The Baird Family Hospital

and

The ANCHOR Centre

Aberdeen

Initial Agreement

Board/CIG Version
1 June 2015
Up-dated 15 October 2015

Contents

1.0 Executive Summary

1.1 Introduction

The Scottish Government have provided approval for NHS Grampian to commence business planning for the development of a new hospital which will provide maternity, gynaecology, breast screening and breast surgery services. It will also include a neonatal unit, centre for reproductive medicine, an operating theatre suite, community maternity unit (CMU) and research and teaching facilities. The new hospital will be called The Baird Family Hospital in recognition of the contribution made to health by the Baird family over many years in Aberdeen and elsewhere in Scotland. Over time, it is expected that the new hospital will be referred to simply as "The Baird" by the public, patients and staff.

The approval to proceed with business planning also includes for the development of a new centre which will provide out-patient and day-patient investigation and treatment services for patients with cancer and for patients with blood and bone marrow disorders, including non-cancer conditions as well as cancers. The centre will also include pharmacy, research and teaching facilities. This new facility will be called The ANCHOR Centre. ANCHOR (Aberdeen and North Centre for Haematology, Oncology and Radiotherapy) is a well-respected and highly regarded 'brand', established in the North for almost two decades.

Both of the new facilities will be developed on the Foresterhill Health Campus in Aberdeen.

In addition, Foresterhill Health Centre (FHC) will be relocated to an agreed adjacent site on the Foresterhill Health Campus. This project will be pursued as an enabling work to allow development of The Baird Family Hospital on the preferred site.

Approval in principle in this Initial Agreement to the relocation of FHC would result in the FHC project being included in the Lochgilphead and Inverurie (L&I) Bundle Design Build Finance Maintain (DBFM) Project due to be completed towards the end of 2017.

This Initial Agreement is the first phase in the business planning process for the project. Its purpose is to describe the strategic context within which the proposed investment will take place and to establish the position of the project in relation to NHS Grampian's overall organisation and service strategies.

Following approval of the Initial Agreement, the two subsequent phases of the business planning process will involve the development and approval of Outline and Full Business Cases.

The Initial Agreement aims to:

- Establish the case for change and strategic fit with NHS Grampian's corporate/service strategies and with national policies and priorities
- Clearly identify the desired outcomes from the proposed project

- Provide stakeholders with an early indication of the preferred way forward for the project.

1.2 Content of the Initial Agreement

The content of the Initial Agreement follows the guidance provided in the Scottish Capital Investment Manual (SCIM) and the "*Checklist for Preparing Initial Agreement Documents*" issued by the Scottish Government Directorate for Finance, eHealth and Pharmaceuticals - Capital and Facilities Division in 31 March 2014.

This document follows the approved format of the well-established "Five-Case Model" for business cases and explores the project from five perspectives:

- **The Strategic Case** explores the case for change – whether the proposed investment is necessary and whether it fits with the overall local and national strategy

- **The Economic Case** asks whether the solution being offered represents best value for money – it requires alternative solution options to be considered and evaluated

- **The Commercial Case** tests the likely attractiveness of the proposal to developers – whether it is likely that a commercially beneficial deal can be struck

- **The Financial Case** asks whether the financial implication of the proposed investment is affordable

- **The Management Case** highlights implementation issues and demonstrates that the Health Board and its partners in this project are capable of delivering the proposed solution.

The SCIM guidance requires that, for an Initial Agreement, the primary focus should be on the Strategic and Economic Cases with a brief outline reference to Commercial, Financial and Management Cases and this is reflected in the presentation of this document.

1.3 The Strategic Case

This Initial Agreement clearly demonstrates that there is a strong strategic case for investment in the proposed new Baird Family Hospital and The ANCHOR Centre. The proposals are fully in line with national and local policies and the strategic direction of NHS Grampian and its partners in the delivery of health and social care.

The requirement to replace the existing Aberdeen Maternity Hospital (AMH) was included in the Maternity Strategy approved by the NHS Grampian Board in 2010. There are significant problems with the existing Maternity Hospital in terms of its physical condition, compliance with statutory standards, space utilisation and functional suitability. The design and functional suitability of the existing building are no longer suitable the provision of modern health services.

The ANCHOR Centre has been planned for some time and has been developing on a staged basis – the new Radiotherapy Centre at Foresterhill completed in 2013 being the first stage of the development of this centre, along with new oncology and haematology in-patient ward accommodation in the Matthew Hay Building opened in 2012. The proposed new building will replace existing facilities which are in poor condition and have no potential for growth.

A key aim of NHS Grampian is to maintain people in their own homes and communities as far as possible. If treatment and care in hospital is required it should be for the minimum time necessary in facilities that support effective and efficient clinical care. Both of the proposed new facilities will be planned on this basis i.e. within the context of the whole pathway of care for patients.

The development of The Baird Family Hospital and The ANCHOR Centre will be part of the implementation of the Foresterhill Development Framework which was approved by the NHS Grampian Board and the Scottish Government in 2008. The Development Framework has already resulted in significant investment in the campus i.e. in new buildings such as the Matthew Hay Building, Aberdeen Dental School and Hospital, Suttie Centre and the new Radiotherapy Centre. It has also led to significant investment in existing buildings including the out-patient facilities in the Rotunda, new operating theatres and the £30m+ investment in the in-patient areas in the Phase 2 and East End buildings.

1.4 The Economic Case

The SCIM guidance requires the Economic Case in the Initial Agreement to set out how the Project Group has selected the preferred way forward and to identify a shortlist of options to be taken forward to the next stages of planning (the Outline Business Case). This SCIM process for the selection of options involves generating a long list of service options using the Options Framework approach whereby service options are systematically worked through in terms of scope, service solution, service delivery, implementation and funding (the five categories of choice). The long list of options is then reduced to a shortlist through a rational assessment process which involves assessing options against a set of investment objectives and critical success factors which have previously been developed for the project. This approach leads to the construction of a reference project from the preferred choice in each category of choice. The reference project is essentially the preferred way forward given that it is predicated upon the best assessment at this stage of the possible scope, service solution, service delivery, implementation and funding choices.

The project described in this Initial Agreement has a number of unusual aspects which have necessitated adapting the SCIM process for development and appraisal of options. This adapted process maintains the SCIM overall objective of ensuring that a sound, robust analysis is undertaken to support effective decision-making and that ultimately:

- resources are applied effectively to support service delivery
- the impact of the investment decisions are maximised in terms of benefits
- the project provides value for money

- the process facilitates good project management and project evaluation.

The aspects of this project that required the SCIM options development and appraisal process to be adapted are:

- The investment in infrastructure proposed in this Initial Agreement is a continuation of the implementation of NHS Grampian's Healthfit 2020 vision for continuous change and modernisation of the health system in Grampian. A key part of this vision is the role of the Foresterhill Health Campus in the introduction of new models of care which aim to deliver care as close to home as possible, placing less reliance on acute in-patient beds and with a clear focus on responding to individuals' needs. This requires significant redesign and re-organisation of clinical services on the site if current good practice is to be applied consistently and comprehensively. Significant investment in infrastructure has already been made in recent years to support this vision and this inevitably limits the options for this project to those which are compatible with the overall vision of the future use of the site and which build on the recent investment already completed.

- A number of the services included within the scope of this project are tertiary and specialist services provided on a regional basis and NHS Grampian's key role in providing these services for the North of Scotland needs to be maintained. Therefore, it would not be appropriate or productive in preparing this Initial Agreement to examine options for major changes in the way that these services are structured and organised on a national or regional basis. As such, there are limited service options and choices for the provision of the services within the scope of this project.

- Many of the services within the scope of this project have critical links to other clinical services and research facilities on the Foresterhill Health Campus. Similarly, they make extensive use of the major infrastructure, skills and technology capacity that is inherent on this major acute site. Again, it was not considered to be appropriate or technically feasible to examine options for re-locating these services from the Foresterhill Health Campus.

Whilst the above constraints limit the availability of service redesign options, site location options for the major infrastructure and building works for this project are critical at this early stage in the development of the project. The Foresterhill Health Campus is already relatively well developed and this project needs to be carefully considered in terms of its impact on both the existing infrastructure and buildings as well as the significant developments planned for the future, particularly the major redevelopment involved in the planned replacement of in-patient accommodation (Phase 2) in 2025+. For this reason, the economic appraisal section of this Initial Agreement has a major focus on the development and appraisal of site location options for the substantial new buildings planned in this project. This was necessary to help and enable critical decisions regarding the relocation/replacement of the existing facilities such as Foresterhill Health Centre to be made at this early stage, thereby facilitating the achievement of both value for money through its inclusion in a "hub procurement bundle" and the delivery of The Baird Family Hospital and The ANCHOR Centre project by the required timescale of 2020.

The Preferred Way Forward

The preferred way forward that emerged from the economic appraisal is summarised as follows:

- The development of The Baird Family Hospital which will replace the existing Aberdeen Maternity Hospital including the Aberdeen Centre for Reproductive Medicine and Neonatal Unit and include a range of other services for women including gynaecology in-patients/daycases/out-patients, breast screening and symptomatic out-patient and in-patient breast services. The Baird Family Hospital will be located towards the west of the Royal Aberdeen Children's Hospital (RACH) on the site currently occupied by the Foresterhill Health Centre and the Breast Screening Centre. This option is consistent with the Foresterhill Development Framework agreed with Aberdeen City Council in 2008. The new facilities will be closely linked to Aberdeen Royal Infirmary and RACH.

- Completion of The ANCHOR Centre at the south of the east end of the Foresterhill Health Campus adjacent to the new Radiotherapy Centre close to the site currently occupied by the Eye Clinic. The first stage, the Radiotherapy Centre, was completed in 2013 and the investment proposed in this IA will fund the second stage to provide out-patient, day-patient and academic/research facilities, together with a range of support facilities including e.g. aseptic pharmacy services.

- The relocation of the Foresterhill Health Centre to elsewhere on the Foresterhill Health Campus and inclusion of this development in the existing hubCo Lochgilphead and Inverurie (L&I) Bundle Design Build Finance and Maintain (DBFM) Project to be completed towards the end of 2017.

- The relocation of the Eye Clinic to upgraded space in Aberdeen Royal Infirmary. This is consistent with the agreed Foresterhill Development Framework.

- The temporary relocation of the Breast Screening Centre to existing accommodation for three years from the end of 2017 until completion of The Baird Family Hospital in late 2020.

1.5 The Outline Commercial Case

The commercial strategy for the investment in The Baird Family Hospital and The ANCHOR Centre and the commercial strategy for the advance work in relocating the Foresterhill Health Centre to elsewhere on the Foresterhill Health Campus will be taken forward using a combination of the non-profit distributing (NPD) model and the hub model.

Both models were established by the Scottish Futures Trust (SFT) on behalf of the Scottish Government as an alternative to, and have since superseded, traditional style private finance procurement in Scotland.

The Baird Family Hospital and The ANCHOR Centre project will be delivered by the NPD model via a 'Project Company' (a special purpose limited company funded from

a combination of senior and junior debt underpinned by a 25 year service concession contract). The shares in the Project Company are held by the private sector investors with the exception of one “golden share” which is held by the public authority. This “golden share” increases transparency and accountability and underpins the NPD principle of enhanced stakeholder involvement.

The advance work in relocating the Foresterhill Health Centre to elsewhere on the Foresterhill Health Campus will be delivered by its inclusion within an existing joint NHS Grampian and Highland hub initiative bundle project. The revised bundled hub project involving Lochgilphead, Inverurie and Foresterhill will be delivered by a ‘Sub-hubCo’ (a non-recourse vehicle funded from a combination of senior and subordinate debt underpinned by a 25 year service concession contract). The senior debt will be provided by AVIVA Public Private Finance Limited with predetermined arrangement fees agreed with SFT through a framework agreement and the subordinate debt by a combination of private sector (60%), SFT (10%) and participant investment (30%). The participant investment will include an agreed pro-rata contribution based on the projected capital cost of the projects from both participating Boards (NHS Highland and NHS Grampian).

In essence, both the Project Company and the Sub-hubCo are responsible for providing all aspects of their respective design, construction, ongoing facilities management (hard maintenance services and lifecycle replacement of components) and finance throughout the course of the project term, other than a small number of exceptions termed authority maintenance obligations (principally responsibility for making good/replacing wall, floor and ceiling finishes) which will fall respectively to NHS Grampian and NHS Highland.

Soft facilities management services (such as domestic, catering, portering and external grounds maintenance) are excluded from both NPD and Hub Project Agreements with these services being provided by the Boards.

NHS Grampian will pay for the services in the form of an annual service payment (Unitary Charge).

A standard contract form of payment mechanism will be adopted within each Project Agreement with specific amendments to reflect the relative size of the facilities, respective availability standards, core times, gross service units (number of service units applied to each functional area) and a range of services specified in the service requirements.

The Board will pay the annual service payment (Unitary Charge) to both the Project Company (for The Baird Family Hospital and The Anchor Centre) and Sub-hubco (for the Foresterhill Health Centre) on a monthly basis in arrears for the buildings they are contracted with, calculated subject to adjustments for previous over/under payments, deductions for availability failures and performance failures and other amounts due to the private sector providers. Where any payment is in dispute, the party disputing the payment shall pay any sums which are not in dispute.

1.6 The Outline Financial Case

1.6.1 Indicative Capital Costs

The indicative costs for the programme of works for the Preferred Way Forward is shown in the table that follows:

Scheme Element	£m	Source of Funding
New Build The Baird Family Hospital and The ANCHOR Centre	112-116	Scottish Government NPD Pipeline of revenue financed infrastructure projects
Relocation/replacement Foresterhill Health Centre	8-8.5	Scottish Government NPD Pipeline of revenue financed infrastructure projects (delivered as a hub scheme)
Total Capital Funding	**120-124.5**	
Other Enabling Works	4-4.5	NHS Grampian formula capital and revenue benefit from asset disposals
Equipment	4-5	NHS Grampian formula capital allocation
Total Project Capital Funding	**128 -134**	

The construction cost associated with The Baird Family Hospital, The ANCHOR Centre and Foresterhill Health Centre (£120 million to £124.5 million) will be financed through the Scottish Government Non-Profit Distributing (NPD) pipeline of revenue financed infrastructure projects previously announced during 2014.

The related equipping costs, enabling works and investment in sub debt (for Foresterhill Health Centre which will be delivered as a hub project) will be financed from NHS Grampian's formula capital allocation supplemented in part by revenue funding generated from the disposal of surplus assets.

These indicative project costs assume:

- A construction start on site of Q2 2018 for the NPD Project for The Baird Family Hospital and The ANCHOR Centre
- A construction start on site of Q3 2016 for the hubCo project for the re-provision of Foresterhill Health Centre
- Demolition of the current Aberdeen Maternity Hospital

Additionally these costs include:

- The work required to re-locate services that are housed in buildings that are located on the site of the planned new buildings (Eye Clinic and Breast Screening Centre) and thereafter to demolish these buildings. These works are estimated to be £4 - £4.5 million for the Preferred Way Forward and will be funded by NHS Grampian.

- Whilst there should be a significant level of medical equipment transfer to the new buildings, there would also be the requirement for significant investment in new and replacement equipment. For example, it is unlikely that any of the furniture would be suitable for transfer. There is a high level estimate of £4 - £5 million for equipment purchase, an element of which relates to Foresterhill Health Centre, but this cost will be refined over the course of the project, with the final cost unlikely to be known until 2020. This cost will be funded by NHS Grampian.

1.6.2 Indicative Revenue Costs

As is the case with most new build projects which replace existing buildings, it is anticipated that there would be a net increase in property related running costs. This net increase in property related costs is estimated to be £1.6 to £2 million per annum.

At this stage, the broad assumption is that clinical services can be re-provided in the new facilities within existing resources. This Initial Agreement therefore does not include any estimates for changes to the costs of providing the clinical services to patients in the new buildings (medical, nursing, admin staffing and supplies). This is because there is complex service redesign work that requires to be undertaken during the OBC and FBC stages that will determine whether there are any cost implications of the move.

1.6.3 Unitary Charge

The total Unitary Charge (UC) payment will comprise the following components:

- Construction costs (including VAT where applicable)
- Private sector development costs (including staffing, advisory and lenders' advisers' fees)
- Financing interest (which is necessary to fund the project through construction)
- Financing fees
- Running costs for the project's Special Purpose Vehicle (SPV) during construction, including insurance costs and management fees
- SPV running costs during operations, including insurance costs and management fees
- Lifecycle maintenance costs
- Hard facilities maintenance (FM) costs.

The estimated annual Unitary Charge payment over a period of 25 years from construction completion is £12 to £15 million of which approximately £1 million

relates to Foresterhill Health Centre. Under current Scottish Government funding conditions, the element of the annual UC that is required to be funded by Health Board annual revenue budgets relates to hard Facilities Management and half of the lifecycle maintenance of the building. This is estimated to be in the range of 10 to 15% of the annual total (£1.2 to £2.3 million). The Scottish Government provides annual revenue support to the Board for the remaining majority 85-90% (£10.2 to £13.5 million).

1.6.4 Affordability

The majority of the additional capital and revenue funding as outlined above which will be incurred by the Board is currently beyond the period of the Board's 5 year Local Development Plan (LDP), but has been highlighted as a known future cost commitment for the LDP submission in March 2016. The exception to this is the revenue cost that will be incurred directly by the Board during the planning and development stage for the Project Team and associated Professional Advisor support. This is estimated to be circa £9.6 million and has been included in the Board's current 5 year LDP which was approved by the NHS Grampian Board in June 2015.

1.7 The Outline Management Case

A project governance structure has been established for this project using a Programme and Project Management approach (PPM) which will be applied to the project to ensure maximum control, quality and financial benefit. This will ensure that:

- A process and audit control framework is applied to all aspects of the project
- Project risks are being managed effectively
- Learning and good practice from the project can be transferred to other projects in the NHS Grampian and wider NHS Scotland capital programme

The following table provides indicative timescales for completion of key milestones for delivery of the project:

Key Milestones – The Baird Family Hospital and The ANCHOR Centre	Date
Finalise Project Board/Team structure	Oct 2014
Commence detailed clinical output specification	Dec 2014
Commence reference design development	Dec 2014
Initial Agreement Approval	June 2015
Planning in principle	Sept – Dec 2015
Complete reference design	Feb 2016
OBC Approval	April 2016
Issue OJEU notice to prospective bidders	May - June 2016
Select 3 bidders to participate in Competitive Dialogue	Sept 2016
Commence Competitive Dialogue	Oct 2016
Close Competitive Dialogue with bidders	May 2017

Prepare final tenders	June 2017
Evaluate and identify the preferred bidder	Aug 2017
FBC Approval	Dec 2017
Financial Close of contract negotiations	Feb 2018
FBC Addendum submitted	May 2018
Construction enabling works/set up compound	March - May 2018
Start construction Baird Family Hospital and ANCHOR Centre	June 2018
ANCHOR Centre construction complete	April 2020
Commission ANCHOR Centre	May – June 2020
Open ANCHOR Centre	June 2020
Baird Family Hospital construction complete	Dec 2020
Commission the Baird Family Hospital	Jan – April 2021

Key Milestones – Foresterhill Health Centre	**Date**
Issue New Project Request Form	May 2015
Initial Agreement Approval	June 2015
Stage 1 development	June – Sept 2015
OBC Approval	Dec 2015
Stage 2 development	Oct 2015 – March 2016
FBC Approval	April 2016
Financial Close of contract negotiations	June 2016
FBC Addendum submitted	Oct 2016
Start construction Health Centre	July 2016
Health Centre construction complete	Sept 2017
Commission Health Centre	Sept – Oct 2017
Open Health Centre	Nov 2017

These timetables will be subject to refinement over the coming months in dialogue with, SFT, our advisors and potential bidders.

The Strategic Case

2.0 Organisational Overview

NHS Grampian provides all healthcare services for the half-million people who live in Grampian, an area covering 3000 square miles of city, town and village and rural communities. The Health Board also provides specialist tertiary services for the North of Scotland.

The Foresterhill Health Campus covers 56 hectares and has been jointly owned and occupied by the NHS and the University of Aberdeen since the site was acquired in the early 20th century. The Aberdeen Royal Infirmary (East End) hospital was constructed in the 1930s with the addition of Phase 1 in the 1960s and Phase 2 in the 1970s. The campus was originally founded on the vision of Professor Matthew Hay, Medical Officer of Health for Aberdeen City. The University of Aberdeen is one of the oldest universities in the UK and remains at the forefront of teaching and research in medicine, the life sciences and humanities.

The Foresterhill Health Campus provides the focus for a wide range of clinical related activity within NHS Grampian. Foresterhill is the workplace for approximately 7000 staff and the place where over 2000 patients are treated and 1000 people visit every day. The University has around 1000 staff and 1500 students based at Foresterhill and also attracts a wide range of visitors.

3.0 Business Strategy and Aims

The driving force for service change and redesign in Grampian is the Health Plan and its delivery model, the Health Care Framework. The latter is a 2020 vision for the implementation of the Health Plan. Within the Health Plan, five strategic themes underpin the main areas of work which need to be addressed to meet the challenges in the future, arising from changes in population structure, need for services, workforce and technology to improve treatment and care for patients. These are:

- Improving health and reducing health inequalities
- Involving patients, carers, the public, staff and partners
- Delivering safe, effective and timely care in the right place
- Developing the workforce and empowering staff
- Getting the best from available resources.

The NHS Grampian long term strategy recognises the increasing importance of the Foresterhill Health Campus and the intention is to fully utilise it as effectively as possible. The strategy anticipates changes in population structure, workforce, technology and best practice. At its core, it also anticipates services being redesigned to improve treatment and care for patients, together with the projected improvement in maximising value for money and health outcomes.

The investment proposed in this Initial Agreement fits within, supports and promotes a number of existing business strategies and work programmes of which this project is an integral part:

- **Scottish Government Policy:** Health and social care services contribute in many different ways to making Scotland a world leader in these services. The Scottish Government's clear priorities for action and a strategic vision over the next five years are:

    - Care will be increasingly integrated, provided in a joined up way to meet the needs of the whole person

    - The people of Scotland will be increasingly empowered to play a full part in the management of their health

    - Care will be clinically effective and safe, delivered in the most appropriate way, within clear, agreed pathways

    - Health and social care will play a full part in helping the care system as a whole make the best use of scarce public resources.

    The Strategic Case for this Initial Agreement is closely aligned to these Scottish Government priorities for action. It focuses on the introduction of new models of care which aim to deliver care as close to home as possible, placing less reliance on acute in-patient beds and with a clear focus on responding to individuals' needs.

- **Grampian Health Plan:** The Plan sets out the overall strategy and guidance for the development of the health system in Grampian.

- **NHS Grampian Healthfit 2020:** This is the practical vision for the health system in Grampian taking account of the direction of travel set out in the Health Plan. It sets out specifically how many elements of the health system could and should be organised up to 2020 if current good practice was to be applied consistently and comprehensively. The 2020 vision will not remain static but will continue to be developed to aid understanding on what is possible in Grampian as a whole and within individual communities. A key feature of the vision is its consistency with the original Healthfit vision for Grampian developed in 2002 and updated in 2009. It demonstrates that Healthfit has provided the firm foundation for continuous change to improve and modernise the health system in Grampian.

- **NHS Grampian Maternity Strategy 2010-2015:** The strategy identified a direction of travel towards making a bigger, vital contribution to reduce the difference in health between the richest and poorest people. Every step from before conception to loving and nurturing a growing, healthy child playing its part. Maternity services will lead at every stage. Key examples include:

    - supporting healthier lifestyles and better well-being
    - returning to the position where normal births and breastfeeding are the expectation
    - Interventions such as caesarean sections and formula milk only being chosen when necessary.

The strategy was followed by a Strategic Review of Maternity Services in 2012 which identified the need to replace the Aberdeen Maternity Hospital including the development of three separate Community Maternity Units (CMUs), serving communities across the region, with one CMU in Aberdeen. The strategy also outlines the need for the new hospital to be closely and physically linked to specialist services at Aberdeen Royal Infirmary and the Royal Aberdeen Children's Hospital.

- **Scottish Breast Screening Programme Major Service Review 2014**: A review of the Scottish Breast Screening Programme was undertaken in 2011 to ensure that the service provided was of the highest quality and delivered in the most efficient manner. Some of the key recommendations included:

    - The programme should continue to be delivered in a way that puts the needs of women at the heart of planning
    - To realise maximum sustainability and efficiency, co-location should be pursued as a long term goal
    - Available capacity in symptomatic mammography units should be utilised by the Scottish Breast Screening Programme, ensuring the needs of future planning in both services is recognised.

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- **The Scottish Government's document "Better Cancer Care; An Action Plan 2008:** This plan sets the national policy direction against which the NHS Grampian Board, through the Northeast Cancer Steering Group, has developed its local and regional action plans. It highlights national priorities for the delivery of cancer services. In particular, the commitment to improve access stipulated within the Better Health, Better Care is reiterated and emphasised in relation to the delivery of care as close to people's homes as possible, and in reducing waiting times. The Better Cancer Care Action Plan took forward the cancer agenda in the context of services addressing the following key commitments:

    - Improving outcomes through early diagnosis, more timely treatment and improvements in treatment with advances in technology
    - Improving cancer prevention
    - Reducing inequalities in outcome
    - Supporting and treating the increasing number of patients living with cancer
    - Improving the overall quality of cancer care for patients.

- **NHS Grampian Property and Asset Management Plan:** This plan aims to ensure that assets are used efficiently, coherently and strategically to support the future clinical and corporate needs of the Board consistent with our forecast for service need.

- **NHS Grampian Service Strategies:** These set clear quality requirements for services and care, and are based on the best available evidence of what treatments and services work most effectively for patients. The Acute Service's vision and clinical strategy for ARI on the Foresterhill Health Campus was first captured within the Foresterhill Development Framework document (2008) and more recently within the ARI Reconfiguration Report. Both documents have been

informed by the current Health Plan (2010 – 2013) and the Better Health, Better Care national Scottish health policy. This document reflects the Acute Service's vision to develop modern and sustainable facilities that support the provision of the 'right care' in the 'right place' by the 'right people'.

4.0 Investment Objectives

The desired outcomes that the investment in this project are intended to achieve are defined in a set of investment objectives. These objectives have been developed as part of a collaborative process involving over 200 clinical staff, non-clinical staff and patient representatives led by professional Health Planners appointed by NHS Grampian.

The investment objectives outlined in this Initial Agreement are specific to the Baird and ANCHOR project. Approval to proceed with the replacement of the Foresterhill Health Centre (FHC) as an enabling work of this project will result in the production of a FHC OBC and FBC as part of the Lochgilphead and Inverurie hubCo Bundle project.

The investment objectives emerged from the clinical brief which was developed over a five month period and involved a programme of more than 50 half and one day workshop meetings. The process involved a review of current service configuration and activity, an assessment of service risks, current and potential future demand, likely advances in treatment etc. The workshops then considered the proposed philosophy of care, model of care delivery and future service scope.

This process has resulted in clarification regarding what is to be achieved as services prepare to deliver redesigned models of care in the new facilities. NHS Grampian is committed to developing and implementing a programme of redesign, involving the project team and appropriate operational management teams, over the next five years to make sure that the redesigned services are in place by the time the new facilities are commissioned.

Following development of the clinical brief, a summary of the key investment benefits to be realised by the project are outlined in the tables in Section 4.1. In addition, to these investment benefits, NHSG is also keen to make sure that specific sustainability and design quality objectives are met.

Sustainability Objectives

The Building Research Establishment's Environmental Assessment Method for Healthcare (BREEAM) sets the standard for best practice in sustainable building design, construction and operation and has become one of the most comprehensive and widely recognised measures of a building's environmental performance.

Consistent with NHS Scotland, NHSG has an aspiration that, where possible, all new buildings achieve a BREEAM Excellent rating. In that regard, an independent BREEAM assessor will be appointed to work with the project team with the aim of achieving BREEAM Excellence.

There are wider sustainability platforms for this investment, notably the potential to deliver community benefits through education, training and recruitment opportunities associated with the new build, targeting work packages offered to SMEs and wider associated benefits for the construction and operational phases of the project. The project team will consider the potential to promote and contract community benefits for the development.

Design Quality Objectives

In accordance with SCIM guidance and the investment objectives, Achieving Excellence Design Evaluation Toolkit (AEDET – HFS Refresh December 2014) will be used throughout the development of the project to help NHSG manage the design from initial proposals through to detailed design and will continue to do so through to Post Project Evaluation.

The AEDET toolkit has three key dimensions and outlines 10 assessment criteria. Each of the 10 areas are assessed using a series of questions which are scored on a scale of 1 - 6. The standard required should result in all 10 dimensions of the AEDET toolkit scoring between 4 and 6.

Baseline AEDET workshops for the current facilities have been completed. The summary scores outlined in the table below demonstrate that the existing facilities score poorly at between 1.0 and 3.5 in all ten categories; the target is scores of 4 - 6 in all categories.

Baseline AEDETs	Women's Services March 2015	Cancer Services March 2015
► Use	1.0	1.1
► Access	1.5	2.3
► Space	1.0	1.7
► Performance	1.5	3.5
► Engineering	1.3	1.5
► Construction	0.0	0.0
► Character and Innovation	1.0	1.7
► Form and Materials	1.4	2.4
► Staff and Patient Environment	1.1	1.5
► Urban and Social Integration	2.3	0.0

Additionally, Design Statements for The Baird Family Hospital and The ANCHOR Centre project have been developed at a series of workshops involving staff from a range of clinical and service professions facilitated by colleagues from Architect Design Scotland. These have been agreed as part of the formal National Design Assessment Process (NDAP) and included as Appendix A.

The investment objectives for this project are defined in the tables that follow.

