

Outline Business Case: 2019

nVCC Enabling Works

Strategic Case

STRATEGIC CASE

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1 ORGANISATIONAL OVERVIEW

Introduction

1.1 The purpose of this section is to:

- Provide an overview of Velindre University NHS Trust (the Trust) and Velindre Cancer Centre; and to
- Outline Velindre Cancer Centre's role in delivering non-surgical specialist cancer services to the population of South East Wales.

Velindre University NHS Trust

1.2 The Trust has evolved significantly since its establishment in 1994 and is operationally responsible for the management of the following two divisions:

- Velindre Cancer Centre; and
- Welsh Blood Service.

1.3 The Trust is also responsible for hosting the following organisations on behalf of the Welsh Government (WG) and NHS Wales:

- NHS Wales Informatics Service (NWIS);
- NHS Wales Shared Services Partnership (NWSSP); and
- Health Technology Wales.

Velindre Cancer Centre

1.4 Velindre Cancer Centre is located in Whitchurch on the North-West edge of Cardiff and is one of the ten largest regional Clinical Oncology Centres in the United Kingdom (UK Radiotherapy Equipment Survey, 2008) and the largest of the three Centres in Wales.

1.5 The Trust is the sole provider of non-surgical specialist cancer services to the catchment population of 1.5 million across South East Wales, from Chepstow to Bridgend and from Cardiff to Brecon. Velindre Cancer Centre employs around 700 members of staff and has approximately 70 volunteers who provide a range of 'added value' roles across the centre.

1.6 The Trust also works in partnership with a wide range of Third Sector and Charity Organisations to deliver high quality cancer care and undertake clinical research. Partners include:

- Voluntary Sector;
- Third Sector;
- Higher Education Institutions (HEIs); and
- Industry/Commercial Partners.

Cancer Services in Wales

- 1.7 The planning and delivery of Cancer Services in Wales is the responsibility of the seven Health Boards (HBs) as part of their statutory responsibility to meet the health needs of the populations they serve. The HBs are supported by the Welsh Health Specialist Services Committee (WHSSC) which commissions specialist cancer services on their behalf.
- 1.8 The seven HBs in Wales are:
- Aneurin Bevan University Health Board;
 - Betsi Cadwaladr University Health Board;
 - Cardiff and Vale University Health Board;
 - Cwm Taf Morgannwg University Health Board;
 - Hywel Dda University Health Board;
 - Powys Teaching Health Board; and
 - Swansea Bay University Health Board.
- 1.9 The HBs also work in partnership with the All Wales Cancer Network, NHS Trusts, Community Health Councils, Voluntary Organisations and Public Health Wales.

Figure 1-1: Map of Local Health Boards across Wales



The Cancer Pathway

- 1.10 The delivery of Cancer Services across Wales generally conforms to a well-defined pathway of care which includes the following five key stages:

Table 1-1: The Cancer Pathway

Cancer Prevention: Enhancing public awareness and education to make informed decisions about lifestyle choices that promote a healthy, cancer free population.
Cancer Diagnosis: Cancer can be identified through a National Screening Programme or where cancer symptoms are identified by the patient/health care professional. If cancer is suspected the patient is assessed by a multi-disciplinary team in the Health Board (often supported by Velindre Cancer Centre staff) and cancer may be diagnosed.
Treatment: The treatment options for every patient are discussed and considered by multi-disciplinary teams (MDTs). The treatment options include surgery, non-surgical treatment e.g. Radiotherapy or Systemic Anti-Cancer Therapy (SACT), a combination of these treatments and supportive care. Care often straddles organisational boundaries.
Recovery/Follow Up: Regular follow up appointments are important to monitor recovery, manage and reduce the after effects of treatment and to ensure any signs of cancer relapse/recurrence are identified at their earliest stage.
End of Life Care: Sadly, not all patients survive cancer – openness about the need to plan end of life care is essential. A focus on living and dying well, early identification of needs and access to fast, effective palliation are important to reduce distress for both the patient and their family.

Scope of Service Provision

- 1.11 Velindre Cancer Centre is responsible for the delivery of non-surgical treatment, recovery, follow-up and end of life care. Following their specialist cancer treatment, Velindre Cancer Centre supports patients during their recovery and through follow up appointments. A significant proportion of Outpatient and SACT activity is already delivered in HB settings by Velindre Cancer Centre staff. However, all Radiotherapy activity is currently performed at Velindre Cancer Centre.

Services provided by Velindre Cancer Centre

- 1.12 Specialist Teams provide care using a well-established Multi-disciplinary Team (MDT) model of service for oncology and palliative care, working closely with local partners and ensuring services are offered in appropriate locations in line with best practice standards of care.
- 1.13 The range of services delivered by Velindre Cancer Centre includes:
- Radiotherapy;
 - Systemic Anti-Cancer Therapies (SACTs);
 - Inpatients;
 - Ambulatory Care

- Outpatient Services;
- Pharmacy;
- Diagnostics (specialist radiology);
- Radiology and Nuclear Medicine
- Specialist Palliative care;
- Acute Oncology Service (AOS);
- Living with the impact of cancer;
- Education and Learning; and
- Research, Development and Innovation.

1.14 The following patient services are delivered away from Velindre Cancer Centre in HB settings:

- SACT Delivery;
- Outpatient Reviews;
- Inpatient Reviews;
- Health Board MDTs; and
- Research and Education.

Current Service Performance

1.15 The Trust has developed a wide range of metrics which are routinely used to monitor the quality and performance of core services provided by VCC. Appendix OBC/SC1 summarises VCC performance against these metrics over the last four years. The data demonstrates that the Trust performs well against the majority of core performance targets. In summary during 2016/17:

- The Trust achieved its target of seeing 100% of people referred for emergency radiotherapy within two days;
- The Trust achieved its waiting time targets for people referred for radical and palliative radiotherapy;
- The Trust achieved its waiting time targets for emergency and non-emergency SACT;
- The Trust reported zero cases of MRSA; and
- 85% of patients rated their overall experience of services as being nine out of ten and above.

Benchmarking of Service Performance

1.16 Whilst benchmarking data is routinely captured for many sectors of the Health Service there is no established benchmarking framework within the UK for Tertiary Cancer Services. This has resulted in a lack of easily accessible data for Tertiary Cancer Services and consequently has made it difficult for VCC to benchmark its own performance against other Cancer Centres.

