLT. • Control of budget, scope and programme agreed for the delivery of the workstream as a whole. • Acting as the point of the escalation of issues within the workstream, addressing matters within their authority, while further escalating issues (with recommendations) that they do not have authority to make decisions on. • Continually reviewing progress with their Project Managers, to ensure that delivery is progressing as planned.
Project Managers	Project Managers are accountable for their Projects and are the single pathway for the issuing of instructions relating to their projects. They are responsible for: • The management of Consultants and Contractors to deliver the agreed deliverables. • Coordination with key stakeholders to ensure that works delivered onsite are notified early, to foster a no-surprises environment. • Control of budget, scope, and programme agreed for the delivery of their project works. • Management of the Project Lifecycle process to ensure that all agreed upon steps have been taken and are documented.

Role	Responsibility
	Coordination with the Client Representative, to ensure that technical risks have been addressed in the management of planned events onsite.
Client Representatives	Client Representatives serve a dual role as they (1) have specialised site knowledge, know how to 'get things done' in a live hospital environment, and can provide insight into site issues and constraints that are not apparent to Consultants and Contractors who do not work regularly at ACH or GCC, and (2) are principally responsible for establishing project briefs, the sign-off of each design phase, and the site activities during construction and maintenance. The Client Representatives are responsible for: - Providing technical advice on site infrastructure, to inform project planning and delivery. - The establishment of technical project briefs to inform the procurement process when going to market. - Sign-off on design phases (as part of the Project Lifecycle process). - Providing technical advice for management mitigation planning when undertaking critical asset works e.g., electrical cut over works. - Aligning with AusHFG – Section D: Providing specialist infection prevention and control advice and forward planning for each stage /department affected by the project.
Quantity Surveyor	The QS helps to estimate costs, material quantities and workstream/project timelines. A key part of their role is liaison with the other team members, to help the project/workstream to stay on track. The QS is responsible for: - Providing tender estimates, as part of the procurement process. - Providing cost management advice on market forces, shifts in escalation, and other matters that may lead to changes in cost. - Assessing progress claims by Contractors for the recommendation of payment. - Assessing variations by Contractors and providing advice on whether these are fair and reasonable. - Preparing monthly cost reports and cash flow for projects.
Commercials/ Contracts Manager	The Commercials/Contracts Manager is responsible for: - Ensuring compliance of contract collateral, in line with the relevant policies and procedures. - Establishing and managing sitewide insurances. - Providing strategic and direct counsel for the resolution of contractual disagreements. - As part of the procurement process, preparing contracts for tender and reviewing the relevant contract collateral prepared by Workstream and Project Managers.

Resourcing Approach

Critical roles within FIRP have already been recruited as part of the delivery of Tranche 1 and 2. Depending on the timing and strategy approved for the delivery of Tranche 3, a significant proportion of the management and support resource will not need to go through a lengthy procurement process. Instead, the focus will be onboarding and training more junior resources on health projects, in the knowledge that that they are being led by experienced personnel who are

familiar with delivering health infrastructure projects at ACH and GCC. The key resources that could be rolled over into Tranche 3 are summarised in Table 46.

Table 46: Resources Proposed to be Carried Forward into Tranche 3

Resource	Purpose
SLT	To implement and manage the overall delivery of FIRP Tranche 3, to meet the required objectives and benefits.
FIRP PMO Team	To continue to support the FIRP SLT, Workstream and Project Managers in achieving the required objectives and benefits.
T1 ASW.11 High Risk/Highly Critical Assets delivery team	To deliver ASW.30 High Risk and Highly Critical Assets
T1 ASW.01 Electrical Resilience delivery team	To deliver ASW.31 Sitewide Electrical Resilience
T1 ASW.02 Building Management Systems delivery team	To deliver ASW.33 Technology Upgrades
T1 ASW.24 Asbestos Remediation	To deliver ASW.35 Asbestos Removal

Additional management resource is required to be procured/recruited for the delivery of ASW.32 Alternative Heating.

If the strategy to bring forward key activities to maintain the management team is not implemented, all management roles will need to be recruited again. Key personnel with experience in delivering healthcare infrastructure on the site are unlikely to return to the project, and the FIRP will have to upskill the industry again, resulting in programme inefficiencies and increased costs.

7.2 Outline Tranche 3 Timeline

The Master Programme maps out the delivery structure and key milestones of FIRP Tranche 3 and is the single source of truth for time management, staging and milestones. This Programme forms part of Consultant and Contractor Agreements (where required) to ensure the completion of works within established timeframes.