4.1 The Baird Family Hospital

Investment Objective 1: Timely Access to Care, Investigation and Treatment				
Stakeholder's needs	**How we will measure success?**		**Related Strategies/Plans**	**Links to Government/National Performance Targets**
	Baseline Data	**KPIs**		
Neonates – timely access to theatre	Minimum of 60 minutes to transfer neonate to RACH by ambulance for emergency surgery, with subsequent 2 hour wait to return baby to NNU. Babies requiring elective surgery in RACH can often miss scheduled operation time due to lack of dedicated ambulance.	Target time of 15 minute journey each way	NHS Grampian Maternity Strategy 2010-2015 NHS Grampian Strategic Review of Maternity Services 2012 Neonatal Care in Scotland; A Quality Framework 2013 Healthcare Quality Strategy for NHS Scotland 2010	Neonatal Care in Scotland; A Quality Framework 2013 Neonatal Expert Advisory Group
Neonates – timely access to Imaging including MRI	Current journey time to ARI of 90 minutes due to ambulance transport required. Return journey can incur waits of 2 hours by ambulance or 20 minutes on foot via external route which means babies are exposed to weather conditions	Target time of 15 minute journey each way	NHS Grampian Maternity Strategy 2010-2015 NHS Grampian Strategic Review of Maternity Services 2012 Neonatal Care in Scotland: A Quality Framework 2013 Healthcare Quality Strategy for NHS Scotland 2010	Neonatal Care in Scotland: A Quality Framework 2013

Patients – timely access to ITU/HDU	Current journey time to ARI dependent on ambulance transfer. Majority are emergencies and are transferred within 60 minutes.	Target time of 15 minute journey each way	NHS Grampian Maternity Strategy 2010-2015 NHS Grampian Strategic Review of Maternity Services 2012	Healthcare Quality Strategy for NHS Scotland 2010
Patients – timely access to Imaging	Current journey time to ARI for Imaging dependent on ambulance transfer which can mean lengthy waits, leading to poorer outcomes and poor patient experience. Patients and staff can experience journeys/absences of 2-5 hours	Target time of 15 minute journey each way	NHS Grampian Maternity Strategy 2010-2015 NHS Grampian Strategic Review of Maternity Services 2012	Healthcare Quality Strategy for NHS Scotland 2010
Safe Labour Ward and theatre journey for maternity patients	Labour Ward and theatre delays associated with inadequate accommodation (eg Stage 1 recovery)	Labour Ward and theatre journey is optimised with no delays caused by poor accommodation	NHS Grampian Maternity Strategy 2010-2015 NHS Grampian Strategic Review of Maternity Services 2012	Healthcare Quality Strategy for NHS Scotland 2010
Maintain NHS Grampian position as Board with the highest level of attendance at Breast Screening Service	77.7% attendance in 2014	Aim to maintain and improve on current level	Scottish Breast Screening Programme Major Service Review September 2014 NHS QIS Management of Breast Services 2008	Scottish Breast Screening Programme

Investment Objective 2: Improved Effectiveness and Efficiency				
Stakeholder's needs	How we will measure success		Related Strategies/Plans	Links to Government/National Performance Targets
	Baseline Data	KPIs		
Maintain and potentially improve upon present low levels of Hospital Acquired Infection rates	Last reported cases of: Staphylococcus Aureus Bacteraemia (SAB): Gynaecology - October 2012 Neonatology - December 2014 Clostridium Difficile: Gynaecology - July 2010 Maternity - no reported cases	Baseline data levels maintained or improved	NHS Scotland National Infection Prevention and Control Manual 2015 Health Facilities Scotland SHFN 30 Parts A and B 2014	NHS Scotland National Infection Prevention and Control Manual 2015
Improved Ambulatory Care will result in:				
Reduced length of stay for Gynaecology and Breast in-patients	2014 data: Gynaecology 2.7 days Breast 3.5 days	Gynaecology 2.3 days Breast 3 days	Healthfit 2020 Releasing Time to Care Better Care Without Delay – Enhanced Recovery	Healthcare Quality Strategy for NHS Scotland 2010 Releasing Time to Care; NHS Institute for Innovation and Improvement Better Care Without Delay – Enhanced Recovery: NHS Institute for Innovation and Improvement

Decrease in repeat appointments for symptomatic breast patients	Symptomatic patients can attend for up to 3 separate clinic appointments	Establishment of one-stop service, where possible, with some patients requiring 2 visits	NHS QIS Management of Breast Services 2008	Healthcare Quality Strategy for NHS Scotland 2010 Association of Breast Surgery
Increase in number of gynaecology and maternity patients attending as a day or an out-patient	In 2014, there were 5,614 admissions to the antenatal wards, 3,356 (60%) of which had the potential to be managed on an ambulatory pathway Gynaecology emergency activity currently seen in in-patient accommodation (15-30 patients/week). These women will be seen in the ambulatory service in the new hospital	Increase maternity ambulatory activity by at least 60% Gynaecology – 80% of activity to be carried out in ambulatory setting	Healthfit Releasing Time to Care	Achievement of British Association of Daycase Surgery targets Releasing Time to Care: NHS Institute for Innovation and Improvement
Increase in 23-hour surgery for breast and gynaecology patients	2014 figures: Breast – 20% daycase rate Gynaecology – 40%	Breast – aim for 40% Gynaecology – aim for 50%	The Planned Care Improvement Programme Day Surgery in Scotland 2006	Achievement of British Association of Day Surgery targets ISD Average Length of Stay minimum benchmarks

Achieve a flexible workforce which is co-located and contributes to:				
A sustainable workforce	A degree of difficulty with recruitment to some consultant and nursing posts	Able to fill all vacancies with suitably qualified personnel	Everyone Matters: 2020 Workforce Vision 2013	NHS Grampian Workforce Plan Local unit workforce plans
To provide an appropriate learning environment to support the development of staff from all professions	The service currently has consulting and treatment spaces which are too small to allow for consulting room-based teaching.	Students report that they had a good learning experience and that the environment was conducive to learning, for classroom and clinical based learning	University of Aberdeen Strategic Plan	
Integrated/co-located working	Women's services are currently fragmented across three different buildings on the Foresterhill Health Campus	Co-located teams providing a more flexible workforce	Everyone Matters: 2020 Workforce Vision 2013	NHS Grampian Workforce Plan Local unit workforce plans
Avoid unnecessary maternity transfers out of region	17 women transferred to other Health Boards in 2014	No transfers out of region unless clinically indicated	NHS Grampian Maternity Strategy 2010-2015 NHS Grampian Strategic Review of Maternity Services 2012	Healthcare Quality Strategy for NHS Scotland 2010

Avoid unnecessary neonatal transfers out of region	2014 activity provided out of region: • 10 ITU days • 44 HDU days • 102 Special Care days • Total of 156 days	90% reduction 15 days	Neonatal Care in Scotland: A Quality Framework 2013	Healthcare Quality Strategy for NHS Scotland 2010 Neonatal Expert Advisory Group
Increase participation in clinical trials across women's and neonatal services	Across women's services, approximately 5% of patients are currently recruited to clinical trials	Across women's services, the aim will be for 10% of patients to be recruited to clinical trials	University of Aberdeen Health Services Research Unit targets Neonatal Care in Scotland: A Quality Framework 2013	Neonatal Care in Scotland: A Quality Framework 2013
Increase participation in clinical trials for Reproductive Medicine clients	Currently around 15% of patients are recruited to clinical trials	80% of patients to be recruited to trials		Human Fertilisation and Embryology Authority (HFEA)
The new hospital design will be functionally suitable and meet the objectives outlined in the agreed Design Statement	Achieving Excellence Design Evaluation Toolkit (AEDET) baseline score of 1-2.3	AEDET scores in the range of 4-6	Achieving Excellence Design Evaluation Toolkit (AEDET)	

Investment Objective 3: Person Centred Care				
Stakeholder's needs	**How we will measure success**		**Related Strategies/Plans**	**Links to Government/National Performance Targets**
	Baseline Data	**KPIs**		
Ambulatory Care is the norm where possible:				
Surgical pre-assessment for maternity, gynaecology and breast surgery	Maternity 100% pre-assessment Gynaecology 50% Breast 40%	100%	Healthcare Quality Strategy for NHS Scotland 2010	British Association of Day Surgery Directory 2009
Admission on day of surgery for gynaecology and breast surgery	Gynaecology and Breast – 40%	85%	Healthcare Quality Strategy for NHS Scotland 2010	British Association of Day Surgery Directory 2009
Minimise inappropriate hospital stays for mothers whose babies require care, also to provide a safe environment for parenting and bonding	There is no Transitional Care service currently which means babies are cared for in the Neonatal Unit or in a postnatal ward, with their mother	An average of 370 babies per year will be admitted to Transitional Care from the NNU with an average length of stay of 8 days	Neonatal Care in Scotland: A Quality Framework 2013	British Association of Perinatal Medicine Categories of Care 2011
Patient safety and dignity is achieved:				
Improved choice for women in relation to place of birth and facilities either at home or in one of two obstetric or three community maternity units	Women are currently offered choice regarding their preferred birthing location. However, their choices can be affected by their perceptions regarding safety and environment of care	Women report being offered information regarding place of birth and are supported to make an informed choice	NHSG Maternity Services Strategy 2010-2015 Refreshed Framework for Maternity Services 2011	Refreshed Framework for Maternity Services 2011
Patients will be cared for in an environment that	The current clinical configuration across women's services is a	100% single room accommodation for	CEL 27 (2010) In-Patient Care	Healthcare Improvement Scotland

provides appropriate privacy and dignity	mixture of single rooms and multi-person bays. This does not always afford the level of privacy and dignity required for patients	in-patients	Scottish Health Planning Note 04-01: Adult In-Patient Facilities Care of Older People in Hospitals 2014	
There will be safety of environment for patients, staff and visitors	Not all clinical areas are secure and this does present a security risk for women and/or babies	Controlled access to patient areas.	Healthcare Quality Strategy for NHS Scotland 2010	Healthcare Quality Strategy for NHS Scotland 2010
The facility will allow the services to better meet the psychological and emotional needs of diverse groups of patients in a caring and compassionate environment i.e. early pregnancy loss, reproductive medicine, patients experiencing cancer diagnosis etc	The present facilities are not optimally designed to provide the required separation of patient flows in order to meet the emotional requirements of certain patient groups ie AMH entrance does not allow for separation of patient journeys thereafter eg for pregnant women, couples attending for fertility treatment and also women experiencing pregnancy loss	A design that acknowledges the needs of specific patient groups, consistent with the Clinical Brief and Design Statement	Healthcare Quality Strategy for NHS Scotland 2010	Healthcare Quality Strategy for NHS Scotland 2010

4.2 The ANCHOR Centre

Investment Objective 1: Patient Centred Care				
Stakeholder's needs	**How we will measure success**		**Related Strategies/Plans**	**Links to Government/National Performance Targets**
	Baseline Data	**KPIs**		
Patients will be cared for in an environment that provides appropriate privacy and dignity. There are no recent HBNs or guidance on this	The current configuration of out and day patient accommodation is functionally unsuitable, cramped and provides	Appropriately sized consulting rooms, treatment	No recent HBNs or guidance	Healthcare Quality Strategy for NHS Scotland 2010

however this aim is a priority for the Board.	inadequate privacy and dignity for patients and families	rooms and treatment bays		
There will be safety of environment for patients, staff and visitors	Over-crowded and cluttered spaces creates a hazard potential	Clinical areas and corridors will be free from clutter	Health Facilities Scotland Best Practice Guidance Health Building Note 00-01 October 2014	
The facility will allow the services to better meet the psychological and emotional needs of diverse groups of patients in a caring and compassionate environment ie distressed patients with e.g. malignant disease	The present facilities are not optimally designed to provide the required separation of patient flow in order to meet the emotional requirements of certain patient groups	A design that acknowledges the needs of specific patient groups eg distressed or acutely ill patients	Healthcare Quality Strategy for NHS Scotland 2010	Healthcare Quality Strategy for NHS Scotland 2010
Increased whole person support ie facility will allow for provision of podiatry, approved complimentary therapies, prosthetic service and Third Sector support to patients and their families	Current accommodation is unsuitable to provide for any of these services adequately	These services are accessible to patients attending The ANCHOR Centre	Healthcare Quality Strategy for NHS Scotland 2010	Healthcare Quality Strategy for NHS Scotland 2010
Improved provision for teenagers and young adults	No specific provision to meet the needs of teenagers and young adults	An accessible lounge which is furnished and equipped specifically with teenagers and young adults in mind	Teenage Cancer Trust “Exploring the Impact of the Built Environment” January 2010 Healthcare Quality Strategy for NHS Scotland 2010	Healthcare Quality Strategy for NHS Scotland 2010
The facility will be designed to allow for the patient’s	Out and day patient services are fragmented and	Patients report that	Healthcare Quality Strategy for NHS	Healthcare Quality Strategy for NHS Scotland 2010

physical journey through cancer services to be smooth and easy for patients and their families	delivered from three distinct locations	their visit to the centre was smooth, timely and easy to navigate	Scotland 2010	

Investment Objective 2: Improved Access to Treatment				
Stakeholder's needs	**How we will measure success**		**Related Strategies/Plans**	**Links to Government/National Performance Targets**
	Baseline Data	**KPIs**		
Improved ambulatory care services will allow for patients to be cared for in a day or out-patient setting as the norm, with a subsequent reduction in inappropriate use of ward accommodation	Out-patients attend the ward for treatment ie pentamadine and intrathecal administration of cytotoxic drugs	These patients will receive their care in The ANCHOR Centre	Healthcare Quality Strategy for NHS Scotland 2010	Healthcare Quality Strategy for NHS Scotland 2010
To achieve and sustain national cancer waiting time and treatment targets	National targets – 95% achievement of 31 day and 62 day targets NHS Grampian performance Q1 2015: 62 days – 84.56% 31 days – 95.58%	Sustained achievement of national targets	Better Cancer Care: An Action Plan 2008	National Services Scotland National Cancer Waiting Times

Investment Objective 3: Improved Efficiency and Effectiveness				
Stakeholder's needs	**How we will measure success**		**Related Strategies/Plans**	**Links to Government/National Performance Targets**
	Baseline Data	**KPIs**		
The facility will allow for day and out-patient services to be co-located which will promote flexible working and shared use of clinical and support space	The service is currently fragmented and delivered over three distinct locations	The haematology and oncology day and out-patient suites are co-located to allow flexible use of accommodation	No recent HBNs or guidance	Healthcare Quality Strategy for NHS Scotland 2010
The facility will include a Pharmacy Aseptic Suite which will be fit for purpose and fully compliant with all required legislation for the safe preparation of chemotherapy treatments and Total Parenteral Nutrition (TPN).	The clinical service is of a high quality , however the current facilities are not fit for purpose	Full compliance with all required legislation	Comply with: HDL (2005) 29 MEL (1997) 12 MHRA standards for preparation of medicines CEL (2013) 28 CEL (2012) 30	
To increase participation in clinical trials across cancer services and in haematology	Current participation: 30% of Oncology patients 20% of Haematology patients	The service will aim for a total of 30% of oncology and haematology patients to be recruited to trials	Scottish Cancer Research Network	
Create an environment that supports a sustainable workforce	A degree of difficulty with recruitment to some consultant and nursing posts e.g. skilled trained nurses to administer cytotoxic therapies	Able to successfully recruit to all vacancies with suitably qualified personnel	Everyone Matters: 2020 Workforce Vision 2013	NHS Grampian Workforce Plan Local unit workforce plans

To provide up-to-date learning facilities in an appropriate environment to support the development of clinical professional staff	The service currently has no dedicated teaching accommodation and consulting and treatment spaces are too small to allow for patient-based teaching.	Students report that they had a good learning experience and that the environment was conducive to learning, for classroom and clinical based learning	University of Aberdeen Strategic Plan	
The new centre design will be functionally suitable and meet the objectives outlined in the agreed Design Statement	(AEDET) baseline score of 1.1 - 3.5	AEDET scores in the range of 4 - 6	Achieving Excellence Design Evaluation Toolkit (AEDET)	
The ANCHOR Centre will continue to provide secondary and tertiary services for the North of Scotland, taking account of the predicted increases in incidence and prevalence and of changes in treatment type and treatment location	The service operates out of cramped, over-crowded accommodation and has no capacity for the predicted increase in activity	Accommodation is adequate to deal with the existing and predicted growth over the next 10-15 years, including changes to the working day and changes around community based treatment and care	“Projections of Cancer Increase in Scotland to 2020” (Information Services Division)	

5.0 Existing Arrangements

5.1 Women's Services

NHS Grampian provides a comprehensive range of services to women, babies and families from the Grampian region and also to the North of Scotland. Secondary and tertiary services are provided from the Foresterhill Health Campus, supplemented and supported by a specific range of secondary services provided at Dr Gray's Hospital in Elgin. The current arrangements for the relevant clinical services are:

Maternity

Secondary and tertiary maternity services are provided from Aberdeen Maternity Hospital (AMH) on the Foresterhill Health Campus. There are currently around 6000 total deliveries per year in the Grampian region, with 4000 of these in AMH. Future planning predictions and assumptions are that this total figure will increase to around 7000 total deliveries by 2025.

The service provision constitutes a full range of maternity services including:

- Tertiary service for foetal medicine which includes services to support high risk women from Grampian, Orkney and Shetland
- Provision of Theatre HDU and Recovery
- Early pregnancy loss service
- Specialist clinics to support high risk women eg diabetes, haematology, epilepsy, hypertension
- Support to women both antenatally and postnatally within AMH, supported by the community midwifery service
- Patient choice in delivery location.

There are 50 antenatal/postnatal beds in AMH, with 9 Labour Ward Rooms (1 birthing pool), 4 CMU rooms, 17 beds in the Triage/Assessment Ward and 7 beds in the Early Pregnancy Ward.

AMH provides a full out-patient service including scanning and antenatal care.

The tertiary service works closely with service provision in the Community Maternity Units (CMUs), with women transferred when clinically required from a CMU to AMH.

Ultrasound and plain film radiology is provided within the maternity building. Specialist services such as MRI, CT and Nuclear Medicine are accessed in Aberdeen Royal Infirmary. This necessitates an external journey for women and staff to access these services.

The main referrers into the service are:

- Community midwifery
- GP

- GDOCS
- Emergency Department
- Antenatal Clinic
- Aberdeen Centre for Reproductive Medicine
- Pregnancy Advisory Service
- Labour Ward
- Gynaecology.

Neonatology

The Neonatal Unit (NNU) based within AMH provides level 3 tertiary neonatal services for the North of Scotland. There are around 900 admissions to the unit each year with 90% of activity coming from the Labour Ward in AMH.

The unit has 37 cots which comprises:

- ITU x 10 cots
- HDU x 7 cots
- Special Care x 19 cots
- Isolation Room x 1.

In addition to this, there are 3 Parentcraft rooms within the unit where accommodation is provided for parents to take the lead on caring for their baby, usually immediately prior to discharge from the unit.

The departmental function is to provide the following services to babies from Grampian, Highland, Orkney and Shetland:

- Tertiary medical and surgical services
- To deliver care to newborns, in particular to premature babies
- Provide support to babies in the AMH postnatal wards
- Provide support to Labour Ward for newborns
- Provide out-patient services
- Support neonatal surgery (most of which is carried out in Royal Aberdeen Children's Hospital)
- Provide and support the national neonatal transport service.

The unit provides care to around 25 babies each year from Moray, 10 from Highland and 2 - 3 each from Orkney and Shetland.

On occasions, the unit is unable to cope with demand and, during 2014, there was a total of 156 days of neonatal care which was provided in other neonatal units in Scotland.

The unit is increasingly supporting very premature babies (<26 weeks) and these numbers are anticipated to continue increasing. Some of these babies can be in the unit receiving care for up to 4 months.

There is mobile imaging equipment within the unit to provide plain film and ultrasound, however babies require to be transported to ARI in order to access MRI, Nuclear Medicine, CT etc. This requires babies to be transported by ambulance to access these services in physically separate hospitals at ARI and RACH.

Gynaecology

A comprehensive secondary and tertiary gynaecology service is provided from the Foresterhill Health Campus, including the provision of gynae-oncology services to Grampian and the North of Scotland.

Service provision incorporates a full gynaecology service including:

- Tertiary centre for North of Scotland
- Elective gynaecology
- Benign gynaecology
- Emergency gynaecology
- In-patient, daycase and out-patient services
- Specialist services eg urogynaecology, endometriosis, colposcopy, vulval disorders
- Medical termination services
- Gynae-oncology surgical services (as part of the North of Scotland Cancer Network – NOSCAN)
- Provide services to women from Orkney and Shetland (in addition to NHSG consultant-delivered services on the islands)
- Endometriosis Centre for the North of Scotland
- Infertility services.

The service is provided primarily for women, however there are also some male patients who access the service.

There are 28 in-patient beds (for both gynaecology and breast services) and 4 beds (Monday to Friday) for termination services. Daycase beds are also utilised in the Short Stay Unit which services multiple surgical specialities in ARI. There is no dedicated HDU provision for gynaecology patients so the service utilises the main ARI HDU as required.

Theatre sessions are allocated in the ARI Main Theatre (12 sessions for gynaecology per week) and also in the Short Stay Theatre (9 sessions per week).

Out-patient services are provided from the Women's Day Clinic and other out-patient clinic locations in ARI. Referrals come predominantly from GPs with other referrals from AMH, Cytology, Emergency Department, Sexual Health Services etc.

Aberdeen Centre for Reproductive Medicine

The Aberdeen Centre for Reproductive Medicine (ACRM) is the sole referral centre for Reproductive Medicine Services in NHS Grampian. It serves as a secondary care centre for Aberdeen, Aberdeenshire, Orkney and Shetland whilst providing tertiary referral services for the entire North of Scotland.

Within the ACRM, services are provided by the Andrology Department, Fertility Clinic, Assisted Reproduction Unit and Embryology Laboratory and these are delivered as a partnership between NHSG and the University of Aberdeen (UoA). The service is heavily regulated by the Human Fertilisation Embryology Authority (HFEA) whose purpose is to set standards for and issue licenses to centres in the UK. They monitor all UK fertility clinics and all UK research involving human embryos, and provide impartial and authoritative information to the public.

The service is also at the forefront of research and teaching and has an excellent national and international reputation.

Approximately 900 new referrals (secondary care and tertiary) are seen in the NHS Fertility Clinic per year.

Treatments provided within the centre include:

- Ovulation induction and artificial insemination
- In Vitro Fertilisation (
- Intra-cytoplasmic Sperm Injection
- Sperm, egg and embryo Cryostorage
- Egg, sperm and embryo donation
- Surrogacy
- Donor Insemination
- Fertility preservation
- Surgical sperm retrieval (currently undertaken in Main Theatre Suite, ARI)
- Reproductive surgery (currently undertaken in ARI).

High level activity figures for the service are (2014 data):

- 7880 out-patient appointments
- 7166 ultrasounds
- 1320 semen analysis
- 1256 procedures
- 2019 laboratory procedures.

Referrals are received from GPs, other Health Boards in the North of Scotland (Highland, Orkney and Shetland), requests from other medical specialities for patients to be seen for fertility preservation, transgender requests from Tayside and early pregnancy assessment services.

Breast Services

The breast service is split into two component parts – Breast Screening and Symptomatic Breast Services.

The Grampian-wide service provision includes:

- Assessment clinics
- Out-patient services
- Emergency and elective provision
- Mobile screening units
- Breast symptomatic surgery
- In-patient imaging services
- Breast reconstruction surgery
- Biopsy service provided for the whole of Scotland.

Breast patients are accommodated for in-patient stays in Wards 308/309 which is shared with gynaecology.

High level activity figures for the service are:

- 9,000-10,000 patients routinely screened each year (approximately 1,000 are called back to clinic, with subsequently about 400 called back for biopsy)
- 4,200 attendances each year for symptomatic imaging
- 8,000 in-patient guided biopsies carried out
- MRI guided service (provided for the whole of Scotland) around 15 patients per year (takes 3 hours per patient)

5.2 Oncology and Haematology Services

Oncology and haematology services on the Foresterhill Health Campus are tertiary in nature and support ARI's historical role as the regional provider of a wide range of cancer and non-malignant haematology services to patients of all ages in the North of Scotland.

The ANCHOR Centre will provide clinic and treatment accommodation for day-patients and out-patients for oncology and haematology. The current service provision includes:

- Cancer services for all main cancer groups
- Service provision to teenagers and young adults
- Malignant and non-malignant haematology
- Palliative Care Team
- Support services to provide "whole person support" eg psychology, spiritual care
- Prosthesis services
- Clinical teaching

- Pharmacy.

In addition to the services provided directly from the oncology and haematology teams, there are other services offered from other specialities on the Foesterhill Health Campus eg care for endocrine malignancies, children are cared for in RACH, genetics etc. NHS Scotland provides some very specialist services on a national basis only eg radical radiotherapy for children, neuro-endocrine tumours etc.

The in-patient facilities to support these services are located in the new Matthew Hay Building which opened in 2012.

Day-patient services are provided in the following locations:

- Ward 30 for oncology day patients with 20 chairs
- Ward 307 for haematology day patients with 12 chairs

Out-patient services are provided in the following locations:

- Ward 307 for haematology out-patients (6 consulting rooms)
- Clinics D and E for oncology out-patients as well as psychology clinics (9 consulting rooms)

Across oncology and haematology services, the high level activity figures are:

- 30000 out-patient attendances per year
- 120 patients attending each day for out-patient or day-patient care
- 35 SACT (Systemic Anti-Cancer Therapy) cycles provided daily
- 20 additional interventions provided each day

The new ANCHOR Centre will be physically co-located with the existing Radiotherapy Centre opened in 2013. It is the primary provider of Radiotherapy for patients from Grampian, Orkney and Shetland.

The Radiotherapy Centre is staffed by a multidisciplinary team of Clinical Oncologists, Medical Physicists, Technologists and Therapeutic Radiographers providing a comprehensive care and supportive pathway from planning through to treatment delivery.

The planning process combines the use of imaging modalities of CT, MRI and PET to help define the treatment area. Specialised treatment planning software is used to optimise the treatment for each patient.

Within the new centre, there are three state of the art Linear Accelerators and an HDR Brachytherapy Unit which deliver daily treatments to over 100 patients. This equipment enables the service to deliver up to date treatment techniques eg Volumetric Modulated Arc Radiotherapy, where the treatment machine rotates around the patient to deliver optimal dose to the tumour whilst minimising dose to normal tissue. Such techniques are recognised as essential developments within

any Radiotherapy Centre and the current equipment specification will allow further growth.

Often Radiotherapy is used in conjunction with other therapies such as chemotherapy and surgery and the service relationship with these services is an integral part of the patient treatment pathway. The majority of patients are out-patient day cases whilst some may require specialised in-patient care.

5.3 Existing Facilities

Whilst the primary driver for change in this Initial Agreement is service modernisation and redesign, these changes simply cannot take place without investment in the accommodation that will enable and facilitate the required changes in service delivery. The table that follows provides information on the current condition and performance of the properties within the scope of the project. The appraisals of the buildings have been undertaken in accordance with the NHS Scotland property appraisal guidance "A risk based methodology for property appraisal".

	Current condition and performance of the Estate based on NHS Scotland National Standards				
	Existing areas sq.m	**Physical Condition**	**Statutory Standards**	**Space Utilisation**	**Functional Suitability**
Aberdeen Maternity Hospital	15127	Poor	Poor	Overcrowded	Not Satisfactory
Breast Screening Centre	793	Satisfactory	Satisfactory	Fully Used	Satisfactory
Foresterhill HC	2906	Poor	Poor	Overcrowded	Unacceptable
Women's Day Clinic, Clinics B and E, Wards 308/309/315	3509	Poor	Poor	Fully Used	Not Satisfactory
Cancer Centre (Clinic D, Wards 307, 310, Aseptic Pharmacy Suite)	1410	Poor	Poor	Overcrowded	Unacceptable
Eye Clinic	1077	Satisfactory	Satisfactory	Fully Used	Satisfactory

The table shows that there are significant problems with the existing properties in terms of physical condition, compliance with statutory standards, space utilisation and functional suitability. There is very little potential for developing either existing or new services within the existing facilities due to the physical limitations of extending buildings on their existing sites. Furthermore, the current design and functional suitability seriously compromises the provision of modern health and care services from these buildings.

The table that follows shows that the estimated backlog maintenance expenditure requirement for these buildings is almost £8 million and that 45% of this backlog is assessed as being of significant or high risk.

	Backlog Expenditure Requirement £000 by Risk Profile				
	Low	**Moderate**	**Significant**	**High**	**Total**
Foresterhill HC	530	190	48	77	845
Eye Clinic	24	54	26	0	104
Clinic D	18	6	26	5	55
Haematology OPD/Day Ward 207	42	48	77	25	192
Oncology Day Ward 310	53	60	96	31	240
Aeseptic Suite Pharmacy	30	24	38	12	104
Aberdeen Maternity Hospital	1029	1856	1717	827	5429
Women's Day Clinic	42	13	61	12	128
Breast Screening Centre	6	1	5	0	12
Clinic B	64	22	96	18	200
Clinic E	27	30	48	16	121
Wards 308/309 (breast and gynae)	80	28	120	22	250
Admin (Ward 315 breast/gynae)	52	59	94	30	235
Total	**1997**	**2391**	**2452**	**1075**	**7915**
	25%	**30%**	**31%**	**14%**	**100%**

This backlog maintenance expenditure requirement is defined as the basic cost of works to bring the building back to an acceptable condition. This definition is in accordance with the Health Facilities Scotland Guidance on backlog costing and as such it excludes VAT, contractor's preliminaries, temporary re-housing costs etc. Experience of undertaking backlog works in existing hospitals has shown that the final outturn cost of such works can be significantly higher than the basic backlog cost, often resulting in a doubling of the basic cost. In this case, that would result in expenditure of circa £16 million on eradicating the backlog in these buildings.

It should also be borne in mind that this backlog maintenance expenditure requirement is associated with the structure and physical condition of the buildings and even if these monies were expended it would do little to address the space utilisation and functional suitability issues which currently exist in the buildings.

In addition to the property appraisals described above, the three main buildings within the scope of this Initial Agreement have been the subject of design evaluation exercises using the Achieving Excellence Design Evaluation Toolkit (AEDET). This exercise evaluates a design by posing a series of clear, non-technical statements, based on three key criteria: Functionality, Build Quality and Impact. This evaluation has enabled the project's stakeholders to develop a clear understanding of the weaknesses of the existing buildings in terms of design and to provide a "benchmark" for reprovision. The benchmark score together with a target score for the proposed new buildings will be submitted to the Scottish Government Capital Investment Group with the Initial Agreement as part of the mandatory NHS Scotland Design Assessment Process (NDAP).

It is clear from the property appraisals and the AEDET evaluations of the existing buildings that without investment in modern facilities the essential changes required in service models to meet the challenges associated with delivering national and local policy simply will not happen. Furthermore, the retention and recruitment of appropriately skilled medical and nursing, allied health professionals and support staff is becoming increasingly more difficult as the facilities become progressively more inadequate. This lack of fit for purpose accommodation will exacerbate the ability to retain and recruit the necessary staff to provide services in the future.

6.0 Service Change

6.1 Women's Services

Before an Initial Agreement is submitted for approval to the Scottish Government Capital Investment Group, all Ministerial and Board approvals for service change should be in place, as set out in Chief Executive Letter (2010) 04. This requires the following to be set out:

- The process of engagement and consultation with stakeholders in developing the proposals
- The recommendations considered by the NHS Board and the date the NHS Board gave approval
- If a major service change, the date Ministerial approval was given and, if any requirements were made by Ministers, that these have been/are being implemented
- That engagement and communication with stakeholders is on-going as implementation commences.

In December 2011, as one part of a wider ongoing strategic review of maternity services, NHS Grampian Board approved the launch of a formal consultation on proposed changes to the maternity service in Grampian. The proposals that were consulted on were developed by a group of women from the catchment area, clinicians and managers who took part in an inclusive Option Appraisal in early 2011, with the overwhelming majority of participants agreeing on a preferred option. A comprehensive follow up process, involving local staff and women, was then undertaken to review and recommend possible locations for the Community Maternity Units (CMUs) – an integral part of the proposals. After sharing the Option Appraisal proposals, NHS Grampian received feedback from the Scottish Government which deemed them to be major service change.

The formal consultation on the proposals ran from 11 December 2011 until 22 March 2012 and a formal report outlining the process and details of the main responses received was presented and considered by the NHS Grampian Board in June 2012.

Throughout the wider review process, NHS Grampian has ensured an ongoing dialogue with the Scottish Health Council (SHC), an independent organisation with a role to assess how well the NHS is involving the public. In cases of major service change, the SHC must approve the engagement process used to develop any proposals before an NHS Board can proceed to formal consultation and also approve the subsequent formal consultation process. In June 2012, The Scottish

Health Council produced a detailed report on NHS Grampian's process for involving local people in the maternity review, outlining its approach to quality assurance, charting communication with NHS staff in relation to the engagement and consultation process and highlighting issues raised by local people during the process. The report states that: "The Scottish Health Council has quality assured the consultation process and is satisfied that NHS Grampian has followed the Scottish Government's CEL (4) (2010) guidance on involving local people in service change."