1.17 In recognition of this, VCC led a benchmarking exercise during 2016/17 with a number of leading Cancer Centres from across the UK. A report summarising

the approach and outputs of this benchmarking exercise is attached as Appendix OBC/SC2.

2 STRATEGIC CONTEXT

Introduction

- 2.1 This section of the Outline Business Case (OBC) summarises the Strategic Context for the new Velindre Cancer Centre (nVCC) Project. It is this nVCC Project that the Enabling Works OBC is designed to support and enable. The Strategic Context surrounding the nVCC site is also explored in this section.

nVCC Project Strategic Context

- 2.2 The Welsh Government has published a wide range of National Strategies which provide the Framework for the planning and delivery of public services in Wales. These are supported by a range of Policies, Frameworks and Guidance which relate more specifically to health and social care.
- 2.3 In addition the Trust continually scans the environment at a population, national, regional and local level to develop our knowledge and intelligence on key issues which we need to take account of in the strategic planning and delivery of services. We use the Sustainable Development Principles as the basis for our horizon scanning.

Figure 2-1: A Summary of the Strategic Context for Velindre University NHS Trust



2.4 The core themes running through the Strategic Framework within NHS Wales are summarised as:

- Sustainability as the fundamental principle of public services;
- Putting citizens and patients at the centre of service design and delivery;
- Developing a new relationship with citizens and patients based upon the principles of prudent health and co-production;
- Providing services of the highest quality which meet the needs of individuals consistently;
- Improving the quality of services;
- Delivering outcomes which are comparable with the best elsewhere;
- Reducing all avoidable waste, harm and variation;
- Providing care at home or within the local community wherever and whenever possible;
- Using resources in a sustainable way;
- Treating people individually with dignity and respect;
- Ensuring that every Welsh pound is spent efficiently and effectively; and
- Providing a first class experience for everyone who uses services.

2.5 The TCS Programme Business Case (PBC) outlines the strategic context for the Transforming Cancer Services Programme and describes how the Programme is central to the Trust's ability to deliver key national and local strategic objectives, especially in relation to those outlined in the following strategic documents:

- Well -being of Future Generations (Wales) Act (2015);
- A Healthier Wales: Our Plan for Health and Social Care;
- Prudent Healthcare: Securing Health and Well-being for Future Generations;
- Together for Health – Cancer Delivery Plan; and
- The Velindre University NHS Trust Cancer Strategy.

Note: *It has been agreed with Commissioners, through the collaborative scrutiny process, that the PBC is extant and for contextual understanding only. However, the PBC will remain a 'live' document which will be updated at key milestones in the Programme.*

2.6 At the heart of the TCS Programme is the delivery of a patient centred service model that will allow the Trust to provide sufficient capacity to deal with growing and changing demand for services, whilst improving clinical outcomes for the population of South East Wales.

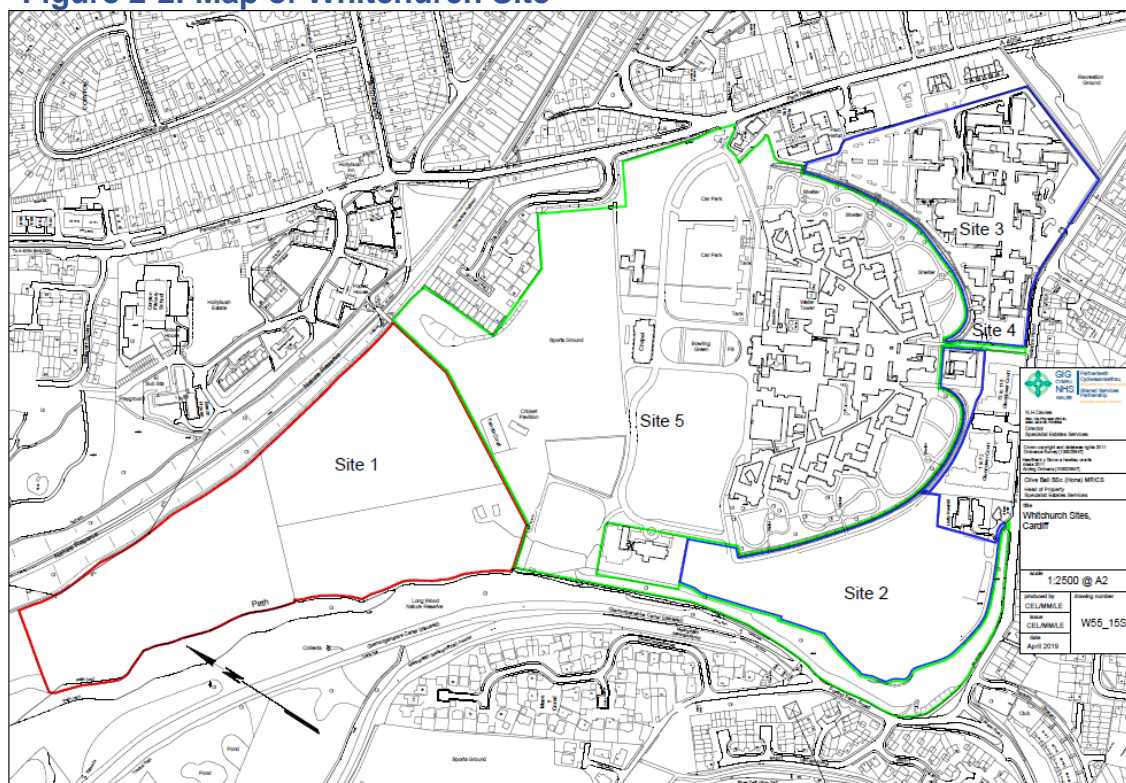
2.7 This Outline Business Case (OBC) will provide the case for a nVCC to be replace the existing Velindre Cancer Centre. The nVCC will provide a hub to deliver the majority of specialist non-surgical cancer services for South East Wales. As such it is critical to the delivery of the overall Programme and is

therefore aligned to the wider healthcare strategic context, at both a local and national level.

Enabling Works Project Strategic Context

- 2.8 The preferred site for development is located in North Cardiff in the village of Whitchurch, Cardiff. The current site is part of the NHS Wales estate and was the key location of the Whitchurch Hospital site, which was established in 1908 but since April 2016 is no longer an operational health facility.
- 2.9 The nVCC Project, after feasibility investigations, designated the site for the new Cancer Centre would be “the Northern Meadow” (site 1 as shown below) was selected as the preferred site for development.