Tranche 3 has been split into three stages that cover the known scope of the balance of work for FIRP, with the recommended option focusing on the delivery of Stage 1 of this approach. Figure 10 outlines the key milestones and approximate timings for the three stage of Tranche 3.

A high-level Tranche 3 project plan (Gantt chart) is included in Appendix 1.

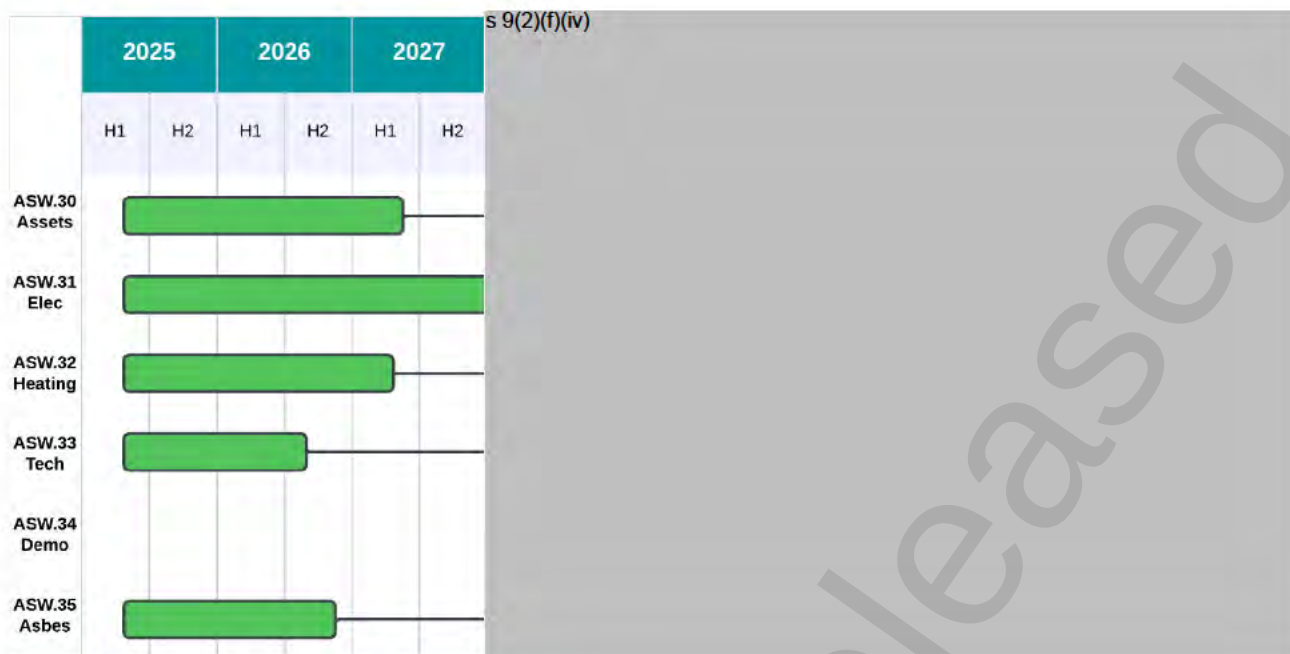


Figure 10: Summary Programme

7.3 Change Management

The impact of Tranche 3 on business processes, staff, and other stakeholders will be assessed on a project-by-project basis. Much of the work, whilst disruptive whilst underway, will not result in significant change to business practices as the impact is primarily on establishment of a safer and more stable environment. Where projects do require business change, this will be planned with the relevant project managers and clinical/non-clinical teams as appropriate, using the event management process that has been implemented successfully in FIRP. This will enable potential issues to be identified and managed, and any negative impacts on patients and the service to be minimised.

There are no additional FTE staff (clinical or otherwise) required for the delivery of Tranche 3.

7.4 Dependency Management

Dependencies between projects and workstreams in Tranche 3 will be managed in the same way that dependencies are currently managed in Tranche 1 and 2. This is via the Event Planning Process, which is outlined in the PEP. All onsite projects are coordinated via an online Disruption Tracker that comprises the following key data points:

- When the works will occur (date, time, and duration).
- Where the works will occur (building, level, and zone/ward).
- What/where the works will impact (power, water, communications, heating, noise, vibration, etc.).

A fortnightly coordination session will be held with parties that have upcoming works, to confirm whether the works can proceed, identify any conflicts, and determine whether there are any opportunities to combine activities. Where clashes are identified or there are too many disruptive activities close together, works may be deferred or combined to minimise potential impacts on clinical service. Members from the business-as-usual Operations Team attend these coordination sessions, so that they can align with activities that they may be undertaking on site.