6.2 Oncology and Haematology Services

In 2008, Professor Alan Rodger was commissioned by the Scottish Government Health Directorate (now Scottish Government Health and Social Care Directorate (SGHSCD) to assist NHS Grampian in relation to a number of issues related to cancer services, including the development of the Aberdeen Cancer and Haematology Centre. In his subsequent report, Professor Rodger referred to the need for NHS Grampian to take forward the SGHSCD approved programme and funding for the replacement of the three existing linear accelerators (Linac), at Aberdeen Royal Infirmary on the Foresterhill Health Campus. In addition to this, Professor Roger stressed that **"**The new Project Board should address, as a matter of urgency, the need to plan, site and build sufficient new bunkers for linac capacity plus one extra for future replacement programmes**.** This should be phase one of the new cancer and haematology centre project and its location should ensure effective and efficient radiation treatment delivery in the new centre". The NHS Grampian Board has followed through this recommendation within Professor Rodger's report and completed the Radiotherapy Centre in 2013 to accommodate three new linear accelerators and provide the fourth bunker as a turn-around space for future replacements. This is an essential first step towards the future Oncology and Haematology Centre as proposed in this Initial Agreement.

"Better Together", Scotland's patient experience programme is an innovative programme designed to support NHS staff in delivering high quality, equitable person centred care. By listening to patients, carers and staff, and through supporting and empowering them to work together in partnership, the programme will help achieve the goal of world class care that is focused firmly on patient experience. Better Together funded a pilot patient experience programme in NHS Grampian during 2010/11 to help inform and improve cancer services at Aberdeen Royal Infirmary. Public consultation during the development of the programme has made it clear that patients expect their care to be delivered in a warm, clean and welcoming environment.

7.0 Business Needs

This section of the Initial Agreement describes the problems, difficulties and inadequacies of the existing arrangements in meeting each of the investment objectives, taking into account current and future demand, changes to policy and national priorities.

7.1 The Baird Family Hospital

Investment Objective 1: Timely Access to Care, Investigation and Treatment				
Problem/difficulty/inadequacies of existing arrangements to meet this objective	**Projections of level and nature of demand for services**	**Stakeholder requirements**		**Change needed to meet objective**
		Current	**Future**	
Women requiring imaging and ITU care need to travel to the adjacent Aberdeen Royal Infirmary by ambulance which creates risk, is disruptive and time consuming, often causing delay in delivering appropriate care.	Women going to ARI for Imaging – approximately 700/year In 2014, there were 3 women admitted to ITU	Average of 60 minutes each way	15 minutes each way	A corridor link between The Baird Family Hospital and Phase 2 of ARI allowing patients to travel easily between both hospitals saving time, disruption and facilitating faster access to care.
Neonates who require surgery need to travel to the adjacent Royal Aberdeen Children's Hospital by ambulance for surgery and to ARI for complex imaging e.g. MRI which creates risk, is complicated and is very time consuming for patients, staff and families, often causing	Neonates going to ARI for MRI – 150/year in the future due to changing standards of care Neonates going	Minimum of 60 minutes each way	15 minutes each way	A corridor link between The Baird Family Hospital and Phase 2 of ARI and a corridor link between The Baird Family Hospital and RACH allowing patients to travel easily between both hospitals saving time, disruption and facilitating faster access to care.

delay in care.	to ARI for other Imaging – approximately 100/year Neonates going to RACH for surgery – up to 40/year Neonates going to RACH for contrast studies – 10/year			This will improve clinical outcomes by minimising the time taken to access investigation and or treatment and the disruption for patients and their families and a reduction in valuable staff time away from the ward/department.
A lack of theatre capacity at the existing maternity hospital means that women who are booked for an elective caesarean section sometimes wait to access theatre as emergencies take precedence. In addition, there is inadequate Stage 1 recovery provision and, due to the lack of suitable and adequate HDU provision, HDU care is often delivered in Labour Ward.	In 2014, there were a total of 1,529 caesarean sections and 1,029 other emergency procedures. During the 90 theatre working days of Q1 in 2015, there were 82 scheduled cases completed outwith the elective session time. 12 of these were postponed to another day	Labour Ward and theatre delays associated with inadequate accommodation (eg Stage 1 recovery)	Labour Ward and theatre journey is optimised with no delays caused by poor accommodation.	The new obstetric operating theatres will be co-located with the breast and gynaecology theatres, providing flexibility of use across the complement of theatres, with adequate Stage 1 recovery provision. Additionally, the Labour Ward will be located adjacent to theatres. Single room ward accommodation will be provided with good observation, creating accommodation which will allow for HDU care

The North East Scotland breast screening service has the highest rate of attendance nationally. This is thought to be partly due to accessibility and ease of parking. There is likely to be finite parking associated immediately adjacent to the new hospital and there is a concern that this could affect attendance rate.	Attendances 2014: 7764	77.7%	Aim to maintain and improve on current level	The new hospital design will seek to make sure that there is adequate adjacent car parking for patients attending for breast screening and other out-patient attendances, optimised as the site allows, with the aim of maintaining the existing high levels of attendance

Investment Objective 2: Improved Effectiveness and Efficiency				
Problem/difficulty/inadequacies of existing arrangements to meet this objective	**Projections of level and nature of demand for services**	**Stakeholder requirements**		**Change needed to meet objective**
		Current	**Future**	
The current ageing estate presents an ongoing HAI risk. This is due to a number of issues including old clinical spaces that are too cramped, not laid out optimally and sometimes difficult to maintain.	AMH was inspected on 6 occasions by the Healthcare Environmental Inspectorate (HEI) during 2013 and 2014. There were a number of areas of concern highlighted around infrastructure.	The HEI reports demonstrated the level of non-compliant accommodation and building infrastructure, also demonstrated S\HTM non-compliance	The new facilities will be S\HTM compliant	The new facilities should be designed to minimise the HAI risk by providing e.g. appropriate space standards, optimising flow, providing easy to maintain and clean surfaces, adequate hand washing facilities and be S\HTM compliant.
Not all gynaecology and breast patients benefit from surgical pre-assessment and therefore some patients are admitted unnecessarily the day before surgery due to the lack of a comprehensive surgical	100% surgical pre-assessment 85% admission on day of surgery Number of patients	2014 length of stay: Gynaecology 2.7 days	Gynaecology 2.3 days	Create accommodation that will allow for 100% of patients to have surgical pre-assessment prior to admission. We will achieve 85% same day admission. We will create Patient Hotel type Accommodation that will allow rural and

pre-assessment service. Some patients are admitted the day before because journey time to Aberdeen prevents them from attending on the morning of surgery. Some patients have procedures carried out on in-patient basis that, with better ambulatory services, could be performed as an out-patient or day-patient basis.	who would benefit from Patient Hotel accommodation is currently being assessed	Breast 3.5 days	Breast 3 days	island patients to arrive the night before and be admitted on the same day of surgery. This will also support women from Highland and Tayside who will come to Aberdeen for gynae-oncology surgery
The current ambulatory care accommodation for symptomatic breast services is inadequate and prevents the delivery of a one-stop service.	Further modelling of activity and demand will be undertaken for the OBC	Symptomatic patients can attend for up to 3 appointments	Establishment of one-stop service, where possible, with some patients requiring 2 visits. The co-location of breast services and Imaging will allow for a one-stop service to be established	The ambulatory care facilities will be designed to facilitate the delivery of a one-stop symptomatic breast service, delivered in accommodation that is shared with the breast screening service and those who have been recalled due to screening detected abnormality.
The current ambulatory care accommodation for maternity and gynaecology is inadequate, preventing a move away from in-patient ward based care to an ambulatory care setting.	Further modelling of activity and demand will be undertaken for the OBC	In 2014, there were 5,614 admissions to the antenatal wards of which 3,356 (60%) had the potential to have been managed on an ambulatory pathway	Increase ambulatory activity by at least 60%	The creation of appropriate, flexible ambulatory care space with co-location and a sharing of accommodation where possible will allow the redesign of services so that more care in future can be provided on an out-patient or day-patient basis.

		Gynaecology emergency activity currently seen in in-patient accommodation (15-30 patients/week). These women will be seen in the ambulatory service in the new hospital	Gynaecology, 80% of activity to be carried out in ambulatory setting	
Inadequate ambulatory accommodation prevents the move from in-patient to daycase care	Further modelling of activity and demand will be undertaken for the OBC	2014 figures: Breast – 20% daycase Gynaecology – 40% daycase	Breast – 40% Gynaecology 50%	Creating appropriate day-patient and ambulatory procedure room accommodation to allow the increase in 23 hour length of stay to be achieved
Recruitment to services in Aberdeen to ensure sustainability can be problematic due to a number of factors including geography, reputation, academic profile and service profile. Poor facilities and accommodation can also affect the delivery of sustainable services.	Further modelling of activity and demand will be undertaken for the OBC	A degree of difficulty with recruitment to some consultant and nursing posts	Able to fill all vacancies with suitably qualified personnel	Creation of facilities which optimise team working and sharing of skills, enhancing academic and clinical reputation and profile eg ability to undertake more clinical research
The service currently has consulting and treatment spaces which are too small to allow for consultant room-based teaching. This impacts on the portfolio of learning opportunities which can be provided	Further modelling of activity and demand will be undertaken for the OBC	Limitations on learning opportunities in clinical areas due to lack of appropriately sized and	Students report that they had a good learning experience and that the environment was conducive to	Specific teaching spaces will be provided to support classroom based learning and consulting spaces will be appropriately sized to allow for planned and opportunistic departmental learning for all disciplines of staff

		resourced accommodation	learning, for both classroom and clinical based learning	
Services are currently located over three hospital buildings at ARI, AMH and the Breast Screening Centre. This often hampers efforts to work in a more integrated manner and means that sharing spaces and using spaces flexibly is compromised.	Further modelling of activity and demand will be undertaken for the OBC	Women's services are currently fragmented across three different buildings on the Foresterhill Health Campus	There are a number of opportunities for integrated and/or co-located working e.g. a single early pregnancy loss service, co-located breast screening and symptomatic breast services.	The co-location of services in modern, fit for purpose accommodation provides opportunities for teams to work together, share skills, provide cover and on-call arrangements and work in a more integrated fashion, helping to create sustainable services, while also improving recruitment and retention of staff.
Current service constraints mean that pregnant women and neonates are often transferred out for care in other units in Scotland due to lack of staffed beds/cots.	Further modelling of activity and demand will be undertaken for the OBC	In 2014, there were 17 women who were transferred out of AMH In 2014, there was a total of 150 days of care provided in other Health Boards	No transfers out of region unless clinically indicated Target of 15 days care provided out of region	Creating fit for purpose accommodation to meet the predicted needs of the Grampian population and patients from across the north will help to minimise the number of transfers out to other centres which is disruptive and often very difficult for patients and their families.

As the tertiary centre for the north and a major teaching hospital working in collaboration with University of Aberdeen and Robert Gordon University, it is important that we have a thriving research profile. The accommodation and facilities we currently have curtails our ability to actively increase our clinical trials work.	Working with the Universities, we plan to increase our research profile to contribute to the body of knowledge, improve care and treatment and strengthen our ability to attract high calibre clinicians to Aberdeen.	Women's services 5% Reproductive Medicine 15%	Women's services 10% Reproductive Medicine 80%	To cope with the planned increase in clinical trials we need to provide appropriate consulting and interview spaces, drug and specimen storage and administration space co-located with the ambulatory accommodation to ensure a smooth journey for participating patients and flexible use of space over time.
Services are being provided from some accommodation which does not meet the needs of patients	Further modelling of activity and demand will be undertaken for the OBC	The baseline Achieving Excellence Design Evaluation Toolkit (AEDET) audit resulted in scores of 1 – 2.3	Future facility will achieve AEDET scores of 4 - 6	The design of the new hospital will ensure functional suitability of all spaces and will meet the clinical and technical briefs and the agreed Design Statement

Investment Objective 3: Person Centred Care				
Problem/difficulty/inadequacies of existing arrangements to meet this objective	**Projections of level and nature of demand for services**	**Stakeholder requirements**		**Change needed to meet objective**
		Current	**Future**	
Poor standard of accommodation affects our ability to provide adequate levels of ambulatory care and pre-assessment to enable admission on day of surgery.	Ambulatory care (23 hour care) will be the norm where clinical appropriate	Pre-assessment: Maternity 100% Gynaecology 50% Breast 40%	100% pre-assessment 85% admission on day of surgery	Flexible, accessible ambulatory care spaces that meet the needs of the predicted caseload over the next 15 years. Creating these spaces will facilitate service redesign by providing appropriate consulting, interview and procedure room accommodation, shared where possible between specialties to provide optimal usage and flexibility over time.
Neonates are often cared for in a post natal ward on in the special care baby unit for longer than is necessary as the baby is receiving a treatment that means care at home is not possible. This means inappropriate hospital stays for mothers, when it is their baby who requires care	Further modelling of activity and demand will be undertaken for the OBC	Service does not exist at the moment	There will be 8 babies cared for each day with an average length of stay of 8 days	Creating a transitional care service and accommodation will allow parents to remain at the hospital and provide care for their baby while receiving a treatment that are unable to be delivered at home. The parent will be the primary care provider, with support and treatment only delivered by the clinical team. This service will provide an opportunity for parents to bond with their child
The current maternity service is not yet able to offer women the correct range of choices regarding how and where they give birth. The Strategic Review of Maternity Services undertaken in 2012 outlined how services should be configured in Grampian, to make sure that women	Further modelling of activity and demand will be undertaken for the OBC	Women are currently offered choice regarding their preferred birthing location. However, their choices can be affected by their	Women report that they had a choice of birthing experience and are supported to make a	This development contributes significantly to the implementation of the recommendations outlined in the Strategic Review of Maternity Services. The new facility will provide an appropriate labour ward and theatre environment for medium and high risk patients. It will also be the hub of a maternity triage service which will

have choice and are able to discuss and agree the kind of birthing experience they want with the right level of support available to meet their clinical requirements.		perceptions regarding safety and environment of care	choice consistent with their risk level	help to make sure that women get good advice and support to obtain access to the birthing experience of their choice. Along with the obstetric unit at Dr Gray's in Moray and the community midwife service, it will also provide one of the three community maternity units to be provided across Grampian for low risk patients. The units at Elgin and Peterhead already exist and a new unit is planned at the new Inverurie Health and Care Hub being delivered as a hubCo DBFM project due to be operational towards the end of 2017
Maintaining patient dignity is an ongoing challenge due to current out dated and cramped facilities, which affects the level of privacy afforded to patients.	Further modelling of activity and demand will be undertaken for the OBC	The current clinical accommodation is a mixture of single rooms and multi-person bays which does not always afford the level of privacy and dignity required	Patients report feeling that their dignity has been preserved	The new facilities needs to be created with the client groups in mind in terms of creating a friendly, safe environment that provides patients and their families with dignity and that takes account of the emotional needs of patients with quite different needs, eg the patient who has recently suffered an early pregnancy loss, the couple attending reproductive medicine and the patients who are attending with a healthy pregnancy as well as patients attending for major surgery, which includes those aged 65 and over. This is outlined in the Clinical Brief and also in the Design Statement
Safety for patients, staff and visitors and be challenging as access control is not optimal e.g. neonatal unit	Further modelling of activity and demand will be undertaken for the OBC	Not all clinical areas are secure and this does present security risks for women and/or babies	Staff and patients report feeling safe	The new facilities will have the appropriate level of controlled access to patient areas

Unable to provide the required separation of some patient groups, which can cause emotional distress to patients and their families ie same hospital entrance for pregnant women as a woman experiencing a pregnancy loss	Further modelling of activity and demand will be undertaken for the OBC	Accommodation poorly designed currently with AMH effectively having “bad news” and “good news” corridor journeys	Facilities designed to allow for appropriate separation of patient flows, reduced patient interactions which could cause distress	A design that acknowledges the needs of specific patient groups, consistent with the Clinical Brief and Design Statement

7.2 The ANCHOR Centre

Investment Objective 1: Person Centred Care				
Problem/difficulty/inadequacies of existing arrangements to meet this objective	**Projections of level and nature of demand for services**	**Stakeholder requirements**		**Change needed to meet objective**
		Current	**Future**	
Current configuration of out- and day- patient accommodation is functionally unsuitable, cramped and provides inadequate privacy and dignity for patients and families	Further modelling of activity and demand will be undertaken for the OBC	Patients receive treatment in overcrowded spaces in very close proximity to other patients	Appropriately sized consulting and treatment rooms as well as treatment bays	The new centre will be specifically designed with these patient groups in mind, taking into consideration the need for private spaces as well as correctly sized bay areas to allow patients to interact whilst also maintaining the required level of privacy and dignity at a distressing time

The health and safety needs of patients, visitors and staff are compromised due to poor accommodation	Further modelling of activity and demand will be undertaken for the OBC	Over-crowded and cluttered spaces due to inadequate storage facilities creates a hazard potential	Clinical areas and corridors will be free from clutter	Appropriate provision of clinical spaces with suitable storage will allow corridors and treatment spaces to be free from unnecessary equipment, supplies etc.
Patients who are distressed or acutely unwell are not always able to access private spaces and are cared for with other patients in crowded waiting areas. The accommodation offers few opportunities for patients to access/exit the clinical service in a discreet manner	Further modelling of activity and demand will be undertaken for the OBC	Present facilities are not optimally designed to provide the required separation of patient flows in order to meet the emotional requirements of certain patient groups	A design that acknowledges the needs of specific patient groups eg distressed or acutely ill patients	A sensitively designed centre which allows for patients to not be distressed by their experience and is consistent with the Clinical Brief and Design Statement
The aspiration to provide complimentary therapies to patients in addition to mainstream clinical treatments is limited due to lack of accommodation to support these services. Our ability to support Third Sector organisations is also limited due to lack of space.	Further modelling of activity and demand will be undertaken for the OBC	Current accommodation is unsuitable to provide for any of these services adequately	Adequate accommodation for these services to be accessible to patients attending the centre	There is evidence to support the benefits enjoyed by patients of this whole person approach where their wellbeing is critical to the management of cancer as a long term condition. The accommodation provided in the new centre will allow for some of these therapies to be provided in the treatment spaces whilst the patient is undergoing often lengthy episodes of care, as well as dedicated spaces for out-patients to access. These spaces will also be

				available to Third Sector colleagues to increase support available to patients and their families
Teenagers and young adults as a specific patient group are not well catered for in the existing clinical accommodation	Further modelling of activity and demand will be undertaken for the OBC	No specific provision to meet the needs of teenagers and young adults	An accessible lounge which is furnished and equipped specifically with teenagers and young adults in mind, aspiration for this area to be staffed to provide specific support	Improved provision for this specific patient group with the creation of a lounge will lessen anxieties felt when attending for treatment, as well as allowing young people to meet, mix and be distracted whilst waiting
Out- and day-patient services are provided in a fragmented way from different locations in Aberdeen Royal Infirmary which means the patient's physical journey to and from areas can be complicated and time-consuming	Further modelling of activity and demand will be undertaken for the OBC	Out- and day-patient services are fragmented and delivered from three distinct locations	Patients report that their visit to the centre was smooth, timely and easy to navigate	The co-location of all out- and day-patient accommodation will allow patients to attend one location to receive most of their care. This will include patients attending for radiotherapy in the recently opened centre.

Investment Objective 2: Improved Access to Treatment				
Problem/difficulty/inadequacies of existing arrangements to meet this objective	**Projections of level and nature of demand for services**	**Stakeholder requirements**		**Change needed to meet objective**
		Current	**Future**	
The lack of suitable ambulatory accommodation means some patients receive care inappropriately in in-patient facilities	Further modelling of activity and demand will be undertaken for the OBC	Out-patients attend the in-patient ward for treatment which could be provided in an	These patients will receive their care in The ANCHOR Centre	Patients attending on an out-patient basis will receive their care in The ANCHOR Centre, allowing the ward to concentrate on in-patient care.

		ambulatory setting e.g. pentamadine and intrathecal administration of cytotoxic drugs		
The achievement of national cancer waiting times is challenging due to lack of adequate facilities to allow for the required amount of timely treatment and care, including the provision of specialist nurse clinics	Further modelling of activity and demand will be undertaken for the OBC	National targets – 95% achievement of 31 day and 62 day targets NHS Grampian performance Q1 2015: 62 days – 84.56% 31 days – 95.58%	Sustained achievement of national targets	The new facility will be sized appropriately to provide accommodation to meet current treatment demand, as well as predictions for increased growth in oncology and haematology services. Planning assumptions have also taken into account the provision of services to the North of Scotland now and into the future

Investment Objective 3: Improved Efficiency and Effectiveness				
Problem/difficulty/inadequacies of existing arrangements to meet this objective	**Projections of level and nature of demand for services**	**Stakeholder requirements**		**Change needed to meet objective**
		Current	**Future**	
There are limitations on staff and service efficiency due to care being provided from three distinct and separate locations in Aberdeen Royal Infirmary. This affects opportunities for flexible working and	Further modelling of activity and demand will be undertaken for the OBC	The service is currently fragmented and delivered over three distinct locations	The haematology and oncology day- and out-patient suites are co-located to create the potential for flexible use of	The design of the centre will create treatment and out-patient zones to be used by both oncology and haematology services. Support spaces will be shared and accommodation will be designed to allow for maximum

appropriate sharing of clinical and non-clinical spaces			accommodation	flexible use and efficiency
Pharmacy aseptic provision is essential to the ANCHOR services but is currently provided from accommodation which is not fit for purpose	Further modelling of activity and demand will be undertaken for the OBC	A high quality clinical service is provided but the facilities do not meet modern clinical standards	Full compliance with all required legislation	A Pharmacy Aseptic Suite will be a key department in the centre and this will allow for full compliance with clinical and building requirements in order that pharmacy staff can safely prepare chemotherapy treatments, co-located with the treatment suite where 70% of the chemotherapy treatments will be administered
Recruitment of patients to clinical trials is a priority for the service but is limited due to lack of clinical accommodation to allow discussions with patients when they attend for out-patient appointments or treatments	Further modelling of activity and demand will be undertaken for the OBC	Current participation in trials: Oncology 30% Haematology	Future participation in trials – 30% of all oncology and haematology patients	Space requirements for recruitment to trials will be incorporated into the design of the centre. The required number of out-patient consulting rooms will be provided and sized accordingly, as well as private spaces for trials staff to meet with patients to discuss recruitment and complete required paperwork
Recruitment to services in Aberdeen to ensure sustainability can be problematic due to a number of factors including geography, reputation, academic profile and service profile. Poor facilities and accommodation can also affect the delivery of sustainable services.	Further modelling of activity and demand will be undertaken for the OBC	A degree of difficulty with recruitment to some consultant and nursing posts	Able to fill all vacancies with suitably qualified personnel	Creation of facilities which optimise team working and sharing of skills, enhancing academic and clinical reputation and profile eg ability to undertake more clinical research
The service currently has consulting and treatment spaces which are too small to allow for consultant room-based teaching. This impacts on the portfolio of learning opportunities which can be provided	Further modelling of activity and demand will be undertaken for the OBC	Limitations on learning opportunities in clinical areas due to lack of appropriately sized and	Students report that they had a good learning experience and that the environment was conducive to learning, for both classroom	Specific teaching spaces will be provided to support classroom based learning and consulting spaces will be appropriately sized to allow for planned and opportunistic departmental learning for all disciplines of staff

		resourced accommodation	and clinical based learning	
Services are being provided from some accommodation which does not meet the needs of patients	Further modelling of activity and demand will be undertaken for the OBC	The baseline Achieving Excellence Design Evaluation Toolkit (AEDET) audit resulted in scores of 1.1 – 3.5	Future facility will achieve AEDET scores of 4 - 6	The design of the new centre will ensure functional suitability of all spaces and will meet the clinical and technical briefs and the agreed Design Statement
The ANCHOR Centre must continue to provide secondary and tertiary services for the North of Scotland, taking account of the predicted increases in incidence and prevalence and of changes in treatment type and treatment location	Further modelling of activity and demand will be undertaken for the OBC	The service operates out of cramped, over-crowded accommodation and has no capacity for the predicted increase in activity	Accommodation is adequate to deal with the existing and predicted growth over the next 10-15 years, including changes to the working day and changes around community based treatment and care	The centre will be sized based on planning assumptions and information around predicted increase in oncology and haematology incidences, as well as the provision of services across the North of Scotland

8.0 Potential Scope and Service Requirements

The Foresterhill Health Campus in Aberdeen is the main focus for secondary services in Grampian and for tertiary services across the North East and North of Scotland, including the Northern Isles, Highland and, to a degree, Tayside.

The future delivery of secondary and tertiary oncology and haematology services and women's services will therefore be focused on the Foresterhill Health Campus, where all interdependent services are located.

The Baird Family Hospital

Plans to redevelop the existing Aberdeen Maternity Hospital have been discussed now for some years, prompted by an ageing estate which is functionally unsuitable.

The Strategic Review of Maternity Services was undertaken in 2012 and included a major public consultation phase. The review recommended the implementation of a number of changes to maternity services including the continuation of a maternity service for medium and high risk patients on the Foresterhill Health Campus and the development of three Community Maternity Units (CMUs) across Grampian to provide patients with choice regarding the kind of birthing experience they can have. There is a consultant-led maternity service at Dr Gray's Hospital in Elgin. There is a CMU at Peterhead Community Hospital (which is in need of some refurbishment). In addition, two new CMUs are planned, one in Inverurie being progressed by NHS Grampian as part of the Inverurie Health and Care Hub project under the Lochgilphead and Inverurie hubCo Design, Build, Finance and Maintain Bundle Project due to be completed by the end of 2017. The other is to be located in Aberdeen City and will be developed as part of The Baird Family Hospital.

These secondary and tertiary maternity services are dependent on a number of other adjacent services available on the Foresterhill Health Campus including for example imaging and intensive care services for women and imaging and paediatric surgical services for neonates.

This major investment provides an opportunity to consider other relevant services to be co-located with maternity services. NHS Grampian plans to create a new facility that addresses other key issues at the same time. This includes gynaecology and obstetrics services which overlap around specific services and will benefit from a more coordinated approach to service delivery e.g. middle and junior grade medical staff cover both services out of hours and are currently delivered from two separate hospitals at ARI and AMH. Also early pregnancy loss services are delivered from both hospitals; a recent review, involving staff and public representatives from the Maternity Services Liaison Committee and SANDS charity, has concluded that this service should be fully integrated with both clinical teams involved in delivering care to this important group of patients in a sensitive and coordinated fashion in accommodation that is designed to meet the particular needs of this client group.

Currently gynaecology and breast in-patient services are delivered from one ward in ARI. This works well and the plan is to continue with this flexible arrangement in The Baird Family Hospital.

There is also a national drive towards co-location of Symptomatic and Breast Screening services to ensure coordinated services and sharing of clinical accommodation e.g. consulting, ultrasound and mammography.

Development of these, mainly women's, services in one facility provides a unique opportunity to integrate these services, optimising the use of staff, accommodation and equipment.

Oncology and Haematology Services

The provision of oncology and haematology services has and continues to be subject to considerable change, resulting from the development of new treatment regimens and a continuing growth in the incidence and prevalence of cancer predicted to be in the region of 8% increase in new cases every 5 years up to 2020.

In recent years, NHS Grampian has worked as part of NOSCAN (North of Scotland Cancer Network) to plan services across the north as part of a virtual service, enabling patients, where possible, to access services locally in their own Board area and in their own locality depending on the nature of the treatment.

Over the last 5 years, NHS Grampian has sought to progress its plans to enhance cancer services to better meet the needs of the Grampian population and also the needs of the patient being looked after in or by Grampian clinicians as part of the virtual North of Scotland cancer network.

The development of The ANCHOR Centre has been approached on an incremental basis with the creation of new ward accommodation in the Matthew Hay Building opened in 2013. In the region of 50% of patients admitted arrive as non-elective patients and are cared for in wards that are co-located with the Emergency Care Centre and with other interdependent acute clinical services e.g. Respiratory Medicine.

The development of The ANCHOR Centre is the next significant phase in the development of services for haematology and oncology, creating much needed day and out-patient treatment and support accommodation space.

The new ANCHOR Centre will be co-located with the already commissioned Radiotherapy Centre. The two facilities will be joined on at least one level and will be two halves of one whole, delivering ambulatory services for oncology and haematology patients from the single conjoined ANCHOR Centre.