Figure 2-2: Map of Whitchurch Site



- 2.10 The main reasons for the preferred site are set out below.

- **Access for patients.** Approximately 80% of patients attending Velindre Cancer Centre come from the Bridgend, Cwm Taf and Aneurin Bevan. This would see most patients using the M4 or A470 to access the Cancer Centre in the future. Given this, if Site 1 was developed the majority of patients may be able to avoid Whitchurch all together. This will reduce the overall travel time for patients, families and carers;
- **Improving the design and environment of the new Velindre Cancer Centre for patients and staff.** Site 1 is approximately 7.83 hectares with sites 2, 3 and 4 being 3.29 hectares and 3.69 hectares respectively. Site 1 offers a more advantageous topographical shape to build the Cancer Centre on than site 2. It is likely that the design and building would be of

a higher quality and the environmental surroundings would offer an enhanced patient/family/staff environment due to the increased space and topographical benefits;

- **Reducing congestion in Whitchurch.** Whitchurch is often heavily congested as a result of the infrastructure and traffic load with Park Road and Velindre Road being particular pinch points. Building the nVCC on site 1 (with access off Park Road or Coryton) will significantly reduce the traffic in Whitchurch and assist in reducing its impact on local residents and people who use services in this area. The best access route to Site 1 would be one that provides the best means of access to our patients, visitors and staff, one which enables Velindre University NHS Trust to act as a 'good neighbour', reducing whenever possible congestion within the Park and Velindre Road areas of Whitchurch, and one that provides appropriate access to the contractor building the nVCC;
- **Cost avoidance for the taxpayer.** Based on the appointed technical advisor's design, the cost consultants 'test-for-fit' building footprint and recently refreshed construction costings, the view of the Infrastructure Workstream (IW) is that Site 1 remains by a considerable margin the most economically advantageous and most deliverable option of the two sites [REDACTED]
- **Attracting a partner to construct the new Velindre Cancer Centre.** The Trust will be following the Welsh Governments' Innovative Finance Policy to procure the nVCC. It is, therefore, important that when the Trust commences procurement for a partner to construct the nVCC it is able to offer an attractive proposal to the market. This will increase the number of companies bidding for the contract and the competition between them will result in the Trust securing the best value for money. Site 1 therefore has an advantage over site 2 as it is easier to access and its topography makes it the easier of the two sites to build on. This makes it more attractive to the market.

- 2.11 At present the current land owner, Cardiff & Vale Health Board, has obtained planning permission on the site for a residential development.
- 2.12 There are currently no vehicle access arrangements to the proposed site which is effectively 'landlocked'. Any works to the main site would require the provision of a new Primary, Ancillary and Emergency Access Road infrastructure into the site boundary.
- 2.13 The hospital site is bounded to the north side by a deep, disused railway cutting. The cutting is currently designated as a Local Nature Reserve and is used as an informal walking route and is interrupted by the steep sided embankment upon which Longwood Drive was constructed. On the southwest side of the site is the Glamorganshire Canal and a Site of Special Scientific Interest (SSSI). The area to the northwest of the site, encompassing the disused railway cutting is designated as a Local Nature Reserve (LNR) by Cardiff City Council (CCC).

The southern boundary is bounded by a local 'wildlife corridor' and public right of way.

- 2.14 An Asda store and McDonald's Restaurant are located to the north of the site and their access road is connected to Longwood Drive as an exit from the mini-roundabout. Longwood Drive provides a direct link to Junction 32 of the M4 and to the A470 providing excellent and improved infrastructure links to the site for the majority of the patients, visitors and staff that would use the nVCC over and above the existing links for the existing facilities.
- 2.15 The Enabling Works Project will enable the development of an nVCC development site that has been 'prepared' for construction. Providing a 'prepared' site de-risks the nVCC Project by providing a site immediately ready for construction by a preferred bidder. The Enabling Works OBC provides the case for the 'site enabling works' needed to develop a new Velindre Cancer Centre.

Status of, and relationship to, the nVCC OBC

- 2.16 The nVCC OBC 2018 was approved by the Velindre University NHS Trust Board in January 2018. All Health Commissioning Boards approved the nVCC OBC in March 2018.
- 2.17 The nVCC OBC has been refined and refreshed following Welsh Government feedback received in 2018 and the nVCC OBC 2019 has been approved by the Velindre University NHS Trust on 1st May 2019.
- 2.18 This Enabling Works OBC should be read in conjunction with the nVCC OBC 2019.