Within Tranche 3 there are limited dependencies between programmes of work that need to be managed, as the interconnected relationships have been addressed by the separation of the works through Tranche 4 and Tranche 5. Dependencies between workstreams are summarised in Table 13.

7.5 Lessons Learnt

During the delivery of Tranche 1 and 2, lessons learnt have been identified, implemented, and captured in the Lessons Learnt Register. Lessons from earlier tranches and the management approach for Tranche 3 are summarised in Appendix 1. Lessons learnt include the need for dedicated project management, adequate resourcing, and specialist contractors, the challenges of accurate cost estimation, the importance of risk allocation and management, the need to manage for quality outcomes, and the necessity of agreed delegations. Tranche 3 will continue to consider event impact planning, ensure effective communication with impacted parties, undertake site management at a campus level, perform effective contract management, and promote Health and Safety, a positive culture, and the wellbeing of staff and contractors. The FIRP team has specialised, dedicated, and knowledgeable staff, and technology is utilised to achieve better site outcomes.

7.6 Benefits Realisation Management

The project benefits are described in Section 3.8 and Appendix 1. Benefit realisation will be managed on a project-by-project basis, within the overarching context of the programme benefits, and will align with the process documented in the FIRP Benefits Realisation Plan (already in place for Tranche 1 and Tranche 2).

The SRO has overall accountability for benefits realisation. The SLT is responsible for reporting on benefits realisation to the Steering Group. The Benefits Realisation Plan (including the Benefits Register) will record and manage identified benefits, KPIs, and measures for the duration of the tranche and until post implementation review is complete.

7.7 Risk Management Strategy

Effective Risk Management at FIRP has been achieved through the implementation of the FIRP Risk Management Policy and the FIRP Risk Management Framework, which is contained within the PEP. The Framework provides the basis for a coordinated set of activities to respond to programme and project risks and is aligned to the principles of Health NZ's Management Framework and Policy, and ISO 31000:2018 principles.

Responsibility for developing and maintaining risk registers for each individual project sits with the Project Managers. Workstream Managers are responsible for managing the overall workstream risks, reporting on change, and escalation of risk. The FIRP Risk Manager is responsible for the management of the Programme Risk Register, on behalf of the Programme Director.

Risk reviews will be undertaken monthly for workstreams and projects, and quarterly for Programme Level risks. Risks will be updated in the Register, reported to the Risk Manager, and discussed at the Risk Management Working Group meeting. The Workstream Manager will manage or mitigate the risk where possible, escalating any residual risk to the Risk Management Working Group. Project risks may be escalated and included in the Workstream and/or Programme Risk Register if they could affect key strategic outcomes.

Where project risks are realised, the resolution or outcomes for managing the risk will be recorded in the Materialised Risk Register, ensuring that the lessons learnt can be shared across all future projects within FIRP.

The key project risks are summarised in are further detailed in Appendix 1.

7.8 Project and Business Assurance

The project will undertake internal Health NZ IIG assurance and will continue to follow the Assurance Plan from the Programme Business Case. Within 90 days of the conclusion of the works, evaluation will be undertaken to confirm the extent to which deliverables have been completed and to reconcile the project budget and timelines to plan. Project Implementation Review will take place as required by Health NZ IIG, to assess the benefits realised and plan for ongoing improvements in performance where applicable.

7.9 Stakeholder Management

The key stakeholders who have an interest in the expected outcomes or can influence the investment proposal have been identified and engagement to date with these stakeholders is summarised in Section 3.5.

The project has engaged directly with the most influential and impacted stakeholders to inform the development of this business case. For moderately influential and impacted stakeholders, the project has engaged through ongoing communications.

The Communications Manager is responsible for ensuring that key stakeholders are engaged proactively. The Communications Manager is responsible for ensuring that key stakeholders are engaged proactively. FIRP will engage with business-as-usual operations on a regular basis to ensure that activities remain open and transparent. The FIRP Communication Strategy (April 2023) includes is the overarching communications document for FIRP. This will be updated as required, for Tranche 3.

Appendix 1: Documents available on request

The following items/documents are available on request that were used/created/referenced to information the preparation of the Tranche 3 Business Case.