9.0 Benefits

The investment proposed in this Initial Agreement is crucial to the modernisation and future development of women's and oncology and haematology Services. It will bring benefits to a wide range of stakeholders and these are set out for each investment objective in the tables that follow:

9.1 Women's Services

Investment Objective 1: Timely Access to Care Investigation and Treatment			
Benefit	**Relative value**	**Relative timescale**	**Type of benefit**
Access to RACH theatres for neonatal surgery is quick and easy	High	Short term	Quantitative
Access to Imaging including MRI in ARI for neonates is quick and easy	High	Short term	Quantitative
Access to ITU/HDU at ARI for patient transfers is quick and easy	High	Short term	Quantitative
Access to Imaging at ARI for patients is quick and easy	High	Short term	Qualitative
Safe labour ward and theatre journey for maternity patients	High	Short term	Qualitative
Maintain NHS Grampian's position as Board with highest level of attendance at Breast Screening Service	Medium	Short term	Quantitative

Investment Objective 2: Improved Effectiveness and Efficiency			
Benefit	**Relative value**	**Relative timescale**	**Type of benefit**
Maintain and potentially improve upon the present low levels of Healthcare Acquired Infection rates	High	Medium term	Quantitative
Reduced length of stay for Gynaecology and Breast patients	High	Medium term	Quantitative
Decrease in repeat appointments for breast patients	Medium	Medium term	Quantitative
Increase in number of Gynaecology and Maternity patients attending as a day or an out-patient	High	Medium term	Quantitative
Increase in 23-hour surgery for Breast and Gynaecology patients	High	Medium term	Quantitative
A sustainable workforce	High	Medium term	Qualitative
Appropriate learning environment to support the development of staff from all professions	Medium	Medium term	Qualitative
Integrated/co-located working	Medium	Medium term	Qualitative
Avoid unnecessary maternity transfers out of region	High	Medium term	Quantitative
Avoid unnecessary neonatal transfers out of region	High	Medium term	Quantitative
Increase participation in clinical trials across women's and neonatal services	Medium	Medium term	Quantitative
Increase participation in clinical trials for reproductive medicine	Medium	Medium term	Quantitative
The new hospital will be functionally suitable and meet the objectives outlined in the Design Statement.	High	Short term	Qualitative

Investment Objective 3: Person Centred Care			
Benefit	**Relative value**	**Relative timescale**	**Type of benefit**
100% surgical pre-assessment	High	Medium term	Quantitative
85% admission on day of surgery	High	Medium term	Quantitative
Minimise inappropriate hospital stays for mothers whose babies require care, also to provide a safe environment for parenting and bonding	High	Medium term	Qualitative
Improved choice for women in relation to place of birth and facilities either at home or in one of two obstetric and three community maternity units	High	Medium term	Qualitative
Patients will be cared for in an environment that provides appropriate privacy and dignity	High	Short term	Qualitative
There will be safety of environment for patients, staff and visitors	High	Short term	Qualitative
The facility will allow the services to better meet the psychological and emotional needs of diverse groups of patients in a caring and compassionate environment i.e. early pregnancy loss, reproductive medicine, patients experiencing cancer diagnosis etc	High	Short term	Qualitative

9.1 Oncology and Haematology Services

Investment Objective 1: Patient Centred Care			
Benefit	**Relative value**	**Relative timescale**	**Type of benefit**
Patients will be cared for in an environment that provides appropriate privacy and dignity	High	Short term	Qualitative
There will be safety of environment for patients, staff and visitors	High	Medium term	Qualitative
The facility will allow the services to better meet the psychological and emotional needs of diverse groups of patients in a caring and compassionate environment i.e. distressed patients with malignant disease	High	Short term	Qualitative
Increased whole person support i.e. facility will allow for provision of podiatry, approved complimentary therapies, prosthetic service and Third Sector support to patients and their families	Medium	Medium term	Qualitative
Improved provision for teenagers and young adults	Medium	Short term	Qualitative
The facility will be designed to allow for the patient's physical journey through oncology and haematology services to be smooth and easy for patients and their families	High	Short term	Qualitative

Investment Objective 2: Improved Access to Treatment			
Benefit	**Relative value**	**Relative timescale**	**Type of benefit**
Improved ambulatory care services will allow for patients to be cared for in a day or out-patient setting as the norm, with a subsequent reduction in inappropriate use of ward accommodation	High	Medium term	Quantitative
To achieve and sustain national cancer waiting time and treatment targets	High	Medium term	Quantitative

Investment Objective 3: Improved Efficiency and Effectiveness			
Benefit	**Relative value**	**Relative timescale**	**Type of benefit**
The facility will allow for day and out-patient services to be co-located which will promote flexible working and shared use of clinical and support space	Medium	Medium term	Qualitative
The facility will include a Pharmacy Aseptic Suite which will be fit for purpose and fully compliant with all required legislation for the safe preparation of chemotherapy treatments	High	Short term	Quantitative
To increase participation in clinical trials across oncology and haematology services	Medium	Medium term	Quantitative
Create an environment that supports a sustainable workforce	High	Medium term	Qualitative
To provide up-to-date learning facilities in an appropriate environment to support the development of clinical professional staff	High	Medium term	Qualitative
The new centre design will be functionally suitable and meet the objectives outlined in the agreed Design Statement	High	Short term	Qualitative
The ANCHOR Centre will continue to provide secondary and tertiary services for the North of Scotland, taking account of the predicted increases in incidence and prevalence and of changes in treatment type and treatment location	High	Medium term	Quantitative

10 Strategic Risks

Numerous national and international studies have shown that one of the main reasons for change projects being unsuccessful in terms of cost and time overruns and/or failing to deliver the expected benefits is as a result of the failure to properly identify and manage risk within the project. This section takes an early view of the key risks that could impact on the successful delivery of the project and sets out what actions the partners in the project will take to ensure risk is minimised and managed. A more detailed assessment of risk will be included in the Outline Business Case and the process of risk management will continue throughout the life of the project and then transfer to the operational management of the organisation. The following table sets out the high level early stage assessment of risks associated with the project.

The risks associated with the project are recorded on an emerging risk register maintained by the Project Team. A copy of the current emerging risk register is included as Appendix B. Additionally, Section 16 includes a description of how risks will be managed within the project. Risks for the project are categorised as strategic or operational. The following section considers the strategic risks in more detail.

Project Approvals

Delivery of the project on time (by 2020) is contingent on the timely approval at key stages of the project both by NHS Grampian and the Scottish Government. The approvals that will be required are:

- Initial Agreement (IA)
- Outline Business Case (OBC)
- Full Business Case (FBC)
- Full Business Case Addendum

In addition, following OBC through to FBC approval, the project will be monitored for timely progression at Key Stage Reviews undertaken by Scottish Futures Trust, on behalf of the Scottish Government Health and Social Care Directorate.

This business risk has been scored as a high within the risk register. The risk is being managed by the use of project programming and resource planning for achievement of each key milestone. Progress on these issues is reported regularly to the Project Board.

Stakeholder Engagement with Project

Critical to the success of the project is stakeholder engagement to ensure that service benefits are achieved and user expectations are met.

These business risks have broadly been scored as medium within the risk register, however the risk associated with ensuring that staff are engaged with the process has been scored as high.

This risk is being managed formally via consultation and communication and informally by ensuring participation in the design stages of the project by service and patient representatives impacted by the project. A communication resource forms part of the project team and a Communication Strategy is being developed and its effectiveness will be reviewed periodically by the Project Board.

Project Structure and People

The project governance structure is set out in Outline Project Management Case (section 16). There is a risk that the project will lack clear direction and sufficient resources to deliver its objectives.

This business risk has been scored as high within the risk register. As set out in section 16, a clear structure for the project has been designed and will be applied. The project is appointing a set of advisors and, as part of this process, it is seeking flexibility to call off additional support to ensure that the project programme can be

delivered. The recruitment of appropriately experienced Project Team members is being progressed and the Project Board regularly receives updates in this area.

Funding

Public sector funding constraints mean that the revenue and capital costs need to be contained within the available funding envelope. Initial costings of the project have been prepared and will be refined throughout the approval phase of the project. There is a risk that the costings for the project will not be affordable within the funding envelope.

This business risk has been scored as high. Additionally, the investment objectives outlined within this IA will require a substantial service redesign agenda to be pursued in tandem with the project programme.

This redesign plan will be developed with the relevant NHSG operational management teams and any cost pressures resulting from the redesign agenda agreed by NHSG at intervals through key stages of the project.

Commercial Risks

To deliver the project under the NPD model will require NHS Grampian to engage with a consortium of private sector partners to secure a design, build, construction and finance arrangement. There is a risk that there will be insufficient private sector interest or a robust supply chain able to deliver the project within the VFM constraints imposed.

This business risk has been scored as high within the risk register. NHS Grampian has appointed Technical Advisors to support the design and presentation of the project to the market using their experience of this type of project. Appropriate procurement routes are being considered early and continuous engagement with the market is planned. This risk will be monitored continuously by the Project Board in conjunction with SFT, taking into account current market experience in this type of arrangement.

Site Availability and Construction

As set out in section 12, preferred site locations for each building have been identified. For the sites to be available for construction, significant enabling works, planning consents and site investigations will require to be delivered within a tight timescale. In addition, it is recognised that construction works may encounter delays.

The business risk associated with availability of the sites has been scored as high within the risk register. The service risk associated with construction has been scored as high within the risk register.

Early engagement with stakeholders, including the Aberdeen City Council Planning Department, has been undertaken and development of a programme of works to deliver available sites within the constraints of the project programme has been

progressed. Significant focus on achieving site availability is in place with buy-in from the wider infrastructure investment programme of NHS Grampian secured.

Critical Path Enabling Works

Delivery of a range of key enabling works are vital to the successful delivery of the agreed programme for this NPD project. This risk is scored as a high risk in the risk register.

Discussion regarding the inclusion of the replacement Foresterhill Health Centre in the L & I hubCo Bundle Project has already been progressed in discussion with SFT and hub North Scotland Ltd. A draft new Project Request Form has been developed.

Option appraisal exercises to agree the solutions for the relocation of the Eye Clinic and temporary relocation of the Breast Screening Centre are underway and NHSG capital funding for the moves has been identified.

Delivering Services

It is planned that the new facilities will support significant service redesign and the delivery of key service strategies e.g. Maternity Strategy and outcomes. To ensure the delivery of this, there is a requirement to map service delivery aspirations to the design of the new facilities. There is a risk that the clinical strategy will lack clarity and that staffing structures to support the redesigned service cannot be achieved.

These business risks have been scored as medium to high within the risk register. The project team includes dedicated resources to represent the service and ensure integration of service redesign with the new facilities. External Healthcare Planners have led various groups of stakeholders in the early design of service specifications through a series of over 50 workshops involving over 200 staff and public representatives. The mapping of service delivery needs to that of the facilities to be provided will be subject to regular reporting to the Project Board.

Business Continuity

The project team have considered planning for business continuity and contingencies when reviewing the risks of the project and will develop plans to address.

It is anticipated that services will continue to be delivered under the current arrangements until the new buildings have been commissioned and a strong emphasis will be placed on preparing and resourcing for the changes anticipated. The project team will be fully resourced through the commissioning phase to accommodate this.

In relation to the project team, a strong emphasis has been placed on building a resilient team which will be augmented with the use of external advisors as appropriate.

11.0 Constraints and Dependencies

The service redesign changes outlined in this IA are critical to the delivery of efficient, effective, safe and affordable care. In our current financial climate, there is no prospect of additional funding so the focus will be on implementing the required changes within the resources available. That will mean difficult decisions about prioritising existing resources.

NHS Grampian aims to provide quality affordable assets complementing and supporting the high quality services which meet the population needs and are financially sustainable over the long term. Facilitating service redesign and delivery of new assets within the current financial environment is challenging and prioritising of existing capital and revenue resources and efforts will be required to support the delivery of this project.

The table below seeks to summarise the main constraints and dependencies to be considered by the project team:

Financial	Capital Funding: Public sector funding is such that the availability has to be prioritised to enable this project to go ahead. In addition, some components of the proposed project will have to be met from NHS Grampian's capital resources, which have many pressures on it.
	Revenue Funding: There are many pressures on the revenue resources of NHS Grampian and funding available is limited by the climate of public sector constraint. The project will require to be delivered within existing resources and will require delivery of efficiencies and prioritisation.
Commercial	An agreed funder must be identified with terms that are agreeable to all key stakeholders.
Programme	SGHSCD have requested that the project is completed by the end of 2020. Relocation of Foresterhill Health Centre, the Eye Clinic and the Breast Screening Centre as project enabling works must be completed by the end of 2017 or the NPD project could be delayed.
Quality	The preferred design solutions should achieve an AEDET score of 4 – 6 in all 10 categories.
	The designs are compliant with the Authority Construction Requirements.
Acquisition	Agree solution with site co-owners (NHS Grampian and University of Aberdeen)

Planning	Planning in principle for the Baird and ANCHOR project must be in place before the project goes to OJEU. Full planning consent must be in place before FBC approval and Financial Close for the Baird and ANCHOR project. Full planning consent for the relocated FHC must be in place before FBC approval and Financial Close.
Sustainability	The BREEAM pre-assessments demonstrate the potential to achieve BREEAM excellence if at all possible. The project should contribute to the NHS Grampian Carbon Target.
Service	The existing facilities continue to deliver services until the new facilities are in full operation.

The Economic Case

12.0 The Development and Evaluation of Options

The SCIM guidance on business case development emphasises that the economic case should not simply be concerned with the financial consequences of the proposed project but also the non-financial aspects. Making the right investment decisions relies on the Project Group selecting a preferred way forward from the range of options available and this must follow from a rigorous appraisal of options against the investment objectives and critical success factors for the project.

The SCIM process for the selection of options involves generating a long list of service options using the Options Framework approach whereby service options are systematically worked through in terms of scope, service solution, service delivery, implementation and funding options (the five categories of choice). The long list of options is then reduced to a shortlist through a rational assessment process which involves assessing options against a set of investment objectives and critical success factors which have previously been developed for the project. This approach leads to the construction of a reference project from the preferred choice in each category of choice. The reference project is essentially the preferred way forward given that it is predicated upon the best assessment at this stage of the possible scope, service solution, service delivery, implementation and funding choices.

The Baird Family Hospital and ANCHOR Centre Project Team carefully considered the SCIM process for the development and evaluation of options for the project and concluded that this project has a number of unusual aspects which necessitated adapting the SCIM process for development and appraisal of options. This adapted process maintains the SCIM overall objective of ensuring that a sound, robust analysis is undertaken to support effective decision-making and that ultimately:

- resources are applied effectively to support service delivery
- the impact of the investment decisions are maximised in terms of benefits
- the project provides value for money
- the process facilitates good project management and project evaluation.

The aspects of this project that required the SCIM options development and appraisal process to be adapted include:

- The investment in infrastructure proposed in this Initial Agreement is a continuation of the implementation of NHS Grampian's Healthfit 2020 vision for continuous change and modernisation of the health system in Grampian. A key part of this vision is the use of the Foresterhill Health Campus for the introduction of new models of care which aim to deliver care as close to home as possible, placing less reliance on acute in-patient beds and with a clear focus on responding to individuals' needs. This requires significant redesign and re-organisation of services on the site if current good practice is to be applied consistently and comprehensively. Significant investment in infrastructure has already been made in recent years to support this vision and this inevitably limits the options for this project to those which are compatible with the overall vision of

the future use of the site and which build on the recent investment already completed.

- A number of the services included within the scope of this project are tertiary and specialist services provided on a regional basis and NHS Grampian's key role in providing these services for the North of Scotland needs to be maintained. Therefore, it would not be appropriate or productive in preparing this Initial Agreement to examine options for major changes in ways that these services are structured and organised on a national or regional basis. As such, there are limited service options and choices for the provision of these services.

- Many of the services within the scope of this project have critical links to other clinical services and research/teaching/training facilities on the Foresterhill Health Campus. Similarly, they make extensive use of the major infrastructure, skills and technology capacity that is inherent on this major acute site. Again, it was not considered to be appropriate or technically feasible to examine options for re-locating these services from the Foresterhill Health Campus in this Initial Agreement.

Whilst the above constraints limit the availability of service redesign options, site location options for the major infrastructure and building works for this project are critical at this early stage in the development of the project. The Foresterhill Health Campus is already relatively well developed and this project needs to be carefully considered in terms of its impact on both the existing infrastructure and buildings as well as the significant developments planned for the future, particularly the major redevelopment involved in the planned replacement of in-patient accommodation (Phase 2) in 2025+. For this reason, the economic appraisal section of this Initial Agreement has a major focus on the development and appraisal of site location options for the substantial new buildings planned for the project. This was intended to help and enable critical decisions regarding the relocation/replacement of the existing facilities such as Foresterhill Health Centre to be made at this early stage thereby facilitating the achievement of both value for money through its inclusion in a "hub procurement bundle" and the delivery of The Baird Family Hospital and The ANCHOR Centre project by the required timescale of 2020.

12.1 The Appraisal of Site Location Options

On 8 December 2014 a workshop involving a range of stakeholders including clinicians, service managers and public members from the local community was undertaken to carry out an appraisal of the non-financial benefits and risks of the shortlisted site location options. The workshop was facilitated by an independent management consultant and the workshop process involved:

- Reviewing and agreeing a set of non-financial benefit criteria and weighting these to reflect the workshop group's view of the relative importance of each criterion

- Examining a shortlist of options against the criteria and, following discussion, agreeing on how well each option could be expected to meet the criteria and then allocating a score (maximum 10 and minimum 0) for each option against each criterion

- Computing an overall weighted benefit score (summated scores x weight) for each option. This weighted benefit score is simply a measure of how well the workshop participants considered each option was likely to deliver the benefits required from the project

- Reviewing the weighted benefits scores from the appraisal and, following discussion, agreeing that they represented an accurate assessment of the group's views of how well each option is likely to perform in terms of delivering the benefits required from the investment in the project.

Whilst the aim was to reach a consensus score on each option against each criterion, it was recognised that with any group this may not always be possible and the facilitator recorded pessimistic and optimistic scores where individual group members had reservations on the consensus score or where there was general doubt on the magnitude of the consensus score. Prior to scoring, the workshop group reviewed, amended and agreed guidance on scoring. The purpose of this guidance was to provide a basis for calibration of scoring and to improve the consistency and accuracy of scoring across options and criteria.

12.1.1 Shortlisted Options

Prior to the workshop, preliminary technical feasibility studies and design work was undertaken to develop a shortlist of options for locating the proposed facilities within the Foresterhill Health Campus, taking into account the required clinical and service adjacencies, patient, staff and goods logistics and the need to comply with the Foresterhill Development Framework. This work included taking into account the potential long term need to accommodate future development projects such as the replacement of the existing Phase 2 facilities. The short list of options that emerged from this work is summarised as follows:

Option 1 – (i) The ANCHOR Centre adjacent to the existing Radiotherapy Centre:
(ii) The Baird Family Hospital on the site of the existing Foresterhill Health Centre
(iii) Future potential development to replace Phase 2 would be adjacent to the new ANCHOR Centre.

Option 2 – (i) The ANCHOR Centre between Radiotherapy and Matthew Hay Building
(ii) The Baird Family Hospital located on the site of existing Eye Clinic/adjacent to RACH
(iii) Future potential development to replace Phase 2 would be on the existing Foresterhill Health Centre site.

Option 3 – (i) The ANCHOR Centre adjacent to the Radiotherapy Centre
(ii) The Baird Family Hospital located adjacent to Maggie's Centre
(iii) Future potential development to replace Phase 2 would be adjacent to The Baird Family Hospital

Option 4 – (i) The Baird Family Hospital and The ANCHOR Centre joined on site of existing Eye Clinic/adjacent to Matthew Hay Building and Radiotherapy Centre
(ii) Future potential development to replace Phase 2 would be on the existing Foresterhill Health Centre site

Indicative drawings showing the massing of the main buildings envisaged in each of the above options are shown in Appendix C.

12.1.2 Benefit Criteria

The Benefit Criteria agreed and weighted to reflect the workshop group's views on the relative importance of each criterion are shown in the table that follows:

Benefit Criteria	Workshop 08/12/14		
	Rank	Weight	Normalised Weight
Effective and Safe Service Delivery	1	100	19.61
Accessibility	2	90	17.65
Compatible with Foresterhill Master Plan/Development Framework	3	85	16.67
Flexibility/Future Proofing	4	80	15.69
Best Use of Resources	5	80	15.69
Disruption	6	75	14.71
		Total	100

12.1.3 Non-financial benefits - scoring of options

The workshop group's scores for each option against each criterion are shown in the table below.

	Option 1			Option 2			Option 3			Option 4		
Scoring of Options	The Baird Family Hospital on Foresterhill HC site			The Baird Family Hospital adjacent to Children's Hospital			The Baird Family Hospital adjacent to future development			The Baird Family Hospital integrated with ANCHOR Centre		
Benefit Criteria	consensus	optimistic	pessimistic	consensus	optimistic	pessimistic	consensus	optimistic	pessimistic	consensus	optimistic	pessimistic
Effective and Safe Service Delivery	6	8	3	4	5	2	7	9	6	4	5	2
Accessibility	8	8	8	9	9	9	6	6	6	9	9	9
Compatible with Foresterhill Master Plan/Development Framework	10	10	10	4	4	2	4	4	2	4	4	2
Flexibility/Future Proofing	7	8	7	7	8	7	3	5	2	6	7	5
Best use of Resources	6	8	6	4	6	2	7	7	7	6	7	4
Disruption	7	7	7	7	8	7	5	5	3	6	7	5

The table shows that whilst on most of the criteria there is little difference in scores across the three scoring scenarios (consensus, optimistic and pessimistic), there are a number of criteria where the workshop group were either unsure on the magnitude of the score or there were varying views across the workshop group. In these cases, optimistic and pessimistic scores were recorded as shown in the table. These optimistic and pessimistic scores provide the basis for sensitivity analysis shown later in the report.

The table also shows that there are a number of low consensus scores for some options in relation to particular criteria indicating that the workshop group considered that in these cases the option was unlikely to provide the required level of benefit.

The rationales for the differences in scores is summarised in the table that follows.

Option No	Rationale for Scores
1	**Advantages:** (i) Highly efficient and effective service delivery due to excellent links to Phase 2 (Theatres) and RACH. Subsequent redevelopment plans for new IP can ensure safe and most direct link corridors are developed. (ii) Having the two new developments on opposite sides of the campus improves accessibility in terms of access from main routes into ARI. (iii) This options best fit's master planning / Foresterhill Development Framework. (iv)This option allows expansion of both new developments. (v)Minimum disruption in terms of service continuity during construction. **Disadvantages:** (i) Need to re-provide Foresterhill Health Centre & Breast Screening Service
2	**Advantages:** (i) No urgency to re-provide FHC and BSS. **Disadvantages:** (ii) Patient safety issue due to distances between The Baird Family Hospital and current P2 and future new IP. (ii) New IP build not coherent with Master Planning. (iii) Future Expansion of The ANCHOR Centre is limited. (iv) Having the two new developments in close proximity makes access a problem both in terms of causing bottlenecks onto the main roads on the East End site of the campus. Concentrates patient activity onto East end site. (v) Disruption to RACH during construction and may impact on service continuity for radiotherapy during linking phase.
3	**Advantages:** (i) Services Delivery effective due to close adjacencies in the future between clinical blocks. **Disadvantages:** (i) Patient safety issue due to distances between The Baird Family Hospital and current P2 for the first 5 – 8 year period before new IP build is completed. (ii)Accessibility – Poorest of all four options. (iii)Future expansion non-existence. (iv)Ground-Lock and build-ability issues. (v)More disruption during construction and will impact on service continuity for both new developments.
4	**Advantages:** (i)No urgency to re-provide FHC and BSS. (ii)Economies of scales during construction due to being built as a single block (marginal). **Disadvantages:**

	(i)Patient safety issue due to distances between The Baird Family Hospital and current P2 and future new IP. (ii)New IP build not coherent with Master Planning. (iii)Future Expansion of The ANCHOR Centre is limited. (iv)Having the two new developments in close proximity makes access a problem both in terms of causing bottlenecks onto the main roads on the East End site of the campus. Concentrates patient activity onto East end site. (v) Disruption to RACH during construction and may impact on service continuity for radiotherapy during linking phase.

12.1.4 Results of the appraisal of non-financial benefits

The results from the non-financial benefits appraisal are summarised in the table that follows. The overall weighted benefit scores have been computed by multiplying the consensus score for each option on each criterion by the weight given to each criterion and then summating these weighted scores to arrive at an overall weighted benefit score for each option.

Option No	Option Description	Weighted Benefits Score	Rank
1	The Baird Family Hospital on Foresterhill HC site	732	1
2	The Baird Family Hospital adjacent to Children's Hospital	579	3
3	The Baird Family Hospital adjacent to future development	540	4
4	The Baird Family Hospital integrated with ANCHOR Centre	580	2

A number of conclusions can be drawn from these results:

- Option No 1 has a relatively high overall weighted benefits score (the maximum possible weighted benefit score using this system is 1000). This indicates that the workshop delegates considered that this option could be expected to perform well in terms of meeting the criteria and delivering the benefits required from the investment in the project.
- The relatively low weighted benefits scores of Options 2, 3 and 4 reflect the workshop group’s concern that these options are unlikely to deliver the required level of benefits.
- The relatively large difference between the weighted benefits score of Option 1 and the other three options confirms that this site option is expected to maximise the required non-financial benefits from the site.

12.1.5 Risk Assessment

The majority of risks associated with the shortlisted options have been measured and quantified in monetary terms and included in the calculated Net Present Cost of each option. Hence, the costs used in the economic appraisal shown later in this IA have been risk adjusted to reflect the main business, operational and project implementation risks including:

- Planning, design and construction risks
- Commissioning risks

- Operational risks
- Service risks
- Business risks
- Optimum bias

Recognising that not all risks can be quantified in monetary terms, the non-financial risks associated with the shortlisted options were identified and appraised at the workshop on the 8 December 2014. This appraisal was similar to that used for the non-financial benefits and involved:

- Reviewing each of the shortlisted options to identify potential non-financial risks.
- Assessing each risk in terms of its likelihood and impact
- Computing a risk score for each option by multiplying the likelihood and impact scores

The results from the appraisal of non-financial risks is summarised in the table that follows:

	Likelihood (0 - 10)				Impact (0 - 10)				Risk Score			
	Option				Option				Option			
Non-financial Risks	1	2	3	4	1	2	3	4	1	2	3	4
Buildability	2	1	9	7	2	2	10	6	4	2	90	42
Operational problems - car park management, buses etc	7	9	10	9	7	8	10	8	49	72	100	72
Patient choice - patients choose centre rather than community (CMU)	5	5	5	5	7	7	7	7	35	35	35	35
Planning	2	5	7	5	8	8	8	8	16	40	56	40
Impact on radiology configuration	5	5	5	5	5	5	5	5	25	25	25	25
Transfer times - internal Pre Phase 2	5	9	9	9	9	9	9	9	45	81	81	81
Transfer times - internal Post Phase 2	9	8	3	8	9	9	9	9	81	72	27	72
Replacement of FH Health Centre by 2017	4	0	0	0	8	8	8	8	32	0	0	0
Decant accommodation for Breast Screening	10	0	0	0	8	8	8	8	80	0	0	0
Reprovide Eye Clinic	7	7	7	7	8	8	8	8	56	56	56	56
Road layouts and accessibility for urgent access	5	6	10	6	7	7	7	7	35	42	70	42
Safety - personal safety for Women's Hospital	5	4	6	4	8	8	8	8	40	32	48	32
						Total Risk Score			498	457	588	497

These results show that the workshop group considered that all the options were relatively low risk with Overall Risk Scores ranging from 457 to 588 (maximum possible risk score is 1200). The risks identified in this exercise will be incorporated into the overall risk register for the project with mitigation strategies developed as the project progresses.

12.1.6 Net Present Costs (NPC)

Indicative, high level capital and facilities management costs for the four options were developed and have been used for an economic appraisal of the shortlisted options. This resulted in a Net Present Cost (NPC) for each option which takes into account the capital and revenue costs of the options over 60 years using Discounted Cash Flow techniques. Hence, the economic appraisal enables the options to be compared in terms of their total costs. In accordance with SCIM and HM Treasury Guidance, the NPCs have been calculated using the Treasury's Generic Economic Model (GEM) which uses a discount rate of 3.5% for the first 30 years of the

appraisal and 3% thereafter, enclosed as Appendix D. The results are shown in the table that follows:

Option No	Option	Net Present Cost (NPC) £millions over 60 years
1	The Baird Family Hospital on Foresterhill HC site	181.234
2	The Baird Family Hospital adjacent to Children's Hospital	173.354
3	The Baird Family Hospital adjacent to future development	172.733
4	The Baird Family Hospital integrated with The ANCHOR Centre	173.356

12.1.7 Value for Money

Weighted benefit scores can be directly compared with Net Present Costs to help assess trade-offs between costs and benefits. This enables options to be compared in terms of value for money. The results from this analysis are shown in the table that follows:

Option No	Option	Weighted Benefits Score (Consensus)	Net Present Cost £million	Cost per Unit of Weighted Benefit Score £
1	The Baird Family Hospital on Foresterhill HC site	732	181.23	247,467
2	The Baird Family Hospital adjacent to Children's Hospital	579	173.35	299,188
3	The Baird Family Hospital adjacent to future development	540	172.73	319,763
4	The Baird Family Hospital integrated with The ANCHOR Centre	580	173.35	298,687

The table shows that whilst the Net Present Cost of Option 1 is higher than that of the other three options, its significantly higher Weighted Benefit Score results in a lower Unit of Weighted Benefit and, therefore, it provides best value for money i.e. the required benefits costs less in this option.

12.1.8 Preferred Option

The results from the four appraisals of the shortlisted options i.e. benefits, risks, costs, and value for money are brought together in the table that follows which shows the ranking of each option in each appraisal (1 is highest ranking i.e. best, 4 is lowest ranking i.e. worst):

		Ranking of Options by Appraisal			
	Option No/Description	**1**	**2**	**3**	**4**
		The Baird Family Hospital on Foresterhill HC site	**The Baird Family Hospital adjacent to Children's Hospital**	**The Baird Family Hospital adjacent to future development**	**The Baird Family Hospital integrated with The ANCHOR Centre**
Non-Financial Benefits Appraisal	WBS (consensus)	732	579	540	580
	Rank	1	3	4	2
Non-Financial Risks Appraisal	Overall NF Risk Score	498	457	588	497
	Rank	3	1	4	2
Economic Appraisal	Net Present Costs (60 years) £m	181.23	173.35	172.73	173.36
	Rank	4	2	1	3
Value for Money	Cost per Benefit Point £	247,467	299,188	319,763	298,687
	Rank	1	3	4	2

The table shows that Option 1 is ranked highest in two of the four appraisals indicating that overall it is the preferred option since it is the one most likely to maximise the non-financial benefits required from the project, provides best value for money and has an acceptable level of risk.

12.1.9 Sensitivity Analysis

Sensitivity analysis is fundamental to option appraisal since it is used to test the robustness of the ranking of options and the selection of a preferred option. It examines the vulnerability of options to changes in underlying assumptions and future uncertainties. For this project it has been undertaken in two stages:

- **Scenario Analysis** – examining the impact of changing scores, weights and net present costs through a number of scenarios
- **Switching Values** – computing the change required to bring about a change in the ranking of the options

Scenario Analysis

This analysis has examined the impact on the weighted benefit scores of more optimistic or pessimistic scoring scenarios. The optimistic and pessimistic scores from the workshop have been used to re-calculate weighted benefit scores and these are shown in the table below. The weighted benefits scores derived from the consensus scores are also shown in the table for comparative purposes:

		Scoring Scenario					
		Optimistic		Consensus		Pessimistic	
Option No	Option Description	WBS	Rank	WBS	Rank	WBS	Rank
1	The Baird Family Hospital on Foresterhill HC site	819	1	732	1	674	1
2	The Baird Family Hospital adjacent to Children's Hospital	661	2	579	3	475	2
3	The Baird Family Hospital adjacent to future development	611	4	540	4	442	4
4	The Baird Family Hospital integrated with The ANCHOR Centre	646	3	580	2	446	3

It can be seen from the table that the ranking of options does not significantly change as a result of adopting more optimistic or more pessimistic scoring. Option 1 remains superior in terms of expected non-financial benefits in all three scoring scenarios.

Weighting Scenarios

The weighted benefit scores shown earlier in this Initial Agreement have been calculated using the weights applied to the criteria as agreed by the workshop delegates on 8 December 2014 and which reflect their views of the relative importance of each criterion. However, given the subjective nature of the weighting of criteria, the workshop group also agreed on the need to examine the impact of adopting three further weighting scenarios, all of which were considered plausible and reasonable:

- **Increased importance given to "Flexibility/Future Proofing" -** by switching the weight of "Flexibility/Future Proofing" with that of "Compatible with the Foresterhill Masterplan/Development Framework".
- **Increased importance given to "Flexibility/Future Proofing" –** by switching the weight for "Flexibility/Future Proofing" with that of "Accessibility"
- **All criteria equally important -** equal weights applied to the criteria**.** This is a reasonable and plausible scenario to examine since experience from other workshops has frequently shown this to be a scenario that broadly represents a wide body of public opinion i.e. all the criteria are equally important.

The table that follows shows the weights applied in these three scenarios and compares them with original weightings developed by the workshop:

	Weighting Scenarios			
	No 1	**No 2**	**No 3**	**No 4**
Benefit Criteria	**Workshop 08/12/14**	**"Flexibility" switched with "Compatible with Masterplan"**	**"Flexibility" switched with "Accessibility"**	**Equal Weights**
Effective and Safe Service Delivery	19.6	19.6	19.6	16.7
Accessibility	17.6	15.7	15.7	16.7
Compatible with Foresterhill Master Plan/Development Framework	16.7	16.7	16.7	16.7
Flexibility/Future Proofing	15.7	17.6	17.6	16.7
Best use of Resources	15.7	15.7	15.7	16.7
Disruption	14.7	14.7	14.7	16.7
	100	**100**	**100**	**100**

The impact on the overall weighted benefit scores of adopting these weighting scenarios is shown in the table that follows:

Option No	Option Description	Weighting Scenario							
		No 1		No 2		No 3		No 4	
		Workshop 08/12/14		"Flexibility" switched with "Compatible with Masterplan"		"Flexibility" switched with "Accessibility"		Equal Weights	
		WBS	Rank	WBS	Rank	WBS	Rank	WBS	Rank
1	The Baird Family Hospital on Foresterhill HC site	732	1	730	1	731	1	733	1
2	The Baird Family Hospital adjacent to Children's Hospital	579	3	575	2	575	2	583	3
3	The Baird Family Hospital adjacent to future development	540	4	534	4	534	4	533	4
4	The Baird Family Hospital integrated with The ANCHOR Centre	580	2	575	3	575	3	583	2

It can be seen that the ranking of options does not materially change as a result of adopting the three different weighting scenarios and Option 1 is consistently the highest ranked option.