3 EXISTING SITE AND LAND ARRANGEMENTS

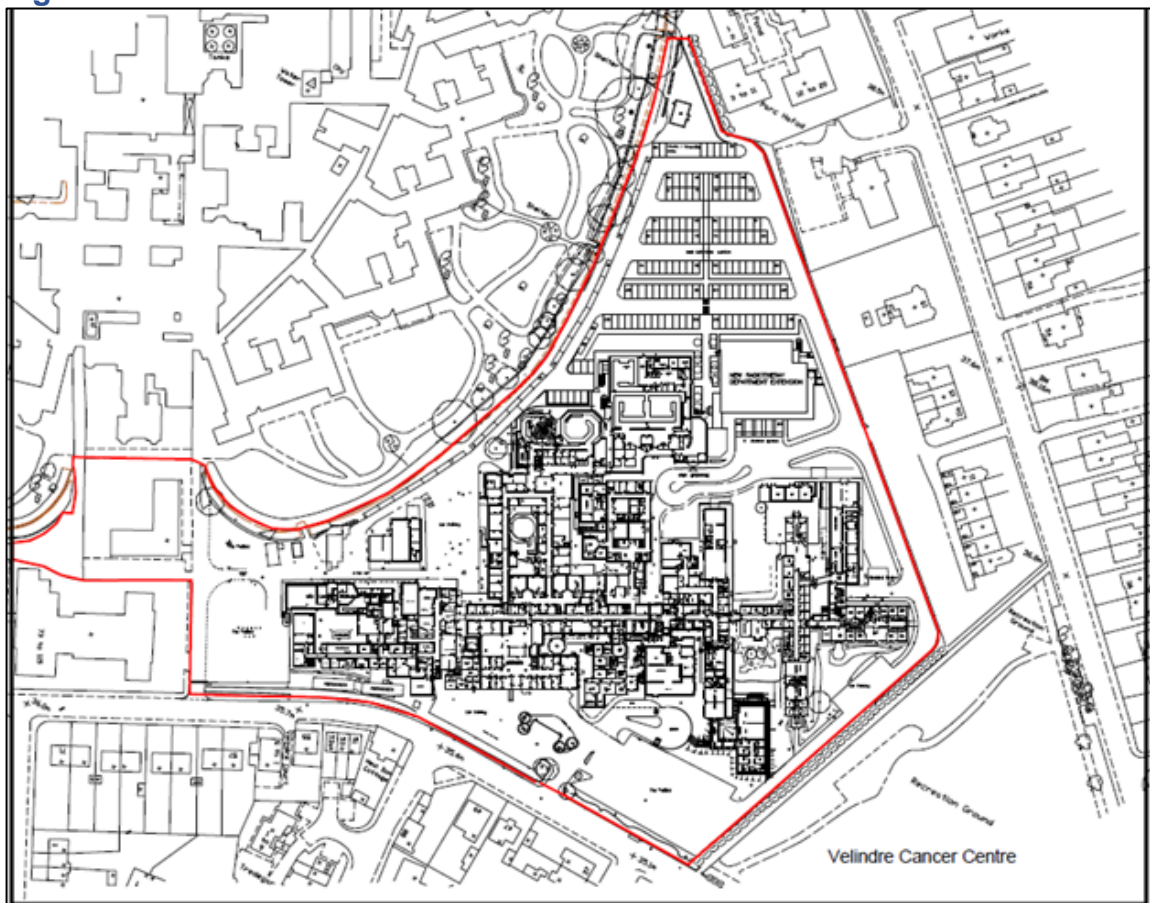
Introduction

- 3.1 The purpose of this section of the Strategic Case is to:
- Describe the current site delivery arrangements for the Services covered within the scope of the nVCC Project; and
 - Provide a description of the existing site planning status on the Velindre Hospital (and Whitchurch Hospital) sites.
- 3.2 The status of the existing (and potential) estate provides the baseline for identifying potential access options.

Velindre Cancer Centre Infrastructure

- 3.3 Velindre Cancer Centre was built in 1956 and in the intervening period has been subject to extension and redevelopment. It consists of traditional build, single and two storey accommodation. The current site plan is provided below.

Figure 3-1: Current Velindre Cancer Centre Site Plan



- 3.4 Approximately 30% of the estate pre-dates 1964 in terms of its construction. This is evident in the value of current backlog maintenance recently recorded in

the all Wales Estate Facilities Performance Management System (EFPMS). The definition of condition in terms of backlog can be identified as:

- **Condition A:** as new and can be expected to perform adequately to its full normal life;
- **Condition B:** sound, operationally safe and exhibits only minor deterioration;
- **Condition C:** operational but major repair or replacement is currently needed to bring up to condition B;
- **Condition D:** operationally unsound and in imminent danger of breakdown;
- **Condition X:** supplementary rating added to C or D to indicate that it is impossible to improve without replacement.

Table 3-1: Backlog Maintenance Position (as at July 2016)

Measure	Unit	Value
Cost to eradicate High Risk Backlog	£	25,313
Cost to eradicate Significant Risk Backlog	£	781,752
Cost to eradicate Moderate Risk Backlog	£	412,180
Cost to eradicate Low Risk Backlog	£	915,653
Risk Adjusted Backlog Cost	£	831,429
Cost to achieve Physical Condition B	£	2,121,123
Percentage of total occupied floor area in physical condition C plus D	%	15
Cost to achieve Statutory Health and Safety Compliance Standard B	£	530,047
Cost to achieve Fire Safety Compliance Standard B	£	302,601
Percentage of patient occupied floor area not in Statutory Health and Safety compliance	%	5
Percentage of patient occupied floor area not in Statutory Fire Safety compliance	%	6
Property Cost to achieve compliance with disability discrimination standards	£	176,720

- 3.5 From the previous EFPMS submission, the cost to eradicate high risk and significant risk backlog has decreased. This is due to the moderate capital investment associated with water infrastructure, at the Velindre Cancer Centre. Over 90% of the Estate fire safety is being managed within category B, a very similar position as the previous year. Risk Adjusted Backlog has also shown a small decrease, since 2015/16. It must be stated that the overall condition of the building is condition B. Space availability and site restrictions, however, prevent future investment from achieving spatial compliance or functional suitability without disruption to the existing facilities and surrounding community.

- 3.6 To achieve and maintain overall Physical Condition B investment has increased from £0.735m in 2012/13 to £2.2m in 2016/17. This represents a 200% increase over this time frame.

Velindre Cancer Centre Footprint

- 3.7 The existing Velindre Cancer Centre has a footprint of approximately 18,000m² as summarised in Table 3-2.