#	Item	Description
1	Assessment of ageing asset condition	Excel data export showing the assets aged and the remediation brief for work to be undertaken.
2	A06 and Chimney deconstruction methodology	Methodology prepared by McConnell Dowell on how to safely deconstruct the existing Central Plant building and the chimney.
3	ACH Boiler Replacement Feasibility Study	Report outlaying options for replacing the steam boilers.
4	ACH Energy Transition Accelerator report	Sitewide report for Auckland City Hospital that explores options for alternative heating solutions.
5	ACH Heating Hot Water (HHW) and Domestic Hot Water (DHW) Systems Feasibility Study.	Report outlaying options for transitioning to renewable systems.
6	ASW.30 Estimates	High risk and highly critical asset cost estimates for the 5-year case and the Stage 1 (Tranche 3), 2 (Tranche 4) and 3 (Tranche 5) approach.
7	ASW.30 Technical Brief	High risk and highly critical asset project brief (5-year case).
8	ASW.31 Estimates	Sitewide electrical resilience cost estimates for the 5-year case and the Stage 1 (Tranche 3), 2 (Tranche 4) and 3 (Tranche 5) approach.
9	ASW.31 Technical Brief	Sitewide electrical resilience project brief (5-year case).
10	ASW.32 Estimates	Alternative Heating cost estimates for the 5-year case and the Stage 1 (Tranche 3), 2 (Tranche 4) and 3 (Tranche 5) approach.
11	ASW.32 Technical Brief	Alternative Heating project brief (5-year case).
12	ASW.33 Estimates	Technology upgrades cost estimates for the 5-year case and the Stage 1 (Tranche 3), 2 (Tranche 4) and 3 (Tranche 5) approach.
13	ASW.33 Technical Brief	Technology upgrades project brief (5-year case).
14	ASW.34 Estimates	Sitewide remediation cost estimates for the 5-year case and the Stage 1 (Tranche 3), 2 (Tranche 4) and 3 (Tranche 5) approach.
15	ASW.34 Technical Brief	Sitewide remediation project brief (5-year case).
16	ASW.35 Estimates	Asbestos removal cost estimates for the 5-year case and the Stage 1 (Tranche 3), 2 (Tranche 4) and 3 (Tranche 5) approach.
17	ASW.35 Technical Brief	Asbestos removal project brief (5-year case).
18	Development of the High Voltage master plan for ACH.	High voltage master plan for Auckland City Hospital.
19	FIRP Communication Strategy	Communication protocols in use on FIRP.
20	FIRP Risk Management Framework	Risk management protocols in use on FIRP.

#	Item	Description
21	FIRP Tranche 1 & 2 Benefits Realisation Plan	Benefits plan summary covering Tranche 1 and 2.
22	FIRP Tranche 1 & 2 Benefits Summary	Summary of benefits realised to date for FIRP.
23	FIRP Tranche 1 & 2 Lessons Learnt Summary	Summary of key lessons learnt on Tranche 1 and 2 to date.
24	FIRP Tranche 3 Full Scope Summary	Summary of scope for the 5-year case.
25	Key Risks & Mitigations	Programme level risk register.
26	Outline Programme (Option 2)	Summary programme for the 5-year option.
27	Outline Programme (Option 3)	Summary programme for the staged option.
28	Programme Business Case	Approved FIRP Programme Business Case.
29	Programme Execution Plan	FIRP Programme Execution Plan (v3).
30	Strategic Assessment	Approved FIRP Strategic Case.
31	Utility Cost Saving Analysis	Breakdown of estimates savings due to the works.
32	Financial Model	Basis for the Financial Case.
33	Quantitative Risk Assessment	Independent assessment of the project risk and contingency.
34	IIG Cost Estimating Manual	IIG guidance document for estimation.

Appendix 2: Glossary

Item	Description
ACH	Auckland City Hospital
ASW	Auckland Site Wide
AusHFG	Australasian Health Facility Guidelines
BMS	Building Management System
CSF	Critical Success Factor
CSSD	Central Sterile Supply Department
ECI	Early Contractor Involvement
FIRP	Facilities Infrastructure Remediation Programme
FTE	Full Time Equivalent
GCC	Greenlane Clinical Centre
GETS	Government Electronic Tender Service
HV	High Voltage
HVAC	Heating, Ventilation and Air Conditioning
IIG	Infrastructure Investment Group
ISO	International Organisation of Standardisation
KPI	Key Performance Indicator
NZ	New Zealand
NZS	New Zealand Standards
ORR	Operational Risk Rating
PAT	Project Assessment Tool
PMO	Programme Management Office (Technical and Internal Resource)
R&M	Repairs and Maintenance
SLT	Senior Leadership Team
SRO	Senior Responsible Owner