Net Present Cost Scenarios

The net present costs used earlier in this Initial Agreement are the expected outturn costs for the options taking account of the expected impact (monetised) and probability of all risks. It is calculated by determining optimistic and pessimistic outturn costs and the probability of each of these outcomes occurring. An assumption has been made that the optimistic outturn costs has a probability of 0.05 and pessimistic outturn cost has a probability of 0.15 i.e. the pessimistic outturn cost is more likely than the optimistic one. These outturn costs are shown in the table that follows:

		Net Present Cost (NPC) £millions over 60 years		
Option No	**Option**	**Optimistic**	**Expected**	**Pessimistic**
1	The Baird Family Hospital on Foresterhill HC site	161	181.23	197
2	The Baird Family Hospital adjacent to Children's Hospital	154	173.35	189
3	The Baird Family Hospital adjacent to future development	154	172.73	188
4	The Baird Family Hospital integrated with The ANCHOR Centre	154	173.36	189

The optimistic and pessimist outturn cost scenarios have been used to re-examine the value for money comparisons and the results are shown in the table that follows:

		Value for Money based on different Outturn Cost Scenarios		
		Optimistic Outturn Cost	**Expected Outturn Cost**	**Pessimistic Outturn Cost**
Option No	**Option**	**Cost per Unit of Weighted Benefit Score £**	**Cost per Unit of Weighted Benefit Score £**	**Cost per Unit of Weighted Benefit Score £**
1	The Baird Family Hospital on Foresterhill HC site	220,515	247,467	269,519
2	The Baird Family Hospital adjacent to Children's Hospital	266,603	299,188	325,849
3	The Baird Family Hospital adjacent to future development	284,937	319,763	348,256
4	The Baird Family Hospital integrated with The ANCHOR Centre	266,157	298,687	325,303

The results in the table show that Option 1 remains best value for money in both the optimistic and pessimistic cost scenarios i.e. its Cost per Unit of Weighted Benefit Score is lowest.

Switching Values

The table below shows the percentage change required on the weighted benefits scores, net present costs and the VFM measure for other options to equal the highest ranked option:

	Switching Values			
	Percentage change required in current values to equal the highest ranked option			
Option No	**Option**	**Weighted Benefit Score**	**Net Present Cost £m**	**Cost per Unit of Weighted Benefit Score £000**
1	The Baird Family Hospital on Foresterhill HC site		4%	
2	The Baird Family Hospital adjacent to Children's Hospital	26.4%		17%
3	The Baird Family Hospital adjacent to future development	35.6%	-0.36%	23%
4	The Baird Family Hospital integrated with The ANCHOR Centre	26.2%	0.00%	17%

The results in the table show both the weighted benefit score and the Cost per Unit of WBS of Options 2, 3 and 4 would need to change significantly in order to equal that of Option 1. Although the NPC of Option 1 is higher, this is only by a small percentage (4%) and this is more than compensated for by its considerably higher non-financial Weighted Benefits Score.

Conclusion from the sensitivity analysis

In conclusion, the sensitivity analysis has shown that the option appraisal results are robust since realistic and plausible changes in the underlying assumptions around costs and benefits do not result in a change in the choice of a preferred option. Furthermore, there would need to be substantial change in Weighted Benefit Scores or Net Present Cost for there to be a change in the ranking of options.

13.0 Preferred Way Forward

The preferred way forward that emerged from the Economic Appraisal entails:

The Baird Family Hospital:

The development of The Baird Family Hospital which will replace the existing Aberdeen Maternity Hospital, including the Aberdeen Centre for Reproductive Medicine and Neonatal Unit, and also include a range of other services for women including gynaecology in-patients/daycases/out-patients, breast screening and symptomatic breast services.

The Baird Family Hospital will be located towards the west of the Royal Aberdeen Children's Hospital on the site currently occupied by the Foresterhill Health Centre and the Breast Screening Centre. This option is consistent with the Foresterhill Devleopment Framework agreed with Aberdeen City Council in 2008. The new facility will be closely linked to Aberdeen Royal Infirmary and the Royal Aberdeen Children's Hospital.

The Baird Family Hospital will bring together in one place a range of secondary and tertiary services for the North of Scotland. This will facilitate more integrated working eg obstetrics and gynaecology as well as symptomatic and breast screening services.

Additionally, the new facility has prompted the development of new ways of working facilitated by the development of appropriate accommodation, providing the opportunity for a move towards ambulatory care as the norm, with in-patient care being reserved for patients with care requirements which demand an extended stay in hospital.

This substantial redesign agenda will result in a significant increase in out and day-patient care and treatment made possible by e.g. 100% surgical pre-assessment, same day admission, appropriate ambulatory care accommodation and the creation of flexible space to optimise space utilisation.

Additionally, the new facility will create the opportunity to strengthen its role as the tertiary centre in the North for a variety of services including obstetrics, gynaecology, neonatology, breast and reproductive medicine.

The ANCHOR Centre:

Completion of The ANCHOR Centre at the south of the east end of ARI adjacent to the new Radiotherapy Centre close to the site currently occupied by the Eye Clinic. The first stage, the Radiotherapy Centre, was completed in 2013 and the investment proposed in this IA will fulfill the second stage to provide out-patient, day-patient and academic/research facilities, together with a range of support facilities, including aseptic pharmacy.

The ANCHOR Centre will bring together all ambulatory services, including day investigation, treatment and out-patient services for oncology and haematology. The new centre will be physically co-located with and connected to the recently commissioned Radiotheray Centre which was built as a first phase of this larger project. Together, in future, the single facility will provide a focus for all ambulatory care oncology and haematology services in the North working with other teams in Highland, Tayside, Orkney

and Shetland to provide care either in the Centre or as part of the virtual cancer service network covering the North of Scotland.

Foresterhill Health Centre:

The relocation of the Foresterhill Health Centre (FHC) to another adjacent site on the Foresterhill Health Campus owned by NHSG on behalf of the Scottish Ministers. This project would be pursued as an enabling work, to allow development of The Baird Family Hospital on the preferred site.

Approval in principle in this Initial Agreement to the relocation of FHC would result in the FHC project being included in the Lochgilphead and Inverurie (L&I) Bundle DBFM Project due to be completed towards the end of 2017. An OBC would be submitted for approval in the autumn of 2015 and a single FBC involving all three projects in April 2016.

The FHC comprises two general practices:

- **Elmbank Group Practice** has a population of 10,340 patients. The Practice operates with 9 General Practitioners and a Practice Nursing Team. Elmbank Group Practice work with a Section 17c Contract that covers all services currently provided via GMS under the National Health Services (General Medical Services) (Scotland) Regulations 2004 as amended.

- **Westburn Medical Group** has a population of 4,827 patients. The Practice operates with 3 General Practitioners and a Practice Nursing Team. Westburn Medical Group work with a Section 17c Contract that covers all services currently provided via GMS under the National Health Services (General Medical Services) (Scotland) Regulations 2004 as amended.

Plans to redevelop the FHC were pursued by NHSG during 2008/09 when the relocation of FHC was progressed as a Framework NEC3 project. The project was developed to an advanced stage and was submitted to the local planning authority for planning consent. It was cancelled along with a number of other projects in 2009 due to a significant reduction in capital funding in Scotland. This project can therefore be progressed quite quickly as it was developed to quite an advanced stage allowing it to be included in the existing L&I hubCo Bundle.

Other key enabling works include:

- The relocation of the Eye Clinic to upgraded space in Aberdeen Royal Infirmary. This is consistent with the agreed Foresterhill Development Framework and is being progressed using NHS capital funding.

- The temporary relocation of the Breast Screening Centre for three years from the end of 2017 until completion of The Baird Family Hospital late in 2020 to existing accommodation on the ARI site. This is being progressed using NHSG capital funding.

14.0 Outline Commercial Case

This section describes the commercial strategy for the investment in The Baird Family Hospital and The ANCHOR Centre and, in addition, the commercial strategy for the advance works with relocation of the Foresterhill Health Centre to elsewhere on the Foresterhill Health Campus. It serves to communicate the following:

- The structure of the project developments and the scope of their contracted services
- The agreed risk allocation
- The type of contract used and some key contractual terms
- The underpinning methods of payment for the services and outputs including any premiums for risk transfer
- The implementation timescales which have been agreed for the delivery of the project.

14.1 The structure of the project developments and the scope of their contracted services

The project's objectives will be taken forward using a combination of the "non-profit distributing" model or (NPD) and the hub model. Both models were established by the Scottish Futures Trust (SFT) on behalf of the Scottish Government as an alternative to, and have since superseded, traditional style private finance procurement in Scotland.

The NPD and hub models are defined by their broad core principles of enhanced stakeholder involvement in the management of the project and capped private sector returns. The standard Project Agreements of both NPD and hub models are substantially similar, differentiated by only minor variations.

The Baird Family Hospital and The ANCHOR Centre project will be delivered by the NPD model via a 'Project Company' (a special purpose limited company funded from a combination of senior and junior debt underpinned by a 25 year service concession contract). The shares in the Project Company are held by the private sector investors with the exception of one "golden share" which is held by the public authority. This "golden share" increases transparency and accountability and underpins the NPD principle of enhanced stakeholder involvement.

Senior debt is provided by funding institutions with arrangement fees set through a funding competition. Junior funding may come from contractors, senior lenders or third party funds and institutions. In the absence of equity returns, the junior lenders are incentivised to manage the "equity risk" to protect their investment and secure their forecast return.

The advance work with relocation of the Foresterhill Health Centre to elsewhere on the Foresterhill Health Campus will be delivered by its inclusion within an existing joint NHS Grampian and Highland hub initiative bundle project. The revised bundled hub project involving Lochgilphead, Inverurie and Foresterhill will be delivered by a 'Sub-hubCo' (a non-recourse vehicle funded from a combination of senior and subordinate debt underpinned by a 25 year service concession contract). The senior debt will be provided by AVIVA Public Private Finance Limited with predetermined arrangement fees agreed with SFT through a framework agreement and the subordinate debt by a combination of private

sector (60%), SFT (10%) and participant investment (30%). The participant investment will include an agreed pro-rata contribution based on the projected capital cost of the projects from both participating Boards (NHS Highland and NHS Grampian).

In essence, both the Project Company and the Sub-hubCo are responsible for providing all aspects of their respective design, construction, ongoing facilities management (hard maintenance services and lifecycle replacement of components) and finance throughout the course of the project term other than a small number of exceptions termed authority maintenance obligations (principally responsibility for making good/replacing wall, floor and ceiling finishes) which will fall respectively to NHS Grampian and NHS Highland.

Soft facilities management services (such as domestic, catering, portering and external grounds maintenance) are excluded from both NPD and Hub Project Agreements with these services being provided by the Boards.

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Group 1 items of equipment, which are generally large items of permanently installed plant or equipment, will be supplied, installed, maintained and replaced by the respective Project Company and Sub-hubCo throughout the project term.

Group 2 items of equipment, which require to be fixed to the building structure, will be supplied by the Board, installed by the respective Project Company or Sub-hubCo, and maintained by the Board.

Group 3 - 4 items of equipment are supplied, installed, maintained and replaced by the Board.

The responsibility and interface of equipment and soft FM in the operational facility is a key consideration of the service provision. To facilitate this, an ‘Equipment Responsibility Matrix’ will be prepared, detailing all equipment by description, group reference, location and responsibility between the Board and private sector providers in terms of supply, installation, maintenance and replacement over the course of the 25 year operational period. To facilitate joint working arrangements between the Board and the hard FM services provider, an ’Interface Responsibility Matrix’ will articulate responsibility at a practical operational level and supplements the Project Agreement.

14.2 Risk Allocation

A key feature of the NPD and hub models is the transfer of inherent construction and operational risk to the private sector that traditionally would be carried by the public sector. The table that follows outlines ownership of known key risks:

	Risk Category	Potential Allocation		
		Public	Private	Shared
1.	Design risk		√	
2.	Construction and development risk		√	
3.	Transitional and implementation risk		√	
4.	Availability and performance risk		√	
5.	Operating risk			√
6.	Variability of revenue risks		√	
7.	Termination risks			√
8.	Technology and obsolescence risks		√	
9.	Control risks	√		
10.	Residual value risks	√		
11.	Financing risks		√	
12.	Legislative risks			√
13.	Sustainability risks			√

Design risk sits with the respective private sector providers subject to the Project Agreements. For example, agreed derogations identified within the authority's construction requirements and ongoing authority's maintenance obligations during operation may give private sector providers relief on certain designed components.

Construction and development risk sits with the private sector providers subject to the Project Agreements for example a small number of delay and compensation events could entitle the private sector providers to compensation if the events materialised and this would be reflected in a revised Unitary Charge calculation.

Transition and implementation risk sits with the private sector providers subject to compliance with the authority's requirement and agreed commissioning timetable.

Availability and performance risk sits with the private sector providers subject to the Project Agreements. For example, availability or performance failures that arise as a result of an excusing clause could give private sector providers relief from payment deduction.

Operating risk is a shared risk subject to the Board and the respective private sector provider's responsibility under the Project Agreements and joint working arrangements within operational functionality. Operational surpluses that are generated by the Project Company under NPD are reinvested in the public sector. The hub model has a capped rate of return that limits the circumstances where surpluses can be generated.

Variability of revenue risk is a shared risk subject to adjustments of the annual service payment under the Project Agreements. In addition, the Board is responsible for a number of pass through costs (costs charged to the SPV that are the responsibility of the NHS and passed to the authority for payment with no mark-up) such as energy and utility usage and direct costs such as local authority business rates, all of which are subject to different factors such as indexation.

Termination risk is a shared risk within the Project Agreements with both parties (Project Company or Sub-hubCo and the Board) being subject to events of default that can trigger

termination. In addition, Grampian will have additional rights of voluntary termination subject to the Project Agreements.

Technology and obsolescence risk predominantly sits with the private sector providers, however the Board could be exposed through specification and derogation within the authority's construction requirements, obsolescence through service change during the period of functional operation and relevant or discriminatory changes in law under the Project Agreements.

Change of control, for example termination due to a reason stated within the Project Agreement, sits with the Board.

Residual value risks sits with the Board (value of the building at expiry of the concession term).

Financing risks predominantly sits with the private sector providers subject to their Project Agreement, however relevant changes in law, compensation events that compensate private sector providers and changes under the Project Agreement all may give rise to obligation on the NHS Board to provide additional funding. Authority voluntary termination may also bring an element of reverse risk transfer due to aspects of the funding arrangement with the funder.

Legislative risks are shared subject to the Project Agreement. Whilst the private sector providers are responsible to comply with all laws and consents, the occurrence of relevant changes in law as defined in the Project Agreement can give rise to compensate respective private sector providers.

Sustainability risks are proportionately shared subject to the Project Agreement. The private sector providers carry the risk of complying with the authority's requirements in terms of sustainable design and lifecycle of hard FM components, however the Board has exposure to aspects of authority maintenance obligations.

14.3 The type of contract used and key contractual arrangements

The agreement for The Baird Family Hospital and The ANCHOR Centre project will be based on the SFT's standard "non-profit distributing" (NPD) model (the "Project Agreement"). The Project Agreement is signed at Financial Close. Any derogation to the Standard Form position must be agreed with SFT.

The agreement for the relocated Foresterhill Health Centre (as part of a bundled hub project) will be based on the SFT's standard "hub initiative" model (the "Project Agreement"). The Project Agreement is similarly signed at Financial Close and again all derogation to the Standard Form position must be agreed with SFT.

Both the Project Company and Sub-hubCo will delegate the design and construction delivery obligations of the Project Agreements to their Tier 1 Building Contractors under a building contract. A collateral warranty will be provided in terms of other sub-contractors having a design liability. The Project Company and Sub-hubCo will enter into a separate agreement with a FM Service Provider for each agreement to provide hard FM service provision.

The Board will procure the grant of a licence from the Scottish Ministers to the Project Company and Sub-hubCo in line with the standard contract position.

The terms of both models will be 25 years.

'Termination of Contract' - as the NHS and the University of Aberdeen jointly own the site the buildings will remain in ownership of the NHS throughout the term, but be contracted to Project Company/Sub-hubCo to allow them to construct and operate the building for the duration of this contract. On expiry of the contract, the facilities will revert to the NHS Board on behalf of The Scottish Ministers. Compensation on termination generally follows the standard contract position

The Foresterhill Health Campus is currently in the joint ownership of The Scottish Ministers (per NHS Grampian Board) and The University of Aberdeen. A Development Framework for the Foresterhill Health Campus was approved by Aberdeen City Council (the planning authority) in 2008 and refreshed in 2013 and will be used as a material consideration for any planning applications. Planning in principle will be sought by the Board as part of the reference design process of The Baird Family Hospital and The ANCHOR Centre whilst detailed planning consent will be sought by Project Company during their design development. Responsibility for planning consent in respect of Foresterhill Health Centre rests with Sub-hubCo.

Service Level Specifications will detail the standard of output services required and the associated performance indicators. The Project Company and Sub-hubCo will provide the services in accordance with their respective method statements and quality plans which indicate the manner in which the services will be provided.

The Board will not be responsible for the costs to the private sector providers of any additional maintenance and/or corrective measures if the design and/or construction of the facilities and/or the components within the facilities do not meet the authority's construction requirements. Where appropriate, deductions will be made from the monthly service payment in accordance with the payment mechanism.

The Board (the authority's) maintenance obligations comprise of repairs and making good of all interior walls and ceiling finishes and, where appropriate, repairs and/or replacement of carpets and other non-permanent floor coverings in accordance with the frequency cycles stated in the Project Agreements. In addition, the Board is responsible for inspection and testing of electrical appliances. Failure by a Board to carry out the authority's maintenance obligations would result in a breach of the agreement and entitle the respective private sector providers to carry out the works and be reimbursed.

Not less than 2 years prior to the expiry date, an inspection will be carried out to identify the works required to bring the facilities into line with the hand-back requirements which are set out in the Project Agreement.

The Project Company and Sub-hubCo would be entitled to an extension of time on the occurrence of a delay event and to an extension of time and compensation on the occurrence of compensation events (in either case, during the carrying out of the works). The private sector providers are relieved of the Board's right to terminate the Project

Agreements for non-performance on the occurrence of relief events. This reflects the Standard Contract position.

The Board will set out its requirements in a series of documents termed construction requirements. The private sector providers are contractually obliged to design and construct the facilities in accordance with these requirements.

The Board has a monitoring role during the construction process and only by way of the agreed review procedure and/or the agreed change protocol will changes occur.
The Board and the respective private sector providers will jointly appoint an Independent Tester who will also perform an agreed scope of work that includes such tasks as undertaking regular inspections during the works, certifying completion, attending site progress meetings and reporting on completion status, identifying non-compliant work, reviewing snagging progress as well as a range of other independent functions.

The Board will work closely with Project Company/Sub-hubCo to ensure that the detailed design is completed prior to Financial Close. Any areas that do remain outstanding will, where relevant, be dealt with under the reviewable design data and procedures as set out within the review procedure.

The Project Agreement details the respective responsibilities towards malicious damage or vandalism to the facilities during the operational term. Each Board has an option to carry out a repair itself or instruct the private sector providers to carry out rectification.

The appointment of an independently nominated Public Interest Director to the Project Company's board is a feature that is specific to the NPD model. The principal roles of the Public Interest Director is to monitor the Project Company's compliance with the core NPD principles, bring the SPV board's attention to refinancing opportunities and review opportunities for realising cost efficiencies and other improvements in the Project Company's performance. It is anticipated that SFT will nominate a Public Interest Director for this project.The Board is entitled to appoint an "Observer" to attend and participate (but not vote) at the Project Company's board meetings.

.**14.4 Method of Payment**

NHS Grampian will pay for the services in the form of an annual service payment (Unitary Charge).

A standard contract form of payment mechanism will be adopted within each Project Agreement with specific amendments to reflect the relative size of the facilities, respective availability standards, core times, gross service units (number of service units applied to each functional area) and a range of services specified in the service requirements.

The Board will pay the annual service payment to both the Project Company and Sub-hubCo on a monthly basis in arrears for the buildings they are contracted with, calculated subject to adjustments for previous over/under payments, deductions for availability failures and performance failures and other amounts due to the private sector providers. Where any payment is in dispute, the party disputing the payment shall pay any sums which are not in dispute.

The Board has a contractual right to set-off any sum due to it under the Project Agreements.

The annual service payments are subject to indexation as set out in the Project Agreements by reference to the retail prices index published by the Government's National Statistics Office. Indexation will be applied to the annual service payment on an annual basis. The base date will be the date on which the project achieves Financial Close.

Both private sector providers are obliged to monitor their own performance and maintain records documenting its service provision in terms of the relevant Project Agreements. The Board will carry out performance monitoring on its own account and will audit each private sector provider's performance monitoring procedures in terms of the Project Agreements.

14.5 Personnel Arrangements

The management of soft facilities management services, such as domestic and portering services, will continue to be provided by NHS Grampian.

No staff will transfer and therefore the alternative standard contract provisions in relation to employee transfer (TUPE) will not come into effect.

There are implications from the requirement by the Board to provide hard maintenance obligations in terms of the Project Agreements.

14.6 Implementation Timescales

The indicative implementation timescales for procuring The Baird Family Hospital and The ANCHOR Centre and the bundled Foresterhill project has been discussed and agreed with SFT.

The outline timetable for delivery of the project is shown in the table that follows:

Key Milestones – The Baird Family Hospital and The ANCHOR Centre	Date
Finalise Project Board/Team structure	Oct 2014
Commence detailed clinical output specification	Dec 2014
Commence reference design development	Dec 2014
Initial Agreement Approval	June 2015
Planning in principle	Sept – Dec 2015
Complete reference design	Feb 2016
OBC Approval	April 2016
Issue OJEU notice to prospective bidders	May - June 2016
Select 3 bidders to participate in Competitive Dialogue	Sept 2016
Commence Competitive Dialogue	Oct 2016
Close Competitive Dialogue with bidders	May 2017
Prepare final tenders	June 2017
Evaluate and identify the preferred bidder	Aug 2017
FBC Approval	Dec 2017

Financial Close of contract negotiations	Feb 2018
FBC Addendum submitted	May 2018
Construction enabling works/set up compound	March - May 2018
Start construction Baird Family Hospital and ANCHOR Centre	June 2018
ANCHOR Centre construction complete	April 2020
Commission ANCHOR Centre	May – June 2020
Open ANCHOR Centre	June 2020
Baird Family Hospital construction complete	Dec 2020
Commission the Baird Family Hospital	Jan – April 2021

Key Milestones – Foresterhill Health Centre	**Date**
Issue New Project Request Form	May 2015
Initial Agreement Approval	June 2015
Stage 1 development	June – Sept 2015
OBC Approval	Dec 2015
Stage 2 development	Oct 2015 – March 2016
FBC Approval	April 2016
Financial Close of contract negotiations	June 2016
FBC Addendum submitted	Oct 2016
Start construction Health Centre	July 2016
Health Centre construction complete	Sept 2017
Commission Health Centre	Sept – Oct 2017
Open Health Centre	Nov 2017

These timetables will be subject to refinement over the coming months in dialogue with, SFT, our advisors and potential bidders.

15.0 Outline Financial Case

This Financial Case sets out the financial and funding impact of the proposed investment. Given that the Initial Agreement is an early stage of the overall approval process, costs are expressed as a range.

Statement of the Organisation's Financial Situation

For the financial year 2014/15, the NHS Grampian Board had a revenue budget of approximately £1.05 billion, and capital budget of £29 million.

In 2014/15 the Board reported a minor surplus for revenue and breakeven for capital budgets i.e. it achieved its financial targets. The Board presented a fully financially balanced 5 year (2015/16 to 2019/20) Local Delivery Plan (LDP) to the Scottish Government Health and Social Care Directorate in May 2015, which includes the Board's projected revenue and capital funding and expenditure across those years.

The preferred way forward for The Baird Family Hospital and The ANCHOR Centre would result in its completion in financial year 2020/21 under the current programme. It is assumed at this stage that the NPD model would apply. The commencement of the associated recurring Unitary Charge (UC) payments and additional recurring revenue costs in relation to the running of the completed buildings would therefore fall outwith the period of the current 5 year LDP.

Not withstanding that, the Board has taken full cognisance of the fact that while the Scottish Government makes a majority funding contribution to the annual UC of the project, there would still be significant additional recurring revenue costs that it will not receive specific additional funding for. These costs are summarised in this Initial Agreement and will be accounted for and reflected in the LDP submission in March 2016.

In addition to the recurring additional revenue costs of the project from financial year 2020/21, there are also a number of non-recurring capital and revenue costs that will be incurred directly by NHS Grampian during the life of the project. These will be incurred in order to reprovide facilities for the services currently located in buildings on the planned construction site and to manage and commission the project effectively. These costs have been fully accounted for in preparation of the 5 year LDP. All of the costs referred to above are explored further in the sections that follow.

Indicative Capital Construction Costs for the Preferred Way Forward

Indicative capital construction costs for the Preferred Way Forward is provided in the table that follows. Whilst the project is expected to be funded via the NPD route, the capital costs provide a means by which the options can be assessed for value for money (VFM) in the Economic Case and also a basis on which to calculate estimated annual Unitary Charge figures. The capital construction costs have been provided by a Third Party Quantity Surveyor. Provision has been included for BCIS indexation, in alignment with the anticipated construction programme and ultimate completion in 2020.

Option	New Build The Baird Family	New Build Foresterhill	Other Enabling	Equipment	Total

	Hospital and The ANCHOR Centre	Health Centre	Works		
Preferred Way Forward Baird Family Hospital on Foresterhill Health Centre site	£112m-£116m	£8m-£8.5m	£4m-£4.5m	£4m-£5m	£128m - £134m

Notes:

- The Foresterhill Health Centre requires to be relocated under the preferred way forward and the cost of its relocation is included in the preferred way forward capital construction cost above (£8 to £8.5 million). The Scottish Government has indicated that it is likely that the funding for its relocation would be provided from The Baird Family Hospital and The ANCHOR Centre NPD allocation. However, its procurement would likely require to be undertaken by combining Foresterhill Health Centre with a hub initiative bundle of projects already in progress (being the projects at Inverurie and Lochgilphead).
- The costs of replacing the existing Eye Clinic and Breast Screening Centre and their demolition are included in the costs above under Other Enabling Costs are expected to be incurred by NHS Grampian.
- A construction start on site of Q2 2018 for the NPD Project for The Baird Family Hospital and The ANCHOR Centre
- A construction start on site of Q3 2016 for the hubCo project for the re-provision of Foresterhill Health Centre
- The above costs assume a provision for risk
- The above new build costs exclude VAT, under guidance from Scottish Futures Trust.
- The above costs ***do not*** include additional contingency/optimism bias.
- Group 2 and 3 equipment are included in the above costs, however are assumed to be funded from NHS Grampian's capital allocation.
- Both new facilities will be built on land already owned by NHS Grampian, on behalf of the Scottish Ministers, jointly with the University of Aberdeen

Enabling Works - Service Relocations (Site Clearance)

The capital costs above relate to the works required to relocate services that are housed in buildings that are located on the site of the planned build. The preferred way forward displaces both the Eye Clinic and Breast Screening Centre. The Foresterhill Health Centre also requires to be relocated under the preferred way forward, however the capital cost of this is not affordable to NHS Grampian. The funding route for its relocation is explained earlier in the Financial Case.

The assets that are being vacated will have a residual written down value (circa £4 million) that will have to be accounted for and the Board will explore options to mitigate any real impact on its resources.

New and Replacement Equipment

Whilst there should be a significant level of medical equipment transfer to the new buildings, there will also be the requirement for significant investment in new and replacement equipment. For example, it is unlikely that any of the furniture would be suitable for transfer. A high level estimate of £4 - £5million for equipment purchase is provided for the Initial Agreement. This cost will be refined over the course of the project, with the final cost unlikely to be known until 2020.

Indicative Additional Property Related Revenue Costs

As is the case with most new build projects that replace existing buildings, it is anticipated that there will be a net increase in property related running costs. The reason for this is in relation to the modern space standards that new buildings are required to meet. The resulting increased floor area inevitably leads to increased costs for Local Authority rates, heating, lighting, cleaning and building maintenance etc.

The following table provides high level, indicative additional recurring property related costs for the preferred way forward, inclusive of the replacement Foresterhill Health Centre:

Property Related Additional Recurring Revenue Costs

Option	Additional Revenue Cost
Preferred Way Forward 1. The Baird Family Hospital on the Foresterhill Health Centre site	£1.6 - £2m

Notes:

- The above costs include VAT where it is applicable.
- Assumes full demolition of the current Aberdeen Maternity Hospital.
- Assumes that current “oncology and haematology service” buildings are retained, but left empty until additional revenue funding is approved to allow their re-use. This is because these services are currently contained within larger buildings that cannot be demolished.

Statement on Service Related Recurring Revenue Costs of Shortlisted Options

The broad assumption is that the clinical services can be reprovided in the new facilities within existing resources. This Initial Agreement therefore does not include any estimates for changes to the costs of providing the clinical services to patients in the new buildings (medical, nursing, admin staffing and supplies). This is because there is complex service redesign work that requires to be undertaken during the OBC and FBC stages that will determine whether there are any cost implications of the move.

Non-recurring Revenue Costs

The estimated direct revenue cost to the Board over the life of the project for the Project Team and associated Professional Advisor support is £9.6 million.

This provides for a series of new (temporary and permanent) posts over the period from Initial Agreement to construction completion and commissioning of the new buildings. A “start-up” fund relating to equipment for the Project Team has been included, as well as an annual non-pay allowance.

The professional external support to the project will take the form of Healthcare Planner, Business Case support, planning costs, Legal Advisor, Technical Advisor, Financial Advisor and Insurance Advisor.

Unitary Charge Estimate

The “new build” construction element of the project will likely to be financed through the Non-Profit Distribution (NPD) procurement model. Associated with the NPD model is an annual service charge (Unitary Charge – UC) payment over a period of 25 years from the completion of construction.

The total Unitary Charge (UC) payment will comprise the following components:

- Construction costs (including VAT where applicable)
- Private sector development costs (including staffing, advisory and lenders' advisers' fees)
- Financing interest (which is necessary to fund the project through construction)
- Financing fees
- Running costs for the project's Special Purpose Vehicle (SPV) during construction, including insurance costs and management fees
- SPV running costs during operations, including insurance costs and management fees
- Lifecycle maintenance costs
- Hard facilities maintenance (FM) costs

The UC estimates below are based on the high level capital costs for each option and use previous revenue funded projects as a guide to their calculation. From these, the UC has been estimated at 10-12% of the initial capital cost per annum.