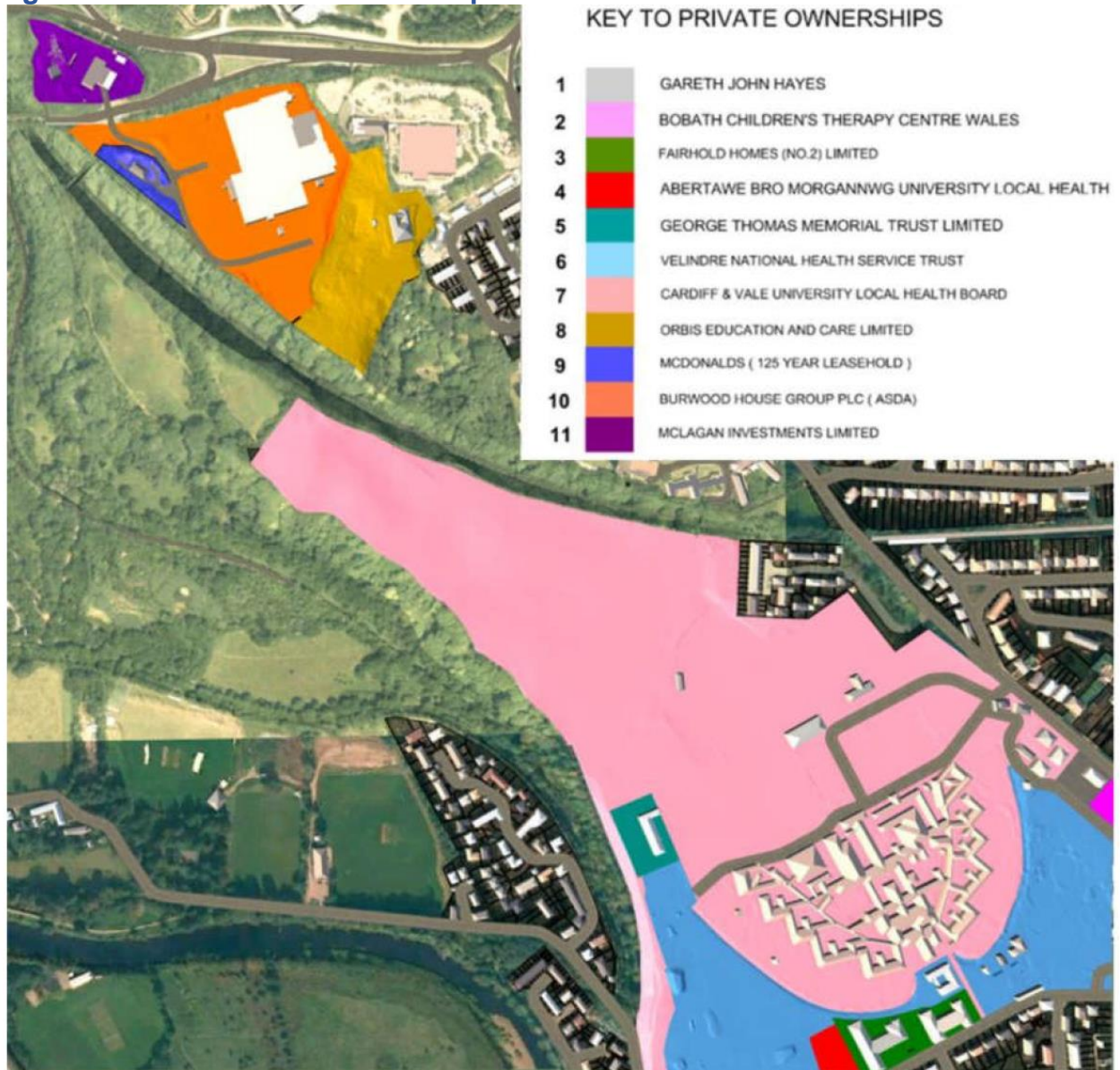
Table 3-2: Existing Velindre Cancer Centre Footprint (January 2018)

Functional Area	m ²
Radiotherapy	5,126
Inpatients	1,879
SACT & Ambulatory Care	1,024
Outpatients & Therapies	1,280
Imaging and Nuclear Medicine	1,069
Pharmacy	637
Hospital Clinical / Non Clinical Administration & Support Services	4,369
Hospital Education, Training and Associated Support Services	349
IM&T	144
SPR & On Call	12
Staff Facilities	299
Mortuary	47
Catering & Restaurant	377
Hospital Main Entrance	581
Central FM Areas	583
Total Gross	17,777

Existing Land Ownership

3.8 The current land ownership arrangements are set down below:

Figure 3-2: Current Land Ownership Plan



Source: Cardiff Council

3.9 The land owned by Velindre is identified in the map above and consists of the land currently operated as the Velindre Cancer Centre. In addition, our adjacent site (referred to as Site 2) has not yet been developed. Velindre University NHS Trust purchased this site in 2014 from Cardiff and Vale University Health Board (CVUHB) with the aim of building the nVCC on this site. The opportunity arose with CVUHB in respect of swapping sites 3 and 4 (existing Velindre Cancer Centre site) and site 2 (brownfield site owned by Velindre) for the Northern Meadows site owned by CVUHB (referred to as site 1).

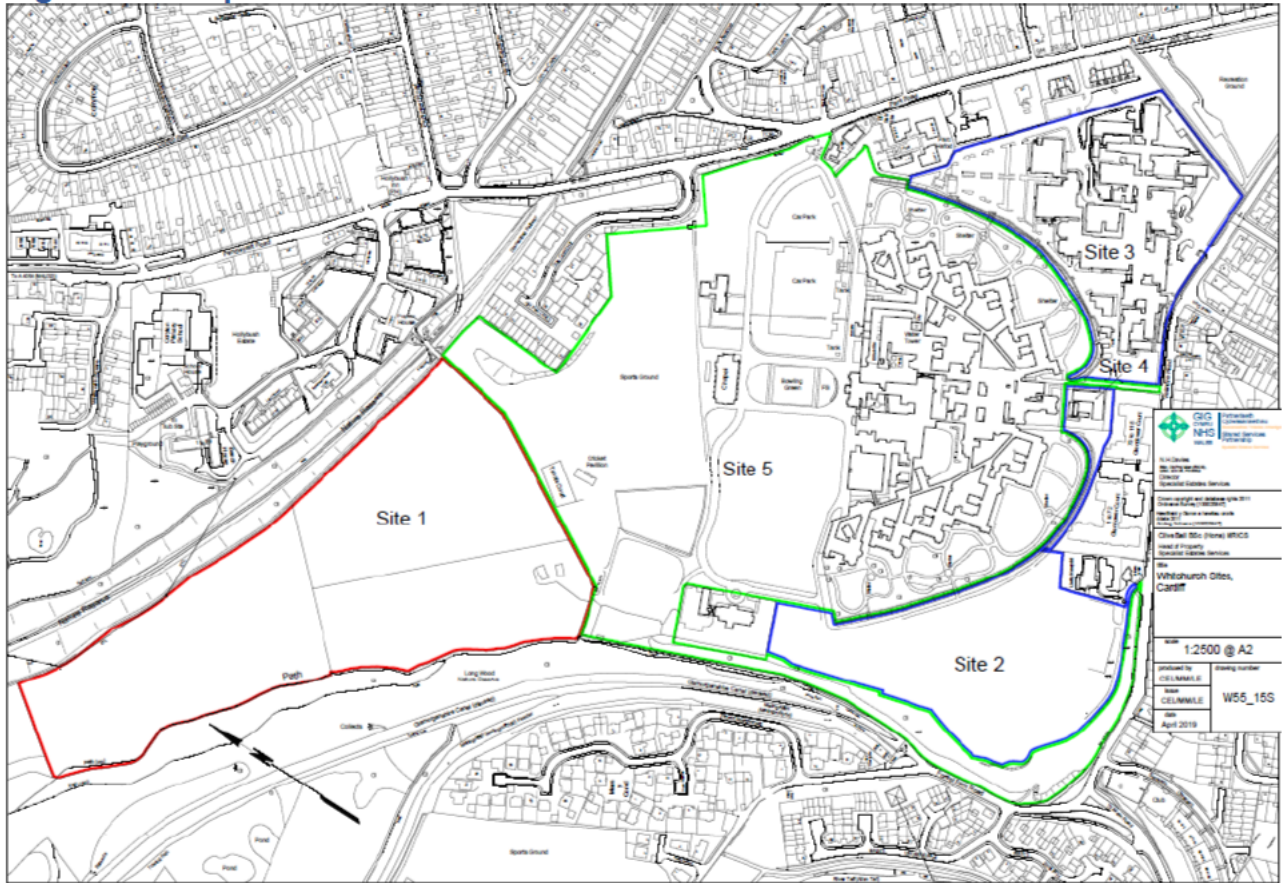
- 3.10 The land owned by Cardiff and Vale Health Board is identified in the map above. As previously stated the land contains the non-operational Whitchurch Hospital site.
- 3.11 On the 21st July 2016, the Trust Board approved that the “Northern Meadows” (Site 1) becoming the preferred site for the nVCC development provided that planning approval could be achieved.
- 3.12 In 2017, the Trust undertook initial discussions with partners with regard to the wider Whitchurch site in respect of access and egress to support the new Velindre Cancer Centre Project. The discussions were constructive and concluded that given the planning for the Whitchurch site was still in its infancy, wider opportunities regarding access and egress to the new Velindre Cancer Centre were not available.
- 3.13 During 2018, the Trust became aware that the future use of the Whitchurch site was becoming clearer. The Trust recommenced discussions with partners regarding the potential options this may provide regarding the access and egress of the new Velindre Cancer Centre. These discussions were positive and confirmed that there were a number of potential opportunities available that were not available in 2017.



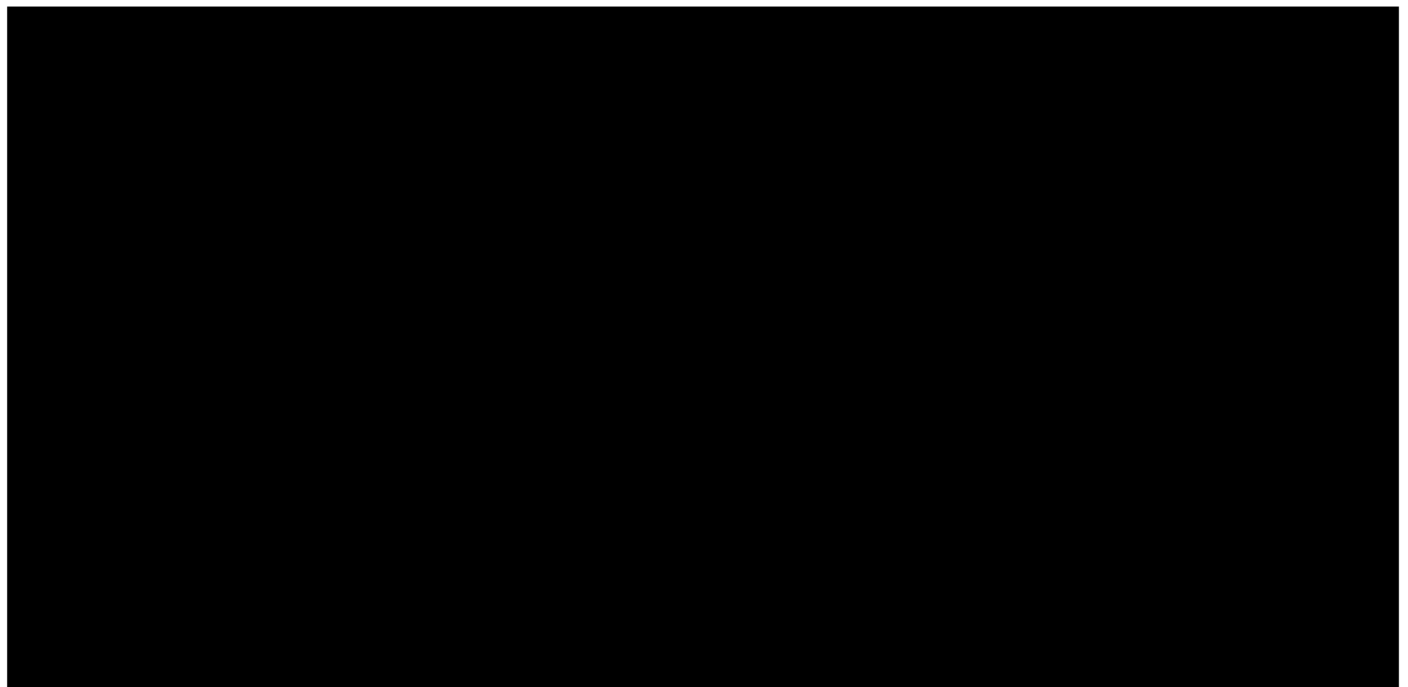
Existing Heads of Terms

- 3.15 The site designated for the nVCC is the “Northern Meadow” site, which is owned by Cardiff & Vale University Health Board. In order to acquire title to Site 1, the Trust has negotiated a land transfer deal with CVUHB, whereby the Trust will transfer ownership of Sites 2, 3 and 4 to CVUHB in exchange for Site 1. Heads of Terms were agreed and approved by the Trust (late November 2016) and approved by CVUHB (late January 2017).
- 3.16 The sites are identified on the plan set down overleaf:

Figure 3-3: Map of Whitchurch Site



3.17 The existing Heads of Terms are outlined in Appendix OBC/SC3.



4 CURRENT PLANNING PERMISSIONS

Town and Country Planning

- 4.1 The Planning Policy Wales (Edition 9, November 2016) notes that the Welsh Government remains one of the few administrations in the world to have a distinctive statutory duty in relation to sustainable development and cites the Well-being and Future Generations (Wales) Act 2015 as placing a legal duty on all Welsh public bodies to carry out sustainable development.
- 4.2 Planning Policy Wales also references the well-being goals which are identified in the Act to ensure that all public bodies are working towards the defined vision of a sustainable Wales. Key policy objectives include achieving a resilient Wales, which is defined as a nation that maintains and enhances a biodiverse natural environment and a healthier Wales, which is defined as a society in which people's physical and mental well-being is maximised.
- 4.3 With reference to both Planning Policy Wales and the Well-being and Future Generations (Wales) Act, the proposal represents a unique opportunity to meld the development of the facility with a site that benefits from long-established biodiversity and local historic relevance.
- 4.4 An application for Outline Planning Permission was submitted on the 12th July 2017 for the following:
- Proposed Velindre Cancer Centre including Specialist Cancer Treatment Centre, Centre for Learning, Research and Development;
 - Primary means of Access (from Coryton interchange);
 - Emergency Access (via Hollybush Estate);
 - Temporary Construction Accesses;
 - Parking (773 car parking spaces);
 - Energy Centre;
 - Landscape Works;
 - Pedestrian Paths; and
 - Maggie's Centre.