Under current Scottish Government funding conditions, the element of the annual UC that is required to be funded by Health Boards, annual revenue budgets relates to hard Facilities Management and half of the lifecycle maintenance of the building. This is estimated to be in the range of 10 to 15%. The Scottish Government provides an annual funding support to the Board for the remaining majority 85-90%, as set out in the table below. Further details are explored in the “Affordability” section.

The following table shows the estimated range of UC costs for the Preferred Way Forward, along with the financial impact for both the Scottish Government and the Board:

Option	Capital Cost – New Build	Annual Unitary Charge @ 10% of Capital	Scottish Government Funded (85-90%)	Board Funded (10-15%)

		Cost		
Preferred Way Forward 1. The Baird Family Hospital on Foresterhill HC site	£120m-£125m	£12m-£15m	£10.2m-£13.5m	£1.2m-£2.3m

Notes:

- The Unitary Charge associated with replacement of Foresterhill Health Centre via the hub model is included in the table above and the following table is the associated subset:

	Capital Cost – New Build	**Annual Unitary Charge @ 10% of Capital Cost**	**Scottish Government Funded (85-90%)**	**Board Funded (10-15%)**
Foresterhill Health Centre	£8m-£8.5m	£0.8m-£1.0m	£0.68m-£0.90m	£0.08m-£0.15m

Overall Affordability

The following table summarises the range of estimated additional costs to the Board associated with The Baird Family Hospital and The ANCHOR Centre if it is funded via the NPD model:

Option	**Other Enabling Works (Capital)**	**Equipment (Capital)**	**Additional Recurring Property Revenue Costs**	**Additional Recurring Service Revenue Costs**	**Recurring Unitary Charge Costs (Revenue)**	**Non-recurring Revenue Costs**
1. The Baird Family Hospital on Foresterhill HC site	£4m - £4.5m	£4m - £5m	£1.6 - £2m	Assumed Nil	£1.2 - £2.3m	£9.6m

Capital Cost

Should a “new build” option obtain Full Business Case approval, it is likely that it would be constructed using the NPD model. The capital cost of the new buildings would therefore be paid for by a lender, directly to a construction consortium, as set out in a bespoke financial model for the project. This cost would then be paid back by the Scottish Government/Board over a 25 year period, as outlined in the “Unitary Charge Estimate” section above and “Recurring Unitary Charge Costs” section below.

Enabling Works Costs

Due to the relatively constrained nature of the Foresterhill Health Campus, there are buildings in place on the sites that would need to be relocated. The enabling works costs above relate to these relocations and funding will be provisionally identified within NHS Grampian’s Capital Plan once cost estimates have been developed, in order to undertake these Works.

Equipment Costs

A high level estimate of £4 - £5 million for equipment purchase is provided for this Initial Agreement, which will require to be funded from the Board’s capital allocation. The purchase date is currently beyond the period of the Board’s 5 year LDP, but has been highlighted as a known future cost commitment against capital funding for the LDP submission in March 2016.

Additional Recurring Property Revenue Costs

As is the case with most new build projects that replace current buildings, there is anticipated to be an increase in their running costs, compared to the facilities being replaced. The cost of £1.6 – £2 million will not be incurred within the Board’s current 5 year LDP, however it has been highlighted as a known future commitment for the LDP submission in March 2016.

Additional Recurring Service Revenue Costs

The broad assumption, at this stage, is that the clinical services can be re-provided in the new facilities within available resources. As stated above, this Initial Agreement therefore does not include any estimates for changes to the costs of providing the clinical services to patients in the new buildings. This is because there is complex service re-design work that requires to be undertaken during the OBC and FBC stages that will determine whether there are any cost implications of the move.

Recurring Unitary Charge Costs

Funding for the 25 year Unitary Charge in relation to the project is assumed to be as follows, based on current Scottish Government guidance.

- Capital Repayment – 100% Scottish Government funded.
- SPV Costs – 100% Scottish Government funded.
- Lifecycle Costs – 50% Scottish Government funded, 50% Board funded.
- Hard FM Costs – 100% Board funded.

As stated in the “Unitary Charge Estimate” section above, this split of the UC elements results in a Scottish Government funded component of 85-90% and Board funded component of 10-15%. The resultant estimated Board cost of £1.2 - £2.3 million will not be incurred within its current 5 year LDP, however it has been highlighted as a known future commitment for the LDP submission in March 2016.

Non-recurring Revenue Costs

The estimated revenue cost that will be incurred directly by the Board over the life of the project for the Project Team and associated Professional Advisor support is £9.6 million.

The NHS Grampian Board approved this funding in December 2014. It is anticipated that this budget will also be sufficient to provide the additional required resources to undertake the other capital projects that are either under-way, or are about to commence in Grampian (e.g. Backlog Maintenance Programme and Hub Initiative projects).

The £9.6 million budget has therefore been included in the Board’s 5 year LDP.

External Financial Contributions to the Project

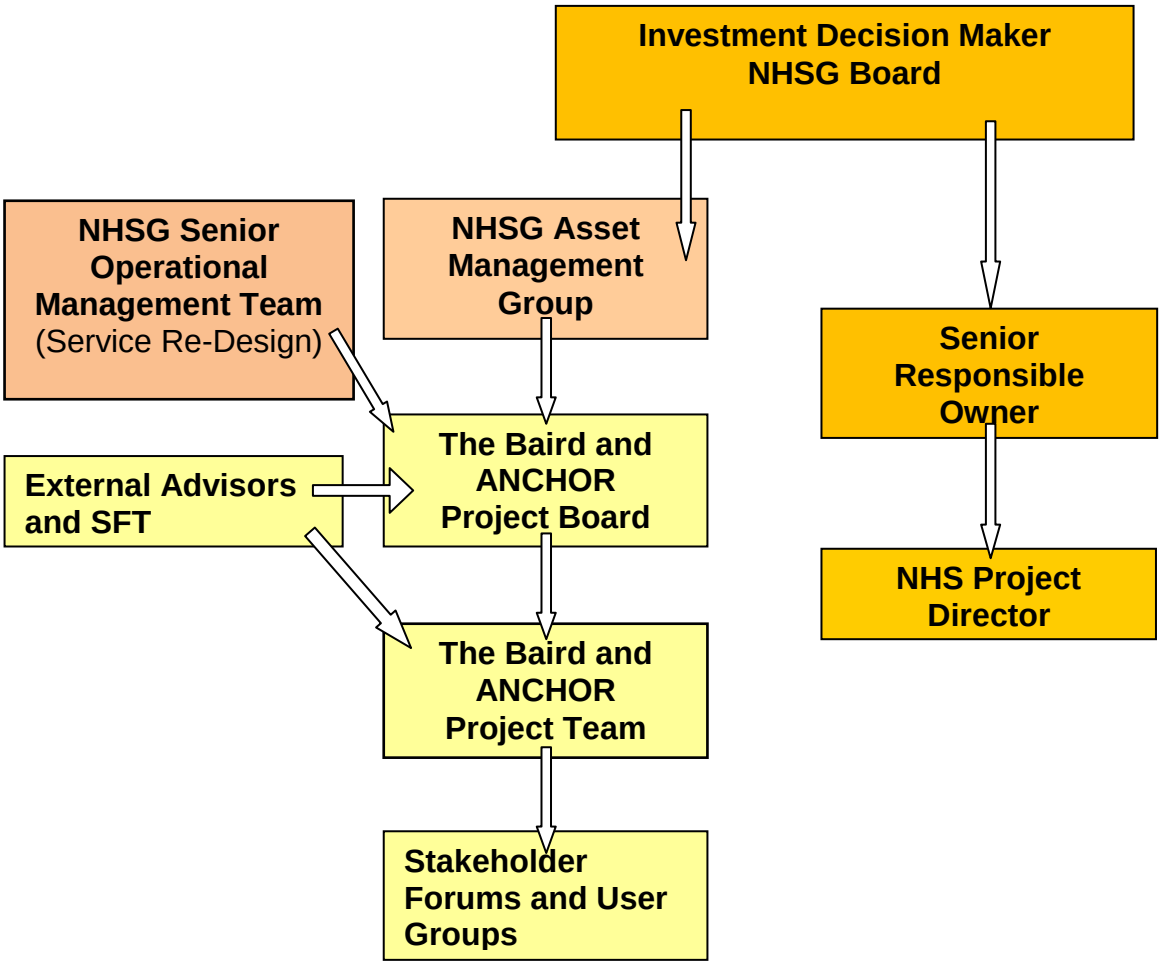
It is likely that a public fundraising campaign will be undertaken in order to provide enhancements to the project that would not normally be paid for from NHS budgets. These are likely to take the form of non-standard decoration, art works, soft furnishing, additional landscaping etc. Plans are underway regarding the organisation and management of the fundraising process. It is likely that a committee will be established to oversee the fundraising effort and to determine how the funding will be spent.

At this point in time, there are no other anticipated external partner financial contributions. However, the University of Aberdeen is a significant partner on the Foresterhill Health Campus and will have a presence in the new buildings (e.g. research facilities). It is therefore not possible to rule out future contributions at this stage.

16.0 Outline Project Management Case

16.1 Programme and Project Management Approach

In compliance with the Scottish Capital Investment Manual, this project will deploy a Programme and Project Management Approach (PPM) with a structure as shown in the diagram that follows:



Roles and responsibilities related to the structure outlined above for the NPD project are summarised below. A separate parallel project structure is already in place to deliver the existing L&I hub bundle which would include the Foresterhill Health Centre project if approved.

Asset Management Group (AMG)

The remit of the AMG is:

- To ensure system-wide co-ordination and decision making of all proposed asset investment/disinvestment decisions for NHSG, ensuring consistency with policy and the strategic direction of NHSG.
- The AMG works in conjunction with the NHS Board Senior Management Team to ensure consistency of approach consistent with policy and affordability.

The Baird Family Hospital and ANCHOR Centre Project Board

The remit of the Project Board is:

- To agree the scope of the project including the clinical service strategy and the benefits to be realised by the development and also the reference design, with appropriate stakeholder involvement.
- To ensure that the resources required to deliver the project are available and committed.
- To drive the project through Initial Agreement, OBC and FBC approval within the NHS and thereafter the Capital Investment Group at SGHSCD.
- To supervise the OJEU procurement process, the competitive dialogue process and appointment of the preferred bidder.
- To assure the project remains within the framework of the overall project strategy, scope, budget and programme.
- To approve changes to the scope of the project including time, cost and quality within agreed authority.
- To work with SFT to successfully complete each Key Stage Review.
- To work with Project Co and SFT to develop and agree the Project Agreement.
- To ensure the project remains within the affordability parameters set out by Scottish Government and NHSG.
- In partnership with all stakeholders to successfully conclude Financial Close.
- To review the Risk Management Plan, ensuring all risks are identified; that appropriate mitigation strategies are actively applied, managed and escalated as necessary, providing assurance to the NHS Board that all risks are being effectively managed.
- To ensure that staff, partners and service end users are fully engaged in designing operating policies that inform the detailed design and overall procedures that will apply which in turn will inform the Project Agreement i.e. ensuring that the facilities are service-led rather than building-led.
- To ensure that the Communication Plan enables appropriate involvement of, and communication with, all stakeholders, internal and external, throughout the project from conception to operation and evaluation.
- To work with Project Co to ensure that the completed facilities are delivered on programme within budget and are compliant with the Authority's Construction Requirements and Project Co's proposals.
- To supervise the functional commissioning and bring the facilities into operation in respect of the elements for which the NHS is responsible and completion of PPE.

NHS Project Team

The remit of the NHS Project Team is:

- To coordinate the production of all Authority Requirement documents for the project.
- To coordinate the production of all technical and financial schedules from an NHS perspective.

- To participate with SFT in the Key Stage Reviews, helping to ensure their successful completion.
- To coordinate the production of the Initial Agreement, the OBC and the FBC.
- To supervise the development of the Occupation Agreement, as appropriate, with building users.
- To ensure communication with all internal and external stakeholders and appropriate user involvement in relation to e.g. workforce planning, functional commissioning and relocation.
- To ensure the development of all appropriate policies and procedures (clinical and FM) to ensure the smooth operation of the building once operational.
- To commission specific redesign work associated with the redesign of services relocating to the new facilities.
- To plan for the post-project evaluation.
- To supervise the specification, procurement and commissioning of all group 2, 3 and 4 equipment.
- To supervise the specification of all group 1 equipment consistent with the Project Agreement.
- To supervise the development and implementation of functional commissioning plans including service relocation, staff orientation and training etc.

Individual Roles and Responsibilities are summarised as follows:

Investment Decision Maker – NHS Grampian Board

Senior Responsible Officer and Project Board Chair – Graeme Smith, Director of Modernisation, NHSG

The key functions of this role will be to provide corporate leadership, support the IA/OBC/FBC through the approval process to SGHSCD, lead on external communication with SGHSCD and MSPs, etc, obtain funding and resources to ensure the project's delivery. To support the Project Director and Project Team to deliver the project as agreed in the IA, OBC, FBC and PA.

Project Team Chair – Jackie Bremner, Project Director, NHSG

To co-ordinate the preparation and production of the Initial Agreement, OBC and FBC, taking forward decisions of the Project Board and guiding the Project Team to develop and manage the operational elements of the project

Project Director - Jackie Bremner, Project Director, NHSG

The key functions of this role will be to lead and coordinate the project through all its stages in collaboration with the Project Team, from Initial Agreement through OBC, FBC to Contract Close. Ensuring that the deal is fit for purpose, consistent with the strategic objectives and affordable, and demonstrates value for money. To lead on the production and approval of the SCIM compliant OBC and FBC. To ensure successful completion of the facilities and bring into operation consistent with the project objectives and PA.

16.2 Reporting and Managing Risk and Risk Assurance

Effective management of project risks is essential for the successful delivery of any infrastructure project. A robust risk management process is being put in place, it will be actively managed through the whole programme to reduce the likelihood of unmanaged risk affecting any aspect of the project. Risk is managed within the Project Team and led by the Project Director.

Embedding of risk management procedures is being progressed as the project moves to being fully resourced. The following further activities are planned for the coming months:

- Review of risks in conjunction with NHS Grampian's advisors
- Development and monitoring of risk action plans

Risk workshops facilitated by the Technical AdvisorsThe project governance allows for a framework of assurance, key aspects include:

- An experienced project team
- A Project Board which includes senior management and external representatives (Scottish Government and SFT)
- Regular reporting to a Project Board on project progress with onward reporting to the NHS Grampian Asset Management Group and NHS Grampian Board
- Development of a network of peers who have/are delivering similar projects
- The appointment of Advisors across disciplines
- The undertaking of Key Stage Reviews with SFT

Risk Register

A risk register is maintained by the Project Team with individuals allocated to manage each risk. The process for maintaining and managing the risk register is as follows:

- The Project Manager is responsible for ensuring that the risk register is up to date.
- Where a risk is major i.e. has a scoring of 'high' or 'very high', an action plan for managing and monitoring is maintained by the individuals allocated to manage that risk.
- The Project Team review the risk register and associated action plan on a monthly basis at their meeting.
- The Project Director is responsible for ensuring an adequate system of control is in place over the management of the risks.
- The Project Director reports on the status of the risk register to each Project Board and provides an update on each major risk.
- If the Project Board identify risks where inadequate progress is being made in the management of the risk, they can request to review the action plan and instruct further work to mitigate the risk.

Review of Risks

Risk management is an integral part of the project reporting, approval and governance arrangements. The following are key examples:

- The Project Board reviews risk regularly and its membership includes a range of senior management representatives together with representatives from the Scottish Government and the Scottish Futures Trust.

- The work commissioned from advisors for the project include a role in relation to reviewing and advising of the project risks.

- The project plan includes key stage reviews. These are conducted at crucial stages in the procurement of a project and provide a critical but constructive assessment of their readiness to progress. This also provides a means of identifying issues, including risks that need to be resolved prior to the work progressing.

- NHS Grampian has a Risk Management Policy and the management of risk within this project aligns to that policy.

Identification of Risk

The following stages of risk management are observed by the project:

- Identifying the risk
- Assessing the risk
- Documenting the risk
- Managing and reporting the risk
- Closing the risk.

Assessment of Risks

Risk exposure is assessed through assigning probabilities to events. The likelihood of each of the risks occurring and the impact, should it occur, has been assessed using the following scale; Low, Medium, High and Very High:

	SEVERITY / IMPACT				
LIKELIHOOD	Insignificant **Score 1**	Minor **Score2**	Moderate **Score 3**	Major **Score 4**	Extreme **Score5**

Almost Certain **Score 5**	**MEDIUM** **5**	**HIGH** **10**	**HIGH** **15**	**VERY HIGH** **20**	**VERY HIGH** **25**
Likely **Score 4**	**MEDIUM** **4**	**MEDIUM** **8**	**HIGH** **12**	**HIGH** **16**	**VERY HIGH** **20**
Possible **Score 3**	**LOW** **3**	**MEDIUM** **6**	**MEDIUM** **9**	**HIGH** **12**	**HIGH** **15**
Unlikely **Score 2**	**LOW** **2**	**MEDIUM** **4**	**MEDIUM** **6**	**MEDIUM** **8**	**HIGH** **10**
Rare **Score 1**	**LOW** **1**	**LOW** **2**	**LOW** **3**	**MEDIUM** **4**	**MEDIUM** **5**

Each risk will be assessed prior to identifying mitigations and with a further assessment of residual risk.

Further Development of Risk Management

Embedding of risk management procedures is being progressed as the project moves to being fully resourced. The following further activities are planned for the coming months:

- Review of risks in conjunction with NHS Grampian's advisors
- Development and monitoring of risk action plans
- Risk workshops facilitated by the Technical Advisors

16.3 Change Management

The investment objectives outlined in the strategic section of this IA will only be realised if there if a significant service redesign agenda is pursued in parallel with the planning and construction of these new facilities.

Development of the clinical brief for the project has resulted in a number of assumptions regarding activity levels, models of care etc. The new facilities will only function effectively if a substantial redesign agenda is actively pursued by the Board.

Work to begin to re-design services is already underway and will be more fully described in the OBC and FBC.

16.4 Benefits Realisation

The completed Benefits Realisation Plan, to be submitted with the Full Business Case, will identify arrangements for identification of potential benefits, their planning, modelling and tracking. It will assign responsibilities for actual realisation of benefits throughout the key phases of the project.

A Benefits Realisation Plan for each of the two facilities will be developed and the emerging plan will be included in the OBC, setting out the benefits outlined in the strategic case and how they will be evaluated.

Overall responsibility for ensuring that the benefits of the project are achieved rests with the relevant operational management teams and will be managed through line management accountability and demonstrated in performance review.

Where relevant, the performance measures identified within the Benefits Realisation Plan will be reviewed as part of the Project Evaluation Plan.

16.5 Post Project Evaluation

The purpose of undertaking a Post Project Evaluation is to assess how well the scheme has met its objectives and whether they have been achieved to time, cost and quality. Performance measures already contained in the Benefits Realisation Plan will not be replaced in the Post Project Evaluation Plan (PEP).

For The Baird Family Hospital and ANCHOR Centre Project, the Board will commission and complete a Post Project Evaluation. The post project evaluation for this NPD project will be led by the Board Property and Asset Management Team supported by representatives of the project team, user groups and other key stakeholders. The Project Board, or its successor, will receive evaluation reports on each element.

Appendix E – Glossary

Acronym	Explanation
ANCHOR	Aberdeen and North Centre for Haematology Oncology and Radiotherapy
A+DS	Architect and Design Scotland
ACC	Aberdeen City Council
AEDET	Achieving Excellence Design Evaluation Toolkit
AR	Authority Requirements
ARI	Aberdeen Royal Infirmary
BREEAM	Building Research Establishment Environment Assessment Method
CEL	Chief Executive Letter
CIG	Capital Investment Group
CMU	Community Maternity Unit
DBFM	Design, Build, Finance and Maintain
FBC	Full Business Case
FHC	Foresterhill Health Centre
FM	Facilities Management
GEM	Generic Economic Model
HAI	Hospital Acquired Infection
HC	Health Centre
HDL	Health Department Letter
HDU	High Dependency Unit
HEAT	Health Efficiency Access and Treatment Targets
HEI	Healthcare Environment Inspectorate
HFN	Health Facilities Notes
HFEA	Human Fertilisation and Embryology Authority
HFS	Health Facilities Scotland
HIS	Healthcare Improvement Scotland
HTM	Health Technical Memoranda
HM	Her Majesty
IA	Initial Agreement
ISD	Information Services Division
IHI	Institute of Healthcare Improvement
ITU	Intensive Therapy Unit
KSR	Key Stage Review
LC	Life Cycle
LCC	Life Cycle Costs
LDP	Local Development Plan
LDRP	Labour, Delivery, Recovery and Post Partum
L&I	Lochgilphead and Inverurie
LTC	Long Term Condition
MRI	Magnetic Resonance Imaging
MEL	Management Executive Letter
MHRA	Medicines and Healthcare Products Regulatory Agency
MSP	Member of the Scottish Parliament

NDAP	NHS Scotland Design Assessment Process
NHS	National Health Service
NHSG	NHS Grampian
NOSCAN	North of Scotland Cancer Network
NPC	Net Present Cost
NPD	Non Profit Distributing
NPR	New Project Request
NPV	Net Present Value
OBC	Outline Business Case
OJEU	Official Journal EU
OPD	Out Patient Department
PA	Project Agreement
PAMP	Property and Asset Management Plan (NHSG)
PEP	Project Evaluation Plan
PET/CT	Positron Emission Tomography/Computer Tomography
PPE	Post Project Evaluation
PPP	Public Private Partnership
PPM	Programme and Project Management
PV	Present Value
QIS	Quality Improvement Scotland
RACH	Royal Aberdeen Children's Hospital
SAB	Staphylococus Aureus Bloodstream
SACT	Systemic Anti-Cancer Therapy
SCIM	Scottish Capital Investment Manual
SFT	Scottish Futures Trust
SGHSCD	Scottish Government Health and Social Care Directorate
SHC	Scottish Health Council
SHFN	Scottish Health Facilities Notes
SHTM	Scottish Health Technical Memorandum
SoA	Schedule of Accommodation
SPV	Special Purpose Vehicle
SRO	Senior Responsible Owner
TPN	Total Parental Nutrition
TUPE	Transfer of Undertakings of Protection of Employment
UC	Unitary Charge
VAT	Value Added Tax
VFM	Value for Money
WBS	Weighted Benefits Score

NHSScotland Design Assessment Process – Report

Project No/Name:	The Baird Family Hospital and The Anchor Centre, Aberdeen Royal Infirmary, Foresterhill.
Business Case Stage:	IA
Assessment Type:	Desktop
Assessment Date:	16 June 2015
Response Issued:	19 June 2015 (verified 17 July 2015)

The appraisal below is based on the SCIM Design Statements for the ANCHOR and BAIRD facilities, submitted on 1st June 2015, and the Initial Agreement (Board/CIG version dated 1 June 15, minus Appendices) received on 15th June 2015. We note that the Initial Agreement (IA) states on Page 16 that the Design Statements have been agreed by NDAP. This is not yet formalised, as it is subject to the recommendations noted below. We also note that the IA includes indicative massing drawings, these images have not been provided or discussed, and therefore are not yet approved by NDAP. This will be a subject matter for next stage.

Joint Statement of Support

Having considered the information provided, Health Facilities Scotland and Architecture + Design Scotland have assessed the project and consider that it is of a suitable standard to be

SUPPORTED

With the following recommendations:

Essential Recommendations

1. That the Design Statements be developed in the following respects prior to their publication with the IA:
   - The Self Assessment process requires amendment to better reflect the chosen procurement routes noting how the Board will appraise it's progress against the design brief at key decision points such as consideration of the reference design, conclusion of documentation taking the project to market etc. Further, references to Design Statement and AEDET to inform site selection, and involvement of NDAP in that decision, should be deleted as the site selection was made prior to the development of the statements or involvement of NDAP.
   - A+DS/HFS's staff names are removed from the 'stakeholders list' for workshops. A+DS/HFS act as facilitator/observers for the workshops for users to develop their own AEDET and Design Statements, and if recorded it should be in this role not as 'stakeholders'.

2. That the design of these two facilities be progressed and assessed not only in relation to the objectives for each facility, but in in a co-ordinated manner considering the broader Foresterhill campus strategy, including proposed the parking project and the planned improvements to greenspace and wider routes. This will require a level of refreshing of the masterplan to ensure the co-ordination and investment potential for the service and whole campus environment is maximised.

Advisory Recommendations

A. That the statement for the ANCHOR Centre be developed in the following regards:

- That the views of success be added in areas where objectives like 'a non- clinical feel' are noted, but no examples are given (1.6, 1.7).
- That benchmarks be rationalised to ensure they relate to the objective, e.g. 2.3 where the objective is around discrete materials management, but benchmarks include video conferencing.

Notes of Potential to Deliver Good Practice

If the quality objectives outlined within the SCIM Design Statements are met in full then the project has the potential to be an example of good practice in terms of patient and staff environments.

Next Stage Processes

Next Actions at Current Business Case Stage

The Board are invited to provide the evidence below by 25 June 2015 to allow the NDAP to verify the **SUPPORTED** status to the CIG.

- Letter agreeing to the essential recommendations, and anticipated timescale for re-submission of the amended design statements.

If we do not receive this note the above date, the above report will be automatically forwarded to the CIG on 25th June 1015.

Please note that failure to adequately discharge essential recommendations will mean that the project may be unsupported at the next stage.

VERIFICATION CIG (to be completed once above has been received and considered):

The above evidence was received on 16 July 2015: a copy of NHS Grampian's letter in this regard is attached, and revised design statements have also been received for comment. The above **SUPPORTED** status is therefore **VERIFIED**.

Signed ..... dated 17 JULY 2015

Process at Next Business Case Stage

A series of engagements has been proposed to the team, within the OBC stage these include:

- staff informal discussion on early design moves in reference design and developing approaches to formative brief/employer requirements etc
- **panel** based workshop considering the developing reference design in lead up to PPIP application (needs not to be too late to influence submission) to inform design development and council consideration of submission.
- continuing staff engagement on developing reference design to add in learning from other projects and sanity check final position at OBC
- desktop assessment (based on the development of the project in relation to these earlier advice) at OBC

Please keep us informed of the likely program of the project so that the above can be arranged timeously. In particular the panel workshop takes some time to align diaries of participants (including planning department) and prepare briefing.

NOTES ON USE AND LIMITATIONS TO ABOVE ASSESSMENT:

Any Design Assessment carried out by Health Facilities Scotland and/or Architecture and Design Scotland shall not in any way diminish the responsibility of the designer to comply with all relevant Statutory Regulations or guidance that has been made mandatory by the Scottish Government.

MODERNISATION DIRECTORATE

Summerfield House
2 Eday Road
Aberdeen AB15 6RE

NHS Grampian

Date:- 15th July 2015
Your Ref:-
Our Ref:- GS/ECB2

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Susan Grant
Principal Architect
Health Facilities Scotland
Procurement and Commissioning and facilities
NHS National Services Scotland
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Dear Susan

The Baird and ANCHOR Centre NPD Project – NDAP

The Board of NHSG will be pleased to work with you to successfully complete the NHS SCOTLAND Design Assessment Process (NDAP) for the Baird and ANCHOR NPD project.

We will be pleased to work with you to discuss, agree and implement the recommendations arising from the NDAP process. At this Initial Agreement stage this will include our agreement to:

- Amend the draft IA to include updated and approved design statements prior to completion and publishing
- Progress the design of the two developments in consort with all the other projects on the Campus. This process is underway in dialogue with the planning department of Aberdeen City Council, where we have recently agreed to submit a Foresterhill Health Campus wide, Pre Application Notice (PAN) which will encompass all changes planned on site over the next 5 years.

Kind regards

Graeme Smith
Director of Modernisation
Senior Responsible Officer (B&A Project)

The Baird Family Hospital: SCIM Design Statement

Introduction

The development of The Baird Family Hospital will bring a range of health services together in one facility. The general design approach shall be to create a truly inclusive environment which must be designed to the highest standards, taking into account specific infrastructure opportunities and constraints to create a high quality facility.

The business objectives for the project are:

- **Person Centred Care.** To provide improved ambulatory care services; a reduction in inappropriate hospital stays and a reduction in length of stay; to provide appropriate maternity facilities for low, medium and high risk women, providing patient choice; to provide appropriate, safe and secure facilities to deliver optimal care; to provide services that support patients and families to be healthy, well and independent
- **Improved Access to Treatment.** To provide appropriate access to High Dependency, ITU and Theatre services and to provide enhanced clinical service integration by co-locating services and allowing for physical connections to other hospitals on the Foresterhill Health Campus
- **Improved Effectiveness and Efficiency.** To have suitable facilities to provide appropriate tertiary services for the North of Scotland; to achieve sustainability of achievement of national waiting time and treatment targets; to create an environment that supports a sustainable workforce

In order to achieve this, the facility must possess the following attributes.

NB: the preferred site for this facility had been chosen prior to the Design Statement Workshops (on the south west side of the Foresterhill Health Campus) and therefore the statement is written with this in mind.

1 Non-Negotiables for Service Users (and those accompanying them)

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
1.1 The first impression of the facility must be of a place of wellness and reassurance; a place you feel you could have a joyful experience, not one that would take the joy out of it. It should feel more part of the community than the hospital, being softer with aspects of landscape and homeliness. It must not be monolithic.	The hospital should have an attractive exterior which works well with the surrounding environment and existing buildings. It is important that the first impression should be a positive one for patients, visitors and staff. A light, bright and airy feel have been expressed as characteristics which stakeholders feel would be important to achieve. A standard building "box" is not a look the building should emulate. It is also hoped that the design of the building on first impression should allow for easy and intuitive wayfinding. The hospital should be complemented with a sympathetic and welcoming exterior environment e.g. greenery, walkways, seating.  


MAIN ENTRANCE

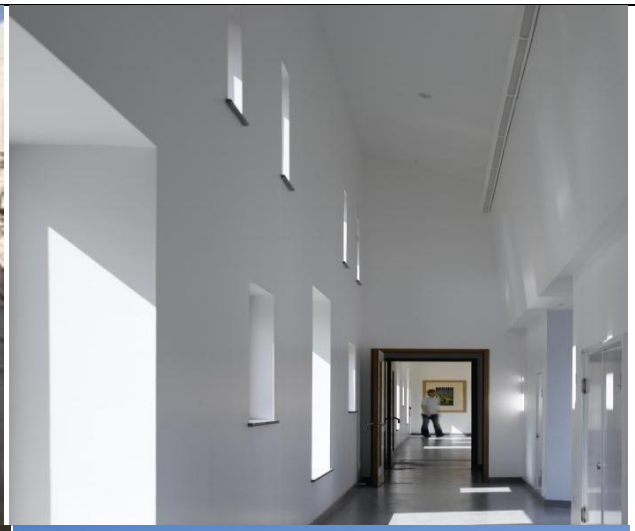
	
1.2 The facility must be easy to get to, with pleasant walks from parking and bus stops. There must be quick and reliable access when needed, 24/7.	Walking routes to be well lit and observed and use landscape features to provide shelter and a soft/natural feel. Routes to be wide enough to allow parents with buggies to pass and for families/friends to walk together and chat rather than in single file. Walking routes to be within 50 metres of public transport drop off points. Drop-off facilities for women in labour and others with limited mobility to be within a short distance of the entrance (including any alternate entrance used out of hours), with direct view to the arrival point. Access to parking close by for out-patients. This is important to make sure that people attend and close parking is known to improve uptake of e.g. breast screening.