All the above to be developed at land to the north-west of Whitchurch Hospital Playing Fields, known as the "Northern Meadow" site.

- 4.5 The application for Outline Planning Permission was 'approved' in March 2018, with certain conditions attached. These conditions relate to the following:
- To satisfy provisions of Article (3)1 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012;
 - To comply with the provisions of Section 92 of the Town and Country Planning Act 1990;
 - To ensure an orderly form of development;
 - To ensure the orderly development of the area with adequate space about buildings and in the interests of the visual amenity of the area;

- To ensure the proposed access is undertaken in accordance with the submitted details, in accordance with Policy KP5, KP6 & T6 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure that adequate provision is made for the secure parking of cycles;
- To make appropriate provision for car parking clear of adjacent roads, in accordance with Council policy and in the interest of highway safety, to regulate the impact of the development on use of the adjacent highway with Policies KP8 & T5 of the adopted Cardiff Local Development Plan (2006-2026);
- In the interest of highway safety and to regulate the impact of the development on use of the adjacent highway in accordance with Policy KP8 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure an orderly form of development and provide safe commodious access to the proposed development in accordance with Policy KP6 of the adopted Cardiff Local Development Plan (2006-2026);
- To provide safe commodious pedestrian, cycle and vehicle access to the proposed development in the interests of highway safety; in accordance with Policy KP6 & T6 of the adopted Cardiff Local Development Plan (2006-2026);
- To provide safe commodious pedestrian, cycle and emergency vehicle access to the proposed development in the interests of highway safety in accordance with Policy T5 of the adopted Cardiff Local Development Plan (2006-2026);
- To make adequate provision for a future bus service to promote sustainable travel in accordance with Policy KP7 & KP8 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure the amenities and traffic within the Hollybush Estate are protected in accordance with Policy KP5 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure the development harmonises with its environment in accordance with Policy KP5 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure that a valuable soil resource is efficiently and effectively protected from harm and re-used as appropriate for landscaping purposes in accordance with Policy KP15 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure the impact upon the protected trees is limited to that as assessed in accordance with Policy KP15 of the adopted Cardiff Local Development Plan (2006-2016);
- To protect and enhance the Green Infrastructure resource of the site and to protect priority habitats and species;
- To manage the impacts of construction in the interests of highway safety, and protection of the environment and public amenity in accordance with Policy KP16 of the adopted Cardiff Local Development Plan (2006-2026);
- To ensure sufficient waste strategy in accordance with Policy W2 of the adopted Cardiff Local Development Plan (2006-2026);

- To ensure the amenities of the adjoining neighbours in accordance with Policy EN13 of the adopted Cardiff Local Plan (2006-2026);
- To ensure a satisfactory drainage development in accordance Policy EN10 of the adopted Cardiff Local Plan (2006-2026);
- To ensure that the safety of future occupiers is not prejudiced in accordance with policy EN13 of the Cardiff Local Development Plan;
- To ensure that any unacceptable risks from land contamination to the future users of the land, neighbouring land, controlled waters, property and ecological systems are minimised, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with policy EN13 of the Cardiff Local Development Plan; and
- To ensure that the safety of future occupiers is not prejudiced in accordance with policy EN13 of the Cardiff Local Development Plan.

4.6 A Section 106 agreement outlines the Planning obligations of the Town and Country Planning Act 1990 (as amended), commonly known as an s106 agreement. They are a mechanism which makes a development proposal acceptable in planning terms, between a Local Authority and a 'Developer', that would otherwise not be acceptable. In respect of the new Velindre Cancer Centre, the Local Authority is the County and City of Cardiff Council (CCC) and the Developer is the Velindre University NHS Trust. The Section 106 agreement comprises the planning conditions included in the agreement for grant of outline permission for the nVCC and (without reserved matters) for the primary and emergency access roads.

4.7 The Section 106 agreement will require the Trust to make a contribution to the Section 106 requirements related to the nVCC outline planning. The financial support for the Green Infrastructure Plan is c£400k and the bus subsidy is c£150k per year for a period of three years. It is expected that further detailed costing information will be provided by Cardiff County Council to support such financial contributions.

4.8 As part of agreeing to the s106 agreement the Trust has stated some conditions, which are outlined below:

- The Trust will reserve the right to undertake the works itself through its chosen contractor; and, if the funding is not used in an agreed timescale or in full, a clawback would occur; and
- The Trust will set out the trigger for when the contribution would be paid (provided the Council has satisfied the above). For the green infrastructure works the contribution would be no sooner than commencement of the works associated with the main cancer development (not the enabling works). With regard to the bus subsidy, the first payment would be prior to the operation of the nVCC.

4.9 The existing Outline Planning Permission conditions are outlined in Appendix OBC/SC4.

5 ENABLING WORKS SCOPE

- 5.1 The Enabling Works Project will enable the development of a 'prepared' site that de-risks the nVCC Project by providing a site ready for construction by a preferred bidder. The Enabling Works OBC provides the case for the 'site enabling works' needed to support the nVCC Project to develop a new Velindre Cancer Centre. The Cancer Centre will provide a hub to deliver the majority of specialist non-surgical cancer services for South East Wales. As such it is critical to the delivery of the overall Programme.
- 5.2 The NHS Wales All-Wales Capital Programme will fund the capital costs of the Enabling Works Project preferred option as determined by this OBC.
- 5.3 The scope of the Enabling Works Project covered by the development of the Outline Business Case (OBC) contains:
- Site primary access options associated with Asda; Longwood Drive; and Park Road;
 - Site ancillary and emergency access road;
 - Ancillary footpath and cycle works to run in parallel with the primary access route;
 - Ancillary footpath and cycle works to run in parallel with the ancillary and emergency access road;
 - Temporary Construction Road for enabling works;
 - Utility supplies, which will be required by VNHST to fulfil the Trust's obligations under the project agreement for the nVCC Project to provide utilities up to the boundary of the nVCC site, comprises of:
 - electricity from Western Power Distribution (this will include the construction of a temporary sub-station);
 - gas from Wales & West Utilities;
 - communications from British Telecom; and
 - clean water supply and waste water disposal from Dwr Cymru Welsh Water
 - Site clearance of the area within the 'red line';
 - GI works on all aspects of the access and site (to be confirmed);
 - Surveys that are warranted to be provided as part of the Site Pack
 - Invasive species / vegetation clearance;
 - Acquisition matters - Land matters relating to easements for primary access, ancillary and emergency access road, ancillary access, utilities, Temporary Construction Road, et al;
 - Development agreements where necessary;
 - Development of a site pack (to be confirmed); and
 - CAPEX for all enabling works area(s).

- 5.4 Within this OBC all technical works are completed up to RIBA Stage Two - Concept Design (as a minimum) that outlines proposals for structural design, outline specifications and preliminary cost information.
- 5.5 The Enabling Works Project requirements were established and include the ability to access the meadow site freely for the purpose of constructing the nVCC (which is scheduled to commence on site before the end of October 2021). Ideally there should be a 6 month 'buffer' to allow for any delay in the MIM Competitive Dialogue procurement process. It also makes provision for any early start that the MIM Contractor may wish to propose (e.g. site establishment, hoardings. environmental protection, habitat relocations, site scrape, excavations and extension of services etc.).
- 5.6 A key consideration that the Project needs to consider is making full provision to accommodate delivery of the Transport for Wales Cardiff Metro solution as detailed within the Transport for Wales commissioned Mott Macdonald Report "Coryton Extension Study – Stage Two – Option Review" Revision A (dated 30th October 2018).
- 5.7 The detail of the Project Requirements are outlined in Appendix OBC/SC5.

7 MAIN ACCESS ROUTE OPTIONS

- 7.1 A key strategic constraint is that the proposed nVCC site ('Northern Meadows') currently has no suitable vehicular access.
- 7.2 The Enabling Works Project will deliver primary and ancillary or emergency vehicular access from the public highways network to locations defined in the Outline Planning Permission within the Northern Meadows up to the site boundary of the nVCC Hospital.

Options of Main Access Routes

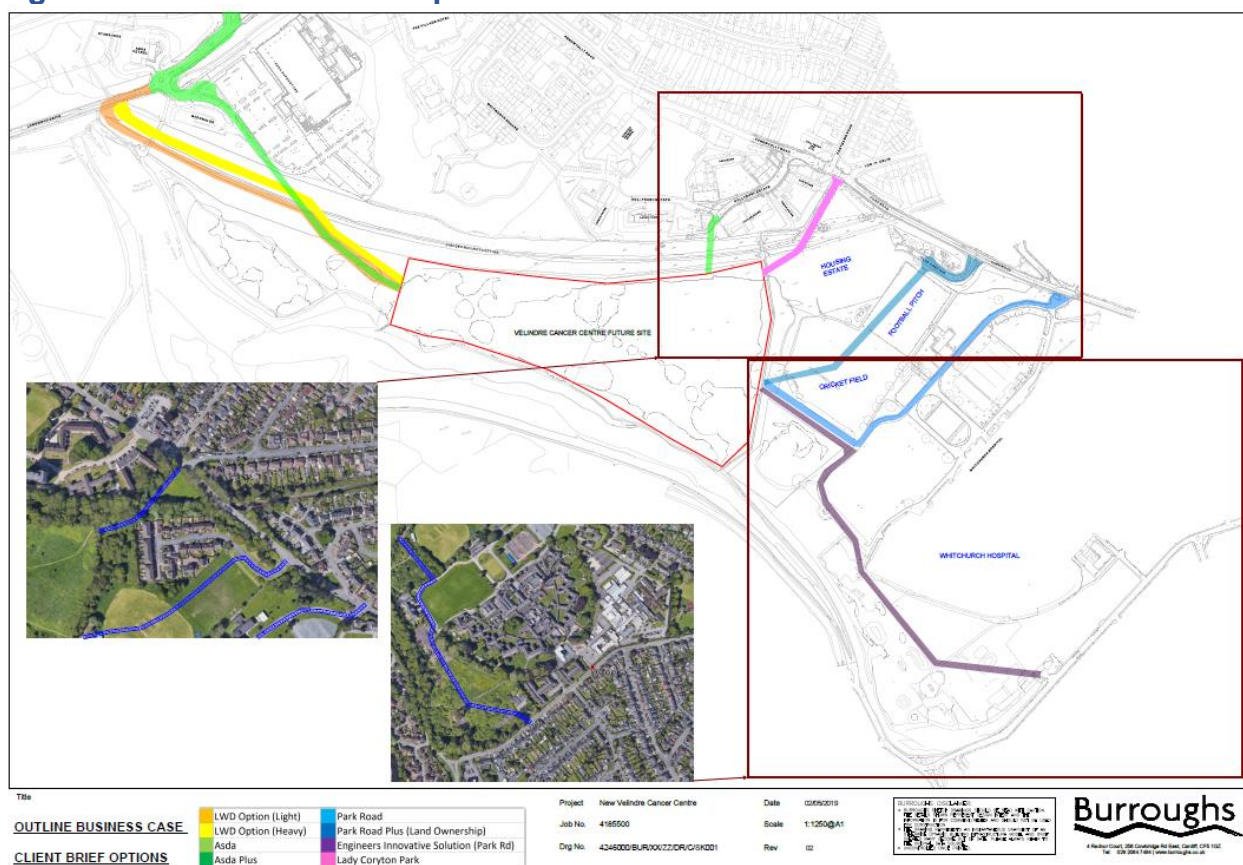
- 7.3 The emerging route access options for the new Cancer Centre were originally identified as follows:

Table 7-1 – Route Access Options

Route Reference:		Brief Description:
LWD Option (light)		Primary access from Longwood Drive to the north, along alignment of the disused railway cutting and secondary access provided via the Hollybush estate, assuming a single-track requirement for the Metro.
LWD Option (heavy)		Primary access from Longwood Drive to the north, along alignment of the disused railway cutting and secondary access provided via the Hollybush estate, assuming a twin-track requirement for the Metro.
Asda		Route utilising access from adjacent car park over disused railway for primary access, with secondary access provided via the Hollybush estate over disused railway.
Asda Plus		Route utilising access from adjacent car