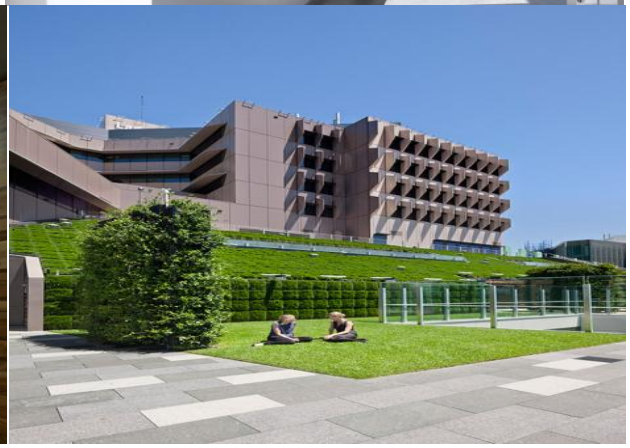
	 
1.3 Arrival experience must not feel like arriving at a hospital, but into a community place. The initial space should be of a size to handle throughput in a calm manner. Help and welcome must be more than obvious as you enter the building. The design should make it easy to find your way about so you do not feel you have to ask for help but it is there if you need reassurance.	The initial arrival space to have a social feel; light and airy but intimate in scale and calm in nature. It should be a space for all people, a place to be with visiting relatives/friends, have refreshments and a chat. It should have space to bring in community life (music etc). Useable external space(s) for quiet respite and for relief (such as allowing children to run off steam) should be provided immediately adjacent to enable use.

	 
1.4 The layout must be designed around the 'emotional flows' of different user groups, avoiding sensitive relationships but without sending out subconscious signals (turn left for good news, turn right for bad) or making the reason for your visit obvious to others.	Conflicts of emotional state such as waiting areas for the reproductive medicine service having sight of areas where new mothers are playing with their babies must be avoided. Signage etc that is visible from shared areas must be discreet regarding the service patients are using.  

1.5 On arriving at a department or ward there must be a direct view to a reception/staff point so a human is visible and you feel assured that staff know you are there. The waiting experience must be 'emotion sensitive', accommodate the person and their family's needs and allow for personal choice.	Waiting areas to be light and open, with space for relatives/friends to wait in comfort while patients are being seen/treated. Spaces within departments to be located close to staff areas so you feel in touch with what is going on and able to get information. There should also be a way of being able to go to the shared social area if there is time and to stay in touch with the appointment. Seating to be comfortable and arranged to allow family groupings and also the appropriate separation, as per patient choice, of different groups (e.g. pregnant women and those attending the reproductive medicine department). The facility must be designed to allow for discreet egress from the building for patients who may have received bad news e.g. early pregnancy loss. The successful design will enable women in these circumstances to exit the department without having to encounter other patients.  

	
1.6 There must be places, both internal and external, for people to go for quiet reflection and to enable critical experiences to happen whenever they need to happen.	A sheltered garden area to be provided adjacent to the Neonatal Unit to allow parents and babies a breath of fresh air as and when needed. This must be useable even when the helipad is in operation. There must be quiet, comfortable spaces within out-patient and ward environments for people to be able to compose themselves after difficult news and before heading back into the 'public' areas of the hospital. Sanctuary space (internal and external) to be provided near the initial space and to be accessible to all building users. This must be sheltered from noise and disturbance (e.g. helipad).

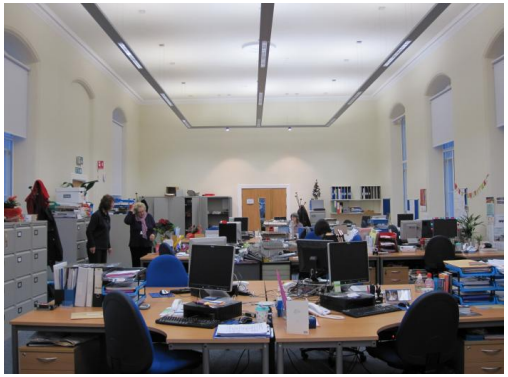


	
1.7 Birthing rooms must have a non-clinical feel and be as homely as possible.	Where clinically appropriate, the furnishings and layout of these rooms should minimise the feeling of "clinical" space and allow women and their partners to feel relaxed and comfortable. Space for partners to remain with women at all times is a key component of these spaces and should be suitable and comfortable to meet the needs of both groups.  

	 
1.8 Consulting and treatment rooms must appear slick and professional, but not intimidating. Treatment spaces should look more clinical/clean and consulting spaces more friendly. They must be designed to be flexible so that the nature of the space and equipment can be adapted to suit the patient's needs.	Good daylighting and privacy. Space to hide clinical equipment so that the room can be readily changed in nature.
1.9 Bedrooms must be for families, not just for the patient. They must be calming and relaxing, and allow good observation so people do not feel isolated.	Bedrooms to be adaptable for family use, day and night. Rooms to have good daylight and views and to be close to outdoor space to allow families a breath of fresh air. Rooms should be designed to make it easy to control noise and lighting levels to allow rest/sleep when needed (this is particularly important for rooms in the Neonatal Unit).
1.10 The development (building and grounds) must be breastfeeding friendly throughout, including providing attractive spaces for those who prefer to feed in private.	An adequate provision of breastfeeding room(s) must be included. The location of these rooms should be carefully considered e.g. not included or close to toilet facilities. The furnishing of such spaces should be comfortable and include equipment as required to support mothers.

2 Non-Negotiables for Staff

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
2.1 There must be safe and reliable access for staff.	The standards of access set above for patients will meet the majority of staff needs with additional needs as noted below: • There must be discrete and immediate access and egress for ambulances and clinicians on emergency calls, with sheltered parking for ambulances immediately adjacent to an entrance • On call staff parking very close to the same entrance • Staff changing facilities, with space to store personal possessions, to be close to staff access routes
2.2 The layout must bring staff together to aid communication and support learning.	Staff routes around the facility to be designed so that you 'bump' into colleagues from other departments as part of your normal daily work. Staff rest areas, including those which need to be provided locally due to operational constraints, to be outside the clinical environment so that they are shared with a nearby service.  
2.3 The layout must be flexible in use and efficient, in terms of the relationship of departments and also to support new ways of working.	Rooms (consulting, treatment, meeting) to be laid out so that they can be used flexibly by different services and not defended as the territory of one service. IT facilities to support video conferencing with colleagues in other areas. There must be an internal link between the Neonatal Unit and Royal Aberdeen Children's Hospital to allow quick and

	reliable transfer for neonates who require surgery. There must be an internal link between the new hospital and Aberdeen Royal Infirmary to allow quick and reliable transfer for women who require access to ITU, HDU and Imaging services.
2.4 The facility must feel a good place to work in, value staff and support their wellbeing.	Staff areas to be as nice as patient areas. Staff and meeting areas designed flexibly to allow for special events/classes. A staff only area where you can get a breath of fresh air. Staff rest facilities to be away from patient areas so that they can feel off duty and blow off steam, or have a quiet moment. The main staff rest area should be designed so that it is nice enough to encourage use and is positioned so that it feels accessible to all staff. **What we do not want:** 
2.5 The facility must be designed to make it easy to clean and service without impacting on patient areas, or staff rest areas, visually or with noise.	Vehicle service routes placed away from public areas and which remove/reduce the need to reverse. Material flows separated from public flows. Good distributed storage.

3 Non-Negotiables for Visitors

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
3.1 There must be facilities to cater for the full range of family needs, from siblings to elderly relatives who may visit.	The provision of comfortable and accessible public areas are important e.g. coffee shop at front entrance with seating and areas which encourage congregation. A children's play area should be included but also not impact negatively on other users of the space. Partner facilities to be included where appropriate in clinical areas to allow partners or family members to remain with women e.g. when in labour. Provision of "Patient Hotel" accommodation to cater for patients to allow them to be more appropriately accommodated, rather than being in an in-patient bed unnecessarily.

4 Alignment with Policy

The things we can do with the same investment that can help other objectives (not strictly related to the service being provided in this building)

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
4.1 The development of two new buildings (the Baird Family Hospital and the ANCHOR Centre) will form part of "re-fronting" the Foresterhill Health Campus. As such, both buildings and landscapes should work together to improve the impression and operation of the hospital and it's relationship with the adjacent residential areas.	The Baird Family Hospital must be a good neighbour to the Royal Aberdeen Children's Hospital and the neighbouring residential housing. Landscape changes to the southern edge of the site to be designed to improve walking routes and health promotion opportunities, co-ordinating with other landscape changes planned for the site.
4.2 NHS Grampian's commitment on sustainability	The development of this new building will form part of the Foresterhill Health Campus. As part of this campus, it is responsible to the EU-ETS (European Union Emissions Trading Scheme). This requires NHS Grampian to reduce its carbon emissions year on year. EU-ETS allocates an annual allowance for carbon emissions to various organisations. Hospitals are allowed to opt out

	but are still set targets with a 2% year on year reduction. Failure to achieve these targets will mean that Foresterhill will be withdrawn from the scheme and have to pay the full cost carbon emissions.

5 Stakeholder Involvement

The above was developed through the engagement of the following people:

Name	**Role**
Jackie Bremner	Project Director, NHS Grampian
Gail Thomson	Service Project Manager, NHS Grampian
Morag Davidson	Support Manager, NHS Grampian
Sheila Ingram	Breast Care Nurse, NHS Grampian
Jenny McNicol	Head of Midwifery, NHS Grampian
Andrew McArdle	Head of Logistics, NHS Grampian
Cathy Young	Unit Operational Manager, NHS Grampian
Tara Fairley	Unit Clinical Director, NHS Grampian
Laura Dodds	Project Manager, NHS Grampian
Margaret Meredith	Project Nurse, NHS Grampian
Mike Munro	Project Clinical Lead, NHS Grampian
Jane Raitt	Project Midwife, NHS Grampian

Facilitators: Heather Chapple, Head of Design Forum, Architecture and Design Scotland

Susan Grant, Principal Architect, Health Facilities Scotland

6 Self Assessment Process

Decision Point	**Authority of Decision**	**Additional skills or other perspectives**	**How the criteria will be evaluated and valued**	**Information needed to allow evaluation**
Site Selection	Decision by Project Board			Local Authority local plan and Foresterhill Development

	with advice from Project Team Option appraisal			Framework
Completion of Clinical Brief	Decision by Project Board with advice from Project Team	Patients, patient representative organisations, clinicians and staff (Project Team)	Clinical model to be assessed in terms of the objectives set out in the Design Statement	Benchmarking against best practice statements SIGN Clinical pathways
Selection of early design concept from options developed	Decision by Project Board with advice from Project Team	External technical advisor NDAP	Assessment of the early option, using AEDET to evaluate the likelihood of the options delivering the objectives set out in the Design Statement	Reference Design proposals developed to RIBA Stage 2 with sufficient detail to allow distinction between the main uses of the building, including circulation and external space
Selection of Delivery/Design Team (associated with Preferred Bidder consortium)	Decision by Project Board with advice from Project Team	External technical, legal and financial advisors Scottish Futures Trust (SFT)	Design Statement shall be embedded in the ITPD documents. Project Team will assess design against Design Statement using AEDET	Dialogue with bidders shall affirm Design Statement as a key document in the development of the project
Approval of design proposals to be submitted to planning authority	Preferred Bidder to submit to planning following agreement by Project Board	External technical advisor Scottish Futures Trust (SFT) NDAP	Assessment of proposals, using AEDET to evaluate the likelihood of delivering the objectives set out in the Design Statement	Review against Design Statement and approved service model
Approval of detailed design proposals to allow construction	ProjectCo to agree with Project Team	External technical advisor. Scottish Futures Trust (SFT) NDAP	Assessment of proposals, using AEDET to evaluate the likelihood of delivering the objectives set out in the Design Statement	Review against Design Statement and approved service model

Post Project Evaluation	Consideration by Project Board with advice from Project Team with results fed to SGHSCD	Independent analysis by technical adviser/service providers	Assessment of the completed development against the objectives set out in the Design Statement by representatives of the Project Board and final AEDET review undertaken with Project Team	Review against Design Statement and service model Conduct patient/relatives/visitor and staff satisfaction survey within 2 years of occupancy

End of Design Statement

The ANCHOR Centre: SCIM Design Statement

Introduction

The development of The ANCHOR Centre on the Foresterhill Health Campus will provide out-patient and day patient services for Oncology and Haematology patients. In addition, there will be aseptic pharmacy provision and research and teaching accommodation. The design approach will be to create an inclusive environment which must be designed to the highest standards, taking into account specific infrastructure opportunities and constraints to create a high quality facility.

The business objectives for this project are:

- **Person Centred Care.** To provide services that support patients and families to remain healthy, well and independent and in their own communities; to provide appropriate, safe and secure facilities to deliver optimal care in the acute centre and in communities across the North of Scotland
- **Improved Access to Treatment.** To provide improved ambulatory care services
- **Improved Effectiveness and Efficiency.** To create an environment that supports a sustainable workforce; to achieve sustainability of achievement of national waiting times and treatment targets; to have facilities to be better able to provide appropriate tertiary services for the North of Scotland

In order to achieve these, the facility must possess the following attributes.

NB: the preferred site for this facility had been chosen prior to the Design Statement Workshops and therefore the statement is written with this in mind.

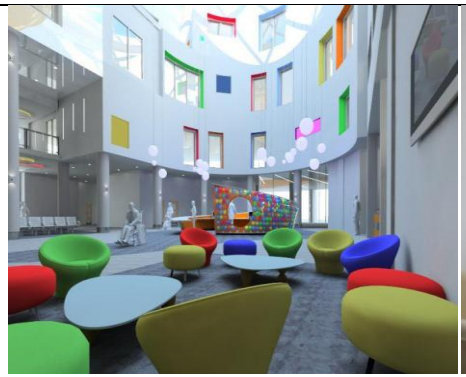
1 Non-Negotiables for Patients

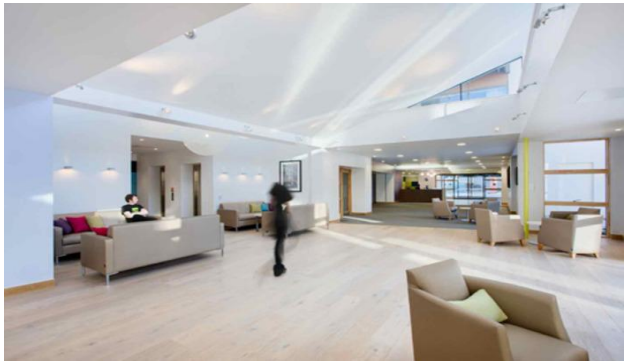
Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
1.1 Together with the wider project (including the Baird Family Hospital and the Foresterhill Development Framework), routes to and from the facility must be improved to make patient access more manageable.	Convenient and reliable parking to be provided in the immediate vicinity of the front entrance e.g. disabled parking spaces within 50 metres of entrance. The vehicle route to the parking allows a view of the facility so you know where you are going and how to get there. Walking routes from buses to be within 50 metres of entrance without alternate transfer. Routes to be shallow grade, well lit and protected from wind. If longer routes are planned, these must include areas to rest in full shelter. Drop-off facilities to be provided immediately adjacent to the entrance. There must be a discrete access/link provided to allow dignified transfer of patients to/from other areas of the Foresterhill Health Campus. 
1.2 The facility should be identifiable so it is obvious where to go. It should inspire confidence and give a positive impression of the service but not attract undue attention so	The entrance should be clearly apparent and welcoming. The signage strategy directing patients to other buildings should be clear, including providing plans and maps to show the location of main facilities.

that it yells ‘the cancer place’ or is so attractive that it becomes the new east entrance to the Foresterhill Health Campus.	There should be obvious and yet intuitive wayfinding so it is clear to patients where they are going and they can be confident that they are in the correct place. The exterior characteristics should be welcoming, not a drab and uninspiring facade.   
1.3 The arrival experience must offer breathing space both outside and in for patients to gather and mentally prepare themselves for their appointment or treatment.	The initial space within the building must feel open, uncluttered, comfortable and sociable. The arrival/entrance area should have a “coffee shop feel”. From here, there must be good planned routes to complimentary facilities, such as the Maggie's Centre, and other clinical services on the Foresterhill Health

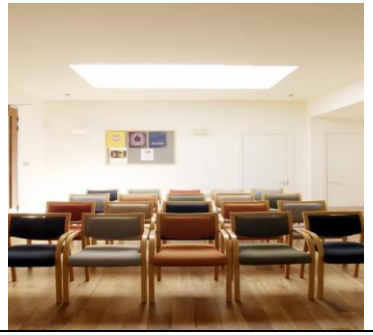
	Campus. There should be good access to external areas (within or nearby the development) for a breath of fresh air and respite. Toilets, space for parking/storing wheelchairs unobtrusively and space for visiting services e.g. Third Sector charities and support organisations to all be provided in or adjacent to this space.   
1.4 On arrival, there must be someone clearly visible that you can ask for help and who can direct you to the appropriate service/waiting area.	The routes for patients must be planned to reduce walking distances to and between services. The journey should also allow for patients to be collected from the waiting area by clinicians, both for welcome and informal conversation, but also to allow some initial assessment of the person's condition through

	observation of their movement. Patients arriving to the ANCHOR Centre for radiotherapy must be able to find their way easily to this existing area; the two component parts of the facility should read as one internally.  
1.5 Waiting area(s) must feel tranquil, spacious, light and private, with views of nature and other positive distractions. The waiting area(s) must be designed to cope with a range of personal needs and a high proportion of people with limited mobility.	Comfortable seating in a variety of sizes and groupings. Access to printed and digital information and wifi. Views of 'stuff going on' but without being on show. Good links to nature (shown to reduce stress) and ideally the ability to step outside into a sheltered area during longer waits. The waiting area should include space for complimentary therapies and also for information/resources. There will also be a waiting area facility for teenagers/young adults. A garden or terrace facility should be provided to allow for external relaxation/private space.



What we do not want in the waiting areas:



1.6 Treatment areas e.g. for chemotherapy must have similar properties to the characteristics as described in section 1.5 above in terms of comfort, daylight, views and distractions.	These spaces should be designed to feel as relaxed as possible, whilst still supporting high quality clinical care. Ideally there will be views of external spaces and other points of interest for patients and their families to enjoy whilst undergoing sometimes lengthy periods of treatment. Treatment spaces must also be flexible enough to allow for social grouping of patients and more quiet secluded areas. There must be space provided for visiting complimentary therapies.
1.7 Consulting and counselling areas must feel quiet, calm and not too clinical.	There must be space to gather yourself again after the consultation before stepping out into 'public'. The facility should provide appropriate main waiting and sub-waiting areas to support these clinical functions, providing ease of access but also physically designed to protect confidentiality e.g. appropriate technical standards to provide soundproofing where required. Decoration and furnishings should be used to create a friendly and non-intimidating environment.
1.8 The ability to eat a nutritious and tasty meal at the point where patients happen to have some appetite is very important to their health and wellbeing.	There must be the ability to warm meals and provide snacks locally to treatment areas. Kitchen facilities local to treatment areas and coffee and snacks close to the out-patient waiting areas.

2 Non-Negotiables for Staff

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
2.1 There must be a discrete entrance and arrival route for staff and the ability to change conveniently before being 'on duty'.	The design should allow, as much as possible, for the appropriate separation of staff and patient movements.
2.2 The facility should have a 'buzz'; lively but calm, and the layout must help staff be productive and support and share with each other. The provision of high quality teaching spaces and facilities to support clinical research are vital.	Staff routes should be short and easy with the "right stuff in the right place". Routes and facilities to be shared by different disciplines so that people meet in the normal course of working. Staff routes should also allow for discreet clinical conversations to be held near to consulting rooms but away from public routes.

	Materials and finishes chosen to lessen noise from machines and movement. Learning/meeting and other staff only spaces should be as attractive as those for patients to demonstrate value and encourage pride. The centre will also include research and teaching facilities so will be an environment for learning and clinical innovation as well as providing patient care. Clinical staff must be able to get quickly and easily between the centre and the in-patient unit in the Matthew Hay Building. There must be an internal link to the main corridor of Aberdeen Royal Infirmary to allow ease of staff movement as well as to allow patients attending the centre to access Imaging. This internal link will also allow for patients who become ill and require admission to be transferred internally.
2.3 The management and transfer of materials, including pharmacy, must be managed without impacting on the nature of patient areas. Ideally, the logistical movement of such materials should avoid patient areas where possible.	The "front of house" and clinical areas must be welcoming and suitable for patient use without distraction or disturbance by logistics movement across the facility. There will be considerable daily movement of goods, sometimes big and bulky packages, which must be managed in a discreet way so as to not impact on the patient experience.
2.4 Clinical spaces provide the opportunity for flexible use and support remote meetings/consultation using IT e.g video conferencing.	Rooms (consulting, treatment, meeting) to be laid out so that they can be used flexibly by different services and not defended as the territory of one service. IT facilities to support video conferencing with colleagues and patients in other areas are available in designated areas as outlined in the room data sheets.
2.5 Staff must be able to rest and feel off-duty.	Rest room with good daylight and views, within a few minutes walk of clinical areas to allow for maximum use. The room should be designed to allow people to gather in social groups or have a moment of privacy and peace.

	 
2.6 The facility must be designed to make it easy to clean and service without impacting on patient areas, or staff rest areas, visually or with noise.	Vehicle service routes placed away from public areas and which remove/reduce the need to reverse. Material flows separated from public flows. Good distributed storage.

3 Non-Negotiables for Visitors

The majority of needs for accompanying friends/family can be met through the environment provided for patients above. Only additional needs are listed below.

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
3.1 There must be space for relatives to be occupied, either in the treatment rooms or in the waiting/arrival area, while the patient is seen.	Provision of waiting areas which are comfortable and there is ease of access to refreshments, external areas and distraction for visitors.

4 Alignment with Policy

The things we can do with the same investment that can help other objectives (not strictly related to the service being provided in this building)

Non-Negotiable Performance Objectives *What the design of the facility must enable*	**Benchmarks** *The physical characteristics expected and/or some views of what success might look like for each*
4.1 With the wider project (the Baird Family Hospital) the project is part of re-fronting the Foresterhill Health Campus and, as such, should work together to improve the impression and operation of the centre. This refers to both the building and the landscape.	Alterations to routes and parking to make better sense of the eastern arrival area. Landscape changes to southern edge of site to be designed together to improve walking routes and health promotion opportunities, co-ordinating with other landscape changes planned for the site. The ANCHOR Centre must be a good neighbour to the Radiotherapy Centre and, in turn, be planned so that the qualities above will be retained after subsequent adjacent development (redevelopment of Phase II building) is completed in 10-15 years time. The ANCHOR Centre and the existing Radiotherapy Centre should be designed to be seen as two halves of one whole. 
4.2 NHS Grampian's commitment on sustainability	The development of this new building will form part of the Foresterhill Health Campus. As part of this campus, NHS Grampian is responsible to the EU-ETS (European Union Emissions Trading Scheme). This requires NHS Grampian to reduce its carbon emissions year on year. EU-ETS allocates an annual allowance for carbon emissions to various organisations. Hospitals are allowed to opt out but are still set targets with a 2% year on year reduction. Failure to achieve these targets will mean that Foresterhill will be withdrawn from the scheme and have to pay the full cost carbon emissions.

5 Stakeholder Involvement

The above was developed through the engagement of the following people:

Name	Role
Jackie Bremner	Project Director, NHS Grampian
Mike Greaves	Project Clinical Lead, NHS Grampian
Gail Thomson	Service Project Manager, NHS Grampian
Jane Tighe	Consultant Haematologist, NHS Grampian
Sean Berryman	Unit Operational Manager, NHS Grampian
Yvonne Wright	Divisional Lead Nurse, NHS Grampian
Andrew McArdle	Head of Logistics, NHS Grampian
Carolyn Annand	Project Nurse, NHS Grampian

Facilitators: Heather Chapple, Head of Design Forum, Architecture and Design Scotland

Susan Grant, Principal Architect, Health Facilities Scotland

6 Self Assessment Process

Decision Point	Authority of Decision	Additional skills or other perspectives	How the criteria will be evaluated and valued	Information needed to allow evaluation
Site Selection	Decision by Project Board with advice from Project Team Option appraisal			Local Authority local plan and Foresterhill Development Framework
Completion of Clinical Brief	Decision by Project Board with advice from Project Team	Patients, patient representative organisations, clinicians and staff (Project Team)	Clinical model to be assessed in terms of the objectives set out in the Design Statement	Benchmarking against best practice statements SIGN Clinical pathways

Selection of early design concept from options developed	Decision by Project Board with advice from Project Team	External technical advisor NDAP	Assessment of the early option, using AEDET to evaluate the likelihood of the options delivering the objectives set out in the Design Statement	Reference Design proposals developed to RIBA Stage 2 with sufficient detail to allow distinction between the main uses of the building, including circulation and external space
Selection of Delivery/Design Team (associated with Preferred Bidder consortium)	Decision by Project Board with advice from Project Team	External technical, legal and financial advisors Scottish Futures Trust (SFT)	Design Statement shall be embedded in the ITPD documents. Project Team will assess design against Design Statement using AEDET	Dialogue with bidders shall affirm Design Statement as a key document in the development of the project
Approval of design proposals to be submitted to planning authority	Preferred Bidder to submit to planning following agreement by Project Board	External technical advisor Scottish Futures Trust (SFT) NDAP	Assessment of proposals, using AEDET to evaluate the likelihood of delivering the objectives set out in the Design Statement	Review against Design Statement and approved service model
Approval of detailed design proposals to allow construction	ProjectCo to agree with Project Team	External technical advisor. Scottish Futures Trust (SFT) NDAP	Assessment of proposals, using AEDET to evaluate the likelihood of delivering the objectives set out in the Design Statement	Review against Design Statement and approved service model
Post Project Evaluation	Consideration by Project Board with advice from Project Team with results fed to SGHSCD	Independent analysis by technical adviser/service providers	Assessment of the completed development against the objectives set out in the Design Statement by representatives of the Project Board and final AEDET review undertaken with Project Team	Review against Design Statement and service model Conduct patient/relatives/visitor and staff satisfaction survey within 2 years of occupancy

End of Design Statement

NHS Grampian								
Baird and Anchor Project								
Risk Register								
Type	**Ref**	**Risk Description - Causes - Consequences [Area/Owning Organisation]**	**Score**	**Likelihood**	**Impact**	**Status**	**Owner**	**Mitigation**
		Approvals						
S- Strategic	1	Strategic Programme not achievable/ deliverable within stated timescales leading to penalties and lack of approval	8	2	4	1 - Open	Project Director	Early review programme with technical advisor to ensure sufficient time to meet OJEU timescales and procurement
O- Operational	2	Lack of clarity over scale and conditions of Scottish Government support and residual impact on NHSG funding required.	2	1	2	1 - Open	Finance Manager	Early engagement with SG/SFT on funding letter conditions
O- Operational	3	Scottish Government do not approve IA/OBC/FBC result in delay if not adequately programmed	4	1	4	1 - Open	Project Director	Continuing and regular engagement with SG on project progress
O- Operational	4	SFT do not give approval at key stages / changes to NPD programme resulting in delay to the project.	8	2	4	1 - Open	Project Director	Early/ continuing dialogue required with SFT to ensure no issues with KSR, follow guidelines on completion of KSR
O- Operational	5	NHSG do not support IA/OBC/FBC resulting in programme delay.	8	2	4	1 - Open	Project Director	NHSG Board agree aims, deliverables and process at outset of project
O- Operational	6	Programme is delayed due to board change to procurement requirements, service and accommodation	8	2	4	1 - Open	Project Director	Governance framework to ensure appropriate sign off and approvals
		Organisation						
O- Operational	7	Restructuring of boards and local authorities services results in changes to governance structures and delay to project programme.	2	2	1	1 - Open	Project Director	Ongoing monitoring and review of project programme if appropriate
O- Operational	8	As-yet unknown strategic development(s) impact on the project deliverables, costs and timeline	4	2	2	1 - Open	Project Director	Ongoing monitoring with stakeholders and review of project deliverable, costs and timelines if appropriate
O- Operational	9	Failure to take on board lessons learnt from previous projects	6	2	3	1 - Open	Project Director	Assemble lessons from SFT, other projects, and hold workshop for team
		Organisation/Political Buyin/Comms						
O- Operational	10	Lack of awareness and engagement with project by General Public, Internal & External Stakeholders and potential for misinformation	8	2	4	1 - Open	Comms Lead	Prepare comms plan, include consultation meetings
O- Operational	11	Lack of clear communication strategy in relation to impact of service changes on other Services within the organisation	12	3	4	1 - Open	Comms Lead	Comms plan for internal stakeholders
S- Strategic	12	The new facility and service model do not deliver the expected benefits in improved capacity, patient pathways and clinical outcomes.	8	2	4	1 - Open	Project Director	Key stakeholder involved in the design and sign off of the development, including dedicated members of the project team. Resources dedicated to planning and implementing the revised service model
S- Strategic	13	The new facility and/or service model do not meet with approval from users (e.g. patients, carers, staff) resulting in complaints / grievances / poor publicity / loss of reputation.	8	2	4	1 - Open	Project Director	Early and continuous engagement with users
S- Strategic	14	Failure to maintain the benefits of relations with the University in the current facilities, and to achieve aspirations for education, peer review and research in the future	8	2	4	1 - Open	Project Director	Early and continuous engagement with University

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
S- Strategic	15	Staff action / grievances in response to changes to working / non-compliance with staff governance standards / national campaigns resulting in programme delay.	12	3	4	1 - Open	HR Lead	Early and continuous engagement with staff and trade unions
O- Operational	16	Failure to inform users of changes to traffic management arrangements resulting in confusion, complaints, adverse incidents and bad publicity.	6	3	2	1 - Open	Comms Lead	Incorporate in publicity and communication strategy; Plan and consult of proposed changes
		Project Structure						
S- Strategic	17	Unclear project roles, responsibilities and management arrangements for the project	8	2	4	1 - Open	Project Director	Use of a project organogram and roles terms of reference
O- Operational	18	lack of defined decision making structures failure	12	3	4	1 - Open	Project Director	Project governance structure defined
O- Operational	19	insufficient co-ordination within project team	9	3	3	1 - Open	Project Director	Regular team meetings and appointment of project managers and director
O- Operational	20	failure to co-ordinate and manage build commissioning activities (including equipment transfer and installation and staff orientation) resulting in adverse incidents and risk to safety. programme delay and costs incurred.	12	3	4	1 - Open	Project Manager	Work with the contractor to ensure arrangement to manage are in place
O- Operational	21	insufficient co-ordination within the design team due to very tight programme	6	2	3	1 - Open	Project Manager	Risk will be transferred to the contractor
O- Operational	22	the completion, handover and occupation is poorly planned, co-ordinated and managed.	12	3	4	1 - Open	Project Manager	Early planning
S- Strategic	23	programme is insufficiently robust and is not deliverable as all activities and constraints have not been included.	12	3	4	1 - Open	Project Manager	Regular review and task matrix workshop to review completeness
		People						
S- Strategic	24	inappropriate and insufficient resources to deliver the project and associated work - business case	8	2	4	1 - Open	Project Director	Appoint external advisor support to lead business case process; ensure sufficient internal support to complete strategic & finance cases
O- Operational	25	inappropriate and insufficient resources to deliver the project and associated work - technical spec	16	4	4	1 - Open	Project Director	Appoint external advisor support to lead business case process; ensure sufficient internal support to complete strategic & finance cases
O- Operational	26	programme impact of delay in recruiting additional posts i.e. project director/project manager/commercial manager	12	4	3	1 - Open	Project Director	Engagement with HR to ensure that accelerated process for advertising posts is available; JD's to be prepared & matched with expedience: liaise with Finance
O- Operational	27	non availability of users/ user input not provided on time due to work commitments	9	3	3	1 - Open	Project Manager - Servic	Appointment of dedicated resource and early planning to ensure wider engagement
O- Operational	28	capacity/capability gaps being filled by external advisors is unaffordable	12	3	4	1 - Open	Project Director	NHSG need to identify sufficient internal resource to ensure that the cost of the external resource is kept to a minimum
O- Operational	29	inappropriate and insufficient resources to manage a robust procurement process will inhibit nhs in securing the most economically advantageous tender.	8	2	4	1 - Open	Project Director	Resourcing of team with dedicated staff
		Funding Availability						

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
S- Strategic	30	Project slippage/overspend: availability of NHSG funding	12	3	4	1 - Open	Project Director	Early engagement with financial planning process. Close monitoring of cost projections
S- Strategic	31	Project slippage/overspend: availability of SG funding	12	3	4	1 - Open	Project Director	Regular engagement with SG
O- Operational	32	NHSG funding settlement - budgeting and availability of funding	12	3	4	1 - Open	Project Director	Early engagement and monitoring with financial planning process
O- Operational	33	Affordability of scheme within the notional £120m identified is not achievable i.e. accommodation out of scope, spike in construction inflation or lending rates	8	2	4	1 - Open	Finance Manager	watching brief & early cost checks required
O- Operational	34	Project does not qualify under esa 10 treatment and therefore will not attract SG revenue funding	5	1	5	1 - Open	Finance Manager	Regular review of project against esa 10 rules
O- Operational	35	Evaluation of unitary charge does not demonstrate vfm/affordability due to underestimation	8	2	4	1 - Open	Finance Manager	Regular review of project against affordability criteria
O- Operational	36	affordability constraints risk that repeated re-design required and programme delay	6	2	3	1 - Open	Project Manager	Early investment of resource in design
O- Operational	37	Tendered annual service payment is unaffordable because bidders cannot meet specification within the terms of the funding letter.	6	2	3	1 - Open	Finance Manager	Regular review of project against affordability criteria
O- Operational	38	initial costing: equipment based on % of construction costs - need to identify a more robust driver. Potential group 2, 3, 4 equipment costs unaffordable	12	4	3	1 - Open	Finance Manager	Development of equipment schedule in conjunction with HFS.
O- Operational	39	double running costs during transition undetermined - fm and clinical resources	9	3	3	1 - Open	Finance Manager	Early budgeting for handover costs
		estimates and assumptions						
O- Operational	40	initial costing: footprint area different to costed	12	4	3	1 - Open	Finance Manager	Refinement of costs in consultation with advisors
O- Operational	41	initial costing: inflation assumptions are based on forecasts, these could change	8	4	2	1 - Open	Finance Manager	Regular review of assumptions
O- Operational	42	initial costing: assumed construction rates could change	8	4	2	1 - Open	Finance Manager	Refinement of costs in consultation with advisors
O- Operational	43	initial costing: ball park figures included for construction and site unknowns	16	4	4	1 - Open	Finance Manager	Refinement of costs in consultation with advisors
O- Operational	44	initial costing: ball park figures included for relation of eye and breast screening facilities - solution unknown	8	4	2	1 - Open	Finance Manager	Refinement of costs as solution is defined
O- Operational	45	initial costing: risk that costs are omitted	6	2	3	1 - Open	Finance Manager	Regular review of assumptions
O- Operational	46	initial costing: risk costs are under/overstated	6	2	3	1 - Open	Finance Manager	Regular review of assumptions
O- Operational	47	initial costings: it infrastructure/energy costs are ball park - need more specialist review	8	4	2	1 - Open	Finance Manager	Refinement of costs in consultation with advisors
O- Operational	48	VAT treatment assumptions could change	9	3	3	1 - Open	Finance Manager	Regular review of assumptions

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
O- Operational	49	project team and advisors costs estimates at this stage - may be different profile	6	3	2	1 - Open	Finance Manager	Regular review and monitoring
		Contracts						
O- Operational	50	supply chain liquidation a member of the supply chain goes into liquidation resulting in the delivery of the project is delayed, and/or costs increased	8	2	4		Project Manager	Set minimum criteria in PQQ and monitor over life of project
O- Operational	51	consultant liquidation a member of the consultant team goes into liquidation resulting in the delivery of the project is delayed, and/or costs increased	6	2	3		Project Manager	Set minimum criteria in PQQ and monitor over life of project
S- Strategic	52	conclude competitive dialogue failure to reach agreement on programme	10	2	5		Commercial Manager	Management of process
O- Operational	53	construction start date uncertainty lack of firm construction start date during competitive dialogue period results in qualified tender returns and provisional inflation allowance	9	3	3		Commercial Manager	Management of process and regular review of program
O- Operational	54	changes in the bank lending rate prevents financial close	12	3	4	1 - Open	Finance Manager	Regular monitoring and review in consultation with advisors
S- Strategic	55	nhsg are unable to achieve value for money as the contract does not attract sufficient interest to hold competitive dialogue with bidders.	10	2	5		Commercial Manager	Management of process
O- Operational	56	nhsg fails to appoint an npd partner as bidders are unable to secure finance or unable to secure affordable finance due to general economic and political climate.	10	2	5		Commercial Manager	Management of process
O- Operational	57	programme is delayed by challenge from unsuccessful bidder or third party. high cost in programme and fees.	9	3	3		Commercial Manager	Management of process
O- Operational	58	programme delayed due to protracted or inconclusive closure of dialogue and/or negotiations to reach financial agreement.	6	2	3		Commercial Manager	Management of process
O- Operational	59	the level of quality delivered by the contractor does not match expectations.	8	2	4		Commercial Manager	Robust monitoring processes in place
O- Operational	60	contractor 'buys' the project and is commercially aggressive in pursuing every perceived minor variation.	6	2	3		Commercial Manager	Robust change control processes in place
O- Operational	61	failure of operations on site due to breakdown between parties.	8	2	4		Commercial Manager	Regular and structured liaison
O- Operational	62	failure to deliver the project due to breakdown between parties / delays in agreement of strategic priorities on site.	6	2	3		Commercial Manager	Regular and structured liaison/sign off
		Planning						
O- Operational	63	planning consent for Foresterhill health centre is still to be secured	6	2	3	1 - Open	Project Manager	Engagement with Planning authorities
	64	statutory consents/planning permission failure to obtain planning permission on programme (inability to satisfy all statutory consultees)	15	3	5	1 - Open	Project Manager	Engagement with Planning authorities

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
O- Operational	65	transport safety and car parking may result on conditions within consent	9	3	3	1 - Open	Project Manager	Engagement with Planning authorities
O- Operational	66	developer obligation may be imposed to manage traffic on westburn road (traffic lights)	9	3	3	1 - Open	Project Manager	Engagement with Planning authorities
		Traffic Management						
O- Operational	67	highways works previously unidentified highway alterations are required. (maintenance of all existing access arrangements to/from the site)	8	4	2	1 - Open	Project Manager	Early planning
O- Operational	68	limitations on access to site	9	3	3	1 - Open	Project Manager	Early planning and integration with traffic management arrangements
		Site Availability						
S- Strategic	69	Foresterhill Health Centre - enabling work but part of hub project potential slippage	16	4	4	1 - Open	Project Manager	Active coordination of each projects programmes and critical paths
O- Operational	70	relocation of eye clinic and breast screening clinic delayed leading to delay in availability of site	12	3	4	1 - Open	Project Manager	options appraisal exercises accelerated: site surveys and information co-ordinated through Estates; regular liaison with Finance over costs. Alignment of program plan
O- Operational	71	site constraints due to ARI	4	2	2	1 - Open	Project Manager	Early site option appraisal completed
O- Operational	72	the actual site/sites selected will involve abnormal remediation/ clearance and/or enabling costs	12	3	4	1 - Open	Project Manager	Early planning
S- Strategic	73	site conditions discovery of previously unknown underground services, contaminated ground or other constraint	8	2	4	1 - Open	Project Manager	Programme contingencies
O- Operational	74	disruption due to need to maintain existing hospital operations and/or interface with other activities leading to temporary stoppage, change to working method, extended work period etc	9	3	3	1 - Open	Project Manager	Programme contingencies
O- Operational	75	enabling works impact on existing facilities delivery of enabling works and operational interfaces will be more complex than anticipated with corresponding impact on programme and cost.	8	2	4	1 - Open	Project Manager	Programme contingencies
		Service Specs						
O- Operational	76	the Initial Agreement is treated as a major service change impacting on programme	10	2	5	1 - Open	Project Director	Early/ continuing dialogue required with SG to ensure IA not held up
S- Strategic	77	the clinical strategy is unclear impacting on an agreed output specification & scoping not being signed off by services	8	2	4	1 - Open	Clinical Leads	Early appointment of healthcare planner and identification service planning leads to take this work forward
O- Operational	78	failure to meet clinical output /operational adjacencies, efficiencies, service output (ar's)	8	2	4	1 - Open	Clinical Leads	Regular monitoring and review and early and detailed involvement of clinical staff and other relevant parties in the planning process, with repeated review at all stages
O- Operational	79	Assumptions made in development of clinical strategy are not approved/deliverable e.g. patient hotel	8	2	4	1 - Open	Project Manager - Servic	Regular monitoring and review and early and detailed involvement of clinical staff and other relevant parties in the planning process, with repeated review at all stages

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
O- Operational	80	Assumptions concerning regional stakeholders and the service they will deliver have been made these may change.	8	2	4	1 - Open	Project Manager - Servic	Regular monitoring and review
O- Operational	81	infection control statutory requirements change in infection control requirements causes delays and adds cost	8	2	4	1 - Open	Project Manager - Servic	Regular monitoring and review
O- Operational	82	patient activity/bed modelling modelling assumptions may prove incorrect	12	3	4	1 - Open	Project Manager - Servic	Robust review and validation of assumptions including consideration of best currently available statistics on
O- Operational	83	extended life expectancy requirements redesign of facilities to meet extended life expectancy requirements, causing redesign costs, increased cost plan and	12	3	4	1 - Open	Project Manager - Servic	Robust review and validation of assumptions
O- Operational	84	medical technology unexpected changes in medical technology. advances in medical technology and associated costs.	4	3	4	1 - Open	Project Manager - Servic	Regular monitoring and review
O- Operational	85	legislative changes that effect cost profile of project	8	2	4	1 - Open	Finance Manager	Regular monitoring and review
O- Operational	86	planned function of a room / area becomes obsolete or priorities change due to changes in practice / advances in technology and requires updating before opening.	6	2	3	1 - Open	Project Manager - Servic	Regular monitoring and review and planning for flexible space in the design whenever possible
O- Operational	87	storage footprint for health records may change and alternatives to paper will be in place by the time the hospital opens.	6	3	2	1 - Open	Project Manager - Servic	Robust planning and flexibility in design
S- Strategic	88	workforce sustainability ability to recruit and sustain workforce within specialist services	12	4	3	1 - Open	Project Director	Early resource planning and engagement with relevant stakeholders
O- Operational	89	staff to deliver re-designed services inability to retrain existing staff to undertake new roles required for new models of care. potential impact on staff turnover.	8	2	4	1 - Open	Project Director	Early resource planning and engagement with relevant stakeholders
O- Operational	90	Failure to engage national training providers to deliver new training requirements arising from the project	8	2	4	1 - Open	Project Director	Early planning and engagement with relevant stakeholders
		Handover						
O- Operational	91	service delivery during migration and operations sustaining 24/7 delivery of key services	10	2	5	1 - Open	Project Manager	Early planning and engagement with relevant stakeholders
O- Operational	92	major clinical incident major incident during switchover period	8	2	4	1 - Open	Project Manager	Contingency Planning
O- Operational	93	commissioning defects impact on operational effectiveness problems with new building	9	3	3	1 - Open	Development Manager	Robust commissioning process
O- Operational	94	programme delay in achieving operational readiness; operational risk if staff are not available for orientation and training in new facility.	9	3	3	1 - Open	Project Manager - Servic	Robust commissioning preparation
O- Operational	95	ff&e damage during decant damage caused to equipment during decanting operation resulting in additional cost in terms of repair and or replacement	9	3	3	1 - Open	Project Manager	Robust commissioning process
O- Operational	96	reduced productivity and clinical risk due to unavailability of equipment and services during transfer to new site.	9	3	3	1 - Open	FM Lead	Robust commissioning process

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
O- Operational	97	delay to commissioning and commencing service due to failure to meet programme to procure / install / commission equipment.	9	3	3	1 - Open	Project Manager	Robust commissioning process
O- Operational	98	running of live services in nhsg disrupted due to damage to utilities or other infrastructure during works within the nhsg.	6	2	3	1 - Open	FM Lead	Contingency Planning
O- Operational	99	nhsg soft fm operational policies preparation and issue of operational policies for: access, whole hospital policies, car parking, cleaning services, laundry services, porter services, grounds and garden, works and estates, stores and deliveries, waste management.	8	2	4	1 - Open	FM Lead	Robust planning for change
O- Operational	100	delay in programme or reduction in capacity due to defects identified post-handover requiring rectification.	9	3	3	1 - Open	Development Manager	Robust commissioning process
O- Operational	101	build programme does not deliver the facility in time for the planned move.	12	3	4	1 - Open	Project Director	Robust commissioning process
		technical design and specification						
O- Operational	102	environment - carbon footprint/energy consumption targets not achievable	6	2	3	1 - Open	Development Manager	Early specification
O- Operational	103	failure to achieve breeam excellent within budget	4	2	2	1 - Open	Development Manager	Early specification
O- Operational	104	design changes to the brief delay to achievement of brief and/or subsequent variations	6	2	3	1 - Open	Development Manager	Sign of design brief by key stakeholders
O- Operational	105	it and telecoms inadequate capability leading to poor service quality	6	2	3	1 - Open	FM Lead	Early review of capacity
O- Operational	106	transportation strategy inadequate transport arrangements to support patient/staff/visitor access.	6	2	3	1 - Open	FM Lead	Early review of requirements
O- Operational	107	late value engineering risk of late changes resulting in compromised product	9	3	3	1 - Open	Development Manager	Early and regular review of cost and specification
O- Operational	108	utilities lack of adequate and appropriate utility services capacity availability or requirement to fund major infrastructure reinforcement with corresponding impact on	6	2	3	1 - Open	FM Lead	Early review of capacity
O- Operational	109	the existing building infrastructure becomes overloaded.	6	2	3	1 - Open	Development Manager	Early site option appraisal
O- Operational	110	re-specification or re-sourcing of materials and/or equipment is required.	6	2	3	1 - Open	Development Manager	Early specification
O- Operational	111	the designs cannot be completed within the programme.	6	2	3	1 - Open	Development Manager	Early specification and review of deliverability
O- Operational	112	client design objectives not achieved.	8	2	4	1 - Open	Development Manager	Early specification and review of deliverability
S- Strategic	113	accommodation required in nhsg to support service models is not feasible.	8	2	4	1 - Open	Development Manager	Early specification and review of deliverability
O- Operational	114	equipment strategy delivered late risk that equipment strategy is not taken into account at 1:50 design stage and will subsequently impact on room layouts	8	2	4	1 - Open	Project Manager	Early specification of equipment requirements

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
O- Operational	115	architecture & design Scotland - comments and impact on programme and cost	8	4	2	1 - Open	Development Manager	Early and regular engagement
O- Operational	116	secured by design certification is not achieved due to conflict with requirements of the brief, affordability or specific nhsg direction	9	3	3	1 - Open	Development Manager	Early and regular engagement
O- Operational	117	planned function of a room / area becomes obsolete or priorities change due to changes in practice / advances in technology and requires updating before opening.	9	3	3	1 - Open	Project Manager - Servic	Early and regular engagement
		Construction						
O- Operational	118	segregation requirements segregation of vehicular and pedestrian traffic for both site and nhsg operational areas	8	2	4	1 - Open	Project Manager	Early planning
O- Operational	119	way leaves service diversion works breach existing way leave arrangements between nhsg and utility providers.	6	2	3	1 - Open	Project Manager	Early planning
O- Operational	120	additional work is requested that cannot be accommodated within the time and budget allowed.	9	3	3	1 - Open	Project Manager	Stakeholder engagement in signoff before construction
O- Operational	121	noise, dust, vibration will impact upon/disrupt operational activity	9	3	3	1 - Open	Project Manager	Early engagement with contractor
O- Operational	122	noise levels during construction noise levels exceed tolerances proposed by nhsg but are within tolerances set out by council. enforced re-sequencing or replanning resulting in additional costs and or delay	6	2	3	1 - Open	Project Manager	Early engagement with stakeholders
O- Operational	123	additional measures (re-design or additional works) may need to be taken to comply with environmental guidance.	6	3	2	1 - Open	Project Manager	Early planning
O- Operational	124	defects arising from enabling works packages which require to rectified	12	4	3	1 - Open	Project Manager	Management of process
O- Operational	125	inaccurate site information risk that the information received is inaccurate/invalid and may lead to major site issues throughout the construction phase of the project	8	2	4	1 - Open	Project Manager	Comprehensive review of data available and identification of gaps
O- Operational	126	utilities (temporary services) lack of adequate and appropriate utility services	8	2	4	1 - Open	FM Lead	Early planning
O- Operational	127	infrastructure damage caused to adjoining property, highways and the like caused as a direct result of construction activities.	8	2	4	1 - Open	Project Manager	Management of process
O- Operational	128	increased npd site traffic results in congestion on campus, impeding both live operations and construction progress.	6	2	3	1 - Open	FM Lead	Management of process
O- Operational	129	injury on campus (outside the construction site) associated with npd construction to any party, impacting on programme, cost and / or reputation.	4	2	2	1 - Open	Project Manager	Management of process

Type	Ref	Risk Description - Causes - Consequences [Area/Owning Organisation]	Score	Likelihood	Impact	Status	Owner	Mitigation
O- Operational	130	programme delay due to construction being halted as campus responds to a major incident.	4	2	2	1 - Open	Project Manager	Contingency Planning
O- Operational	131	vandalism occurs during construction leading to cost and delay	6	3	2	1 - Open	Project Manager	Contingency Planning
O- Operational	132	construction causes downtime in accommodation availability, resulting in reduced service but no reduction in unitary charge costs.	9	3	3	1 - Open	Project Manager	Management of process
O- Operational	133	construction causes an infection control risk resulting in clinical risk and service reduction.	4	1	4	1 - Open	Project Manager	Contingency Planning
O- Operational	134	build programme does not deliver the facility in time for the planned move.	16	4	4	1 - Open	Project Manager	Contingency Planning
S- Strategic	135	late start/finish on site for key work packages.	16	4	4	1 - Open	Project Manager	Contingency Planning

Drawings showing massing of buildings for site options

Appendix C

Option 1

NHS GRAMPIAN

ABERDEEN ROYAL INFIRMARY
FORESTERHILL ABERDEEN

FUTURE DEVELOPMENT

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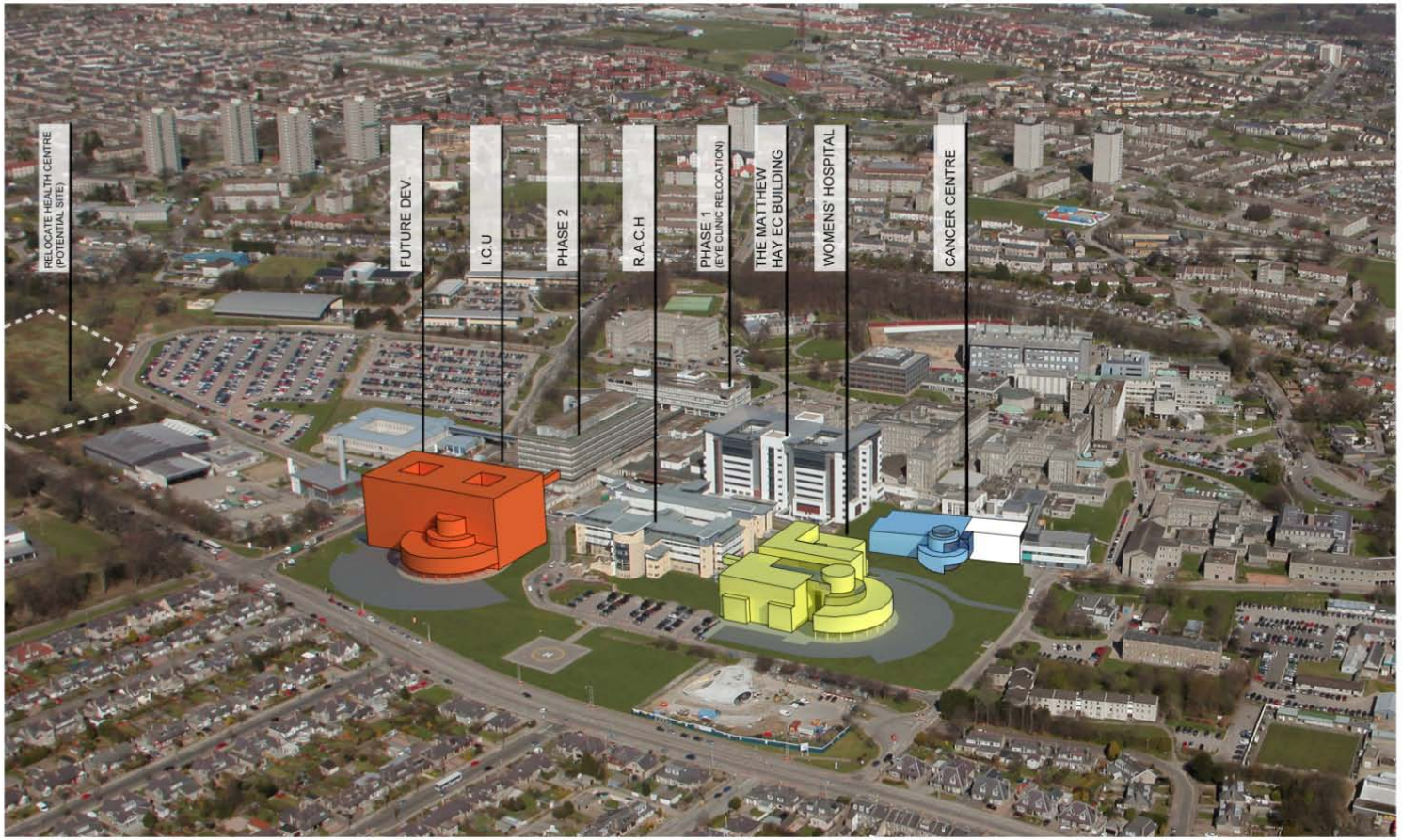
Option 2



NHS GRAMPIAN

ABERDEEN ROYAL INFIRMARY
FORESTERHILL ABERDEEN

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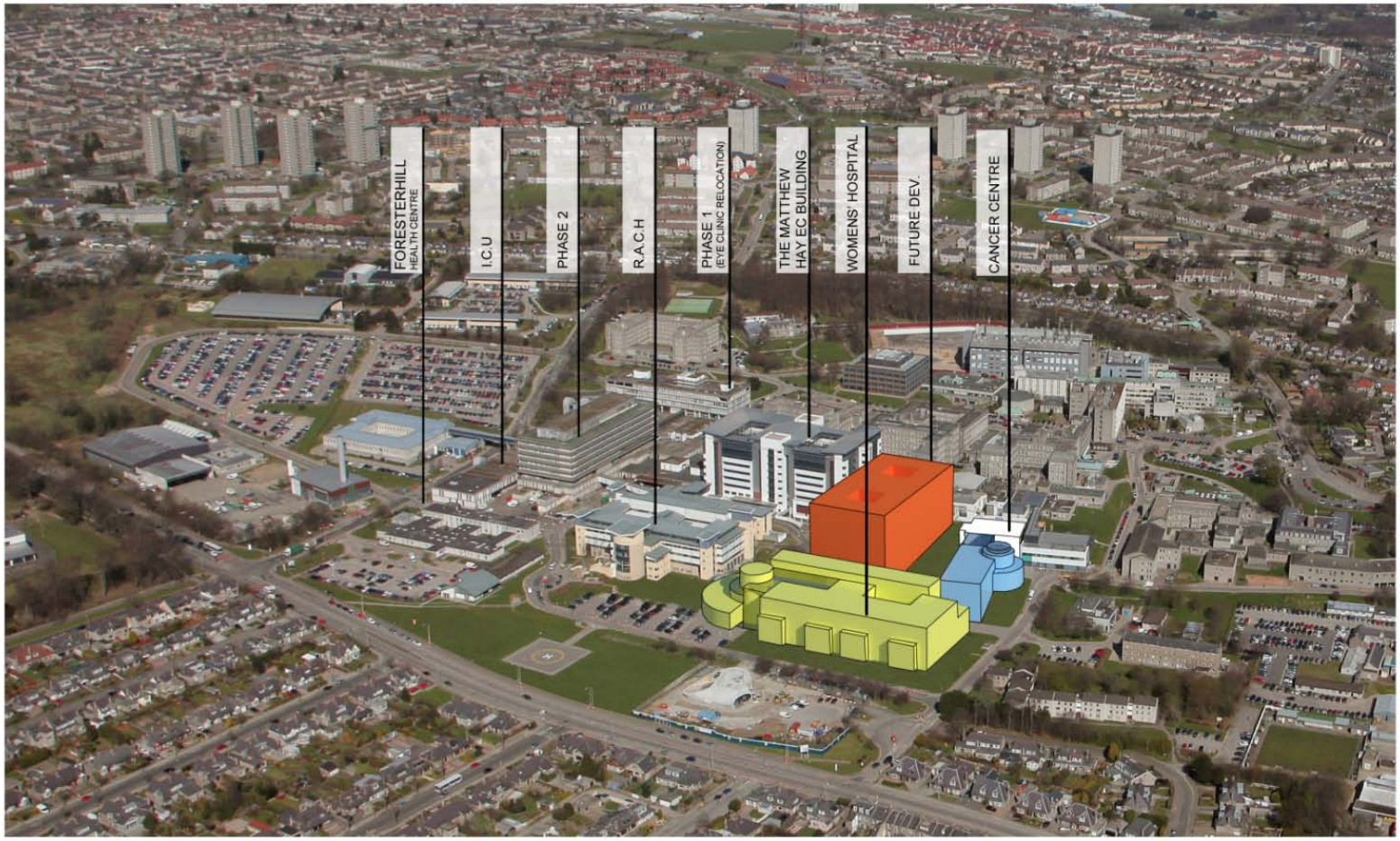
Option 3



NHS GRAMPIAN

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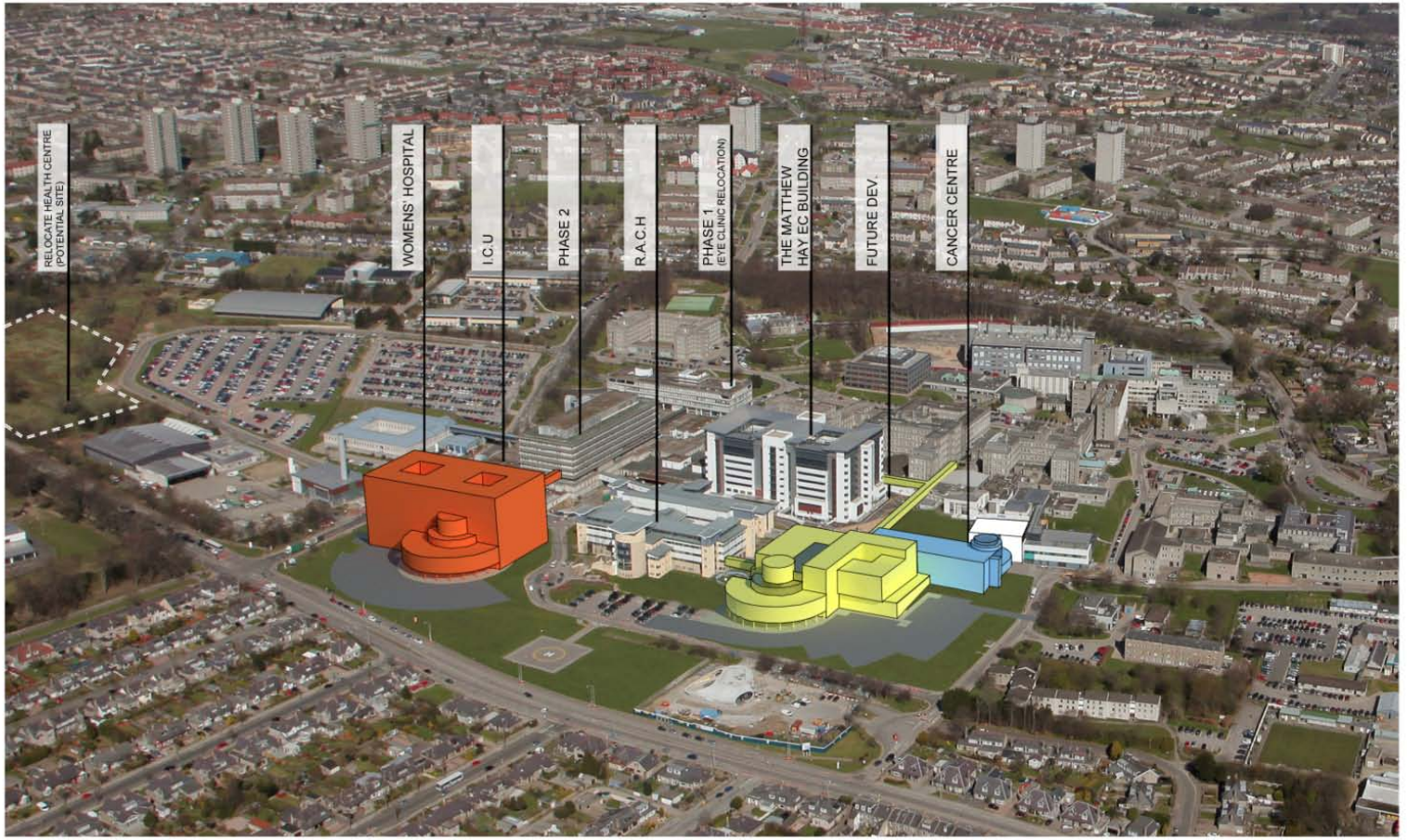
Option 4



NHS GRAMPIAN

ABERDEEN ROYAL INFIRMARY
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Generic Economic Model for NHS Option Appraisal

Appendix D

The Baird Family Hospital and ANCHOR Centre Project

SUMMARY	Appraisal Period	NPC £M	Risk Adjustment £M	Risk Adjusted NPC £M	EAC £M	Risk Adjustment £M	Risk Adjusted NPC £M
Option 1 (Preferred way forward)	60 Years	181.2		181.2	6.9		6.9
Option 2	60 Years	173.4		173.4	6.6		6.6
Option 3	60 Years	172.7		172.7	6.6		6.6
Option 4	60 Years	173.4		173.4	6.6		6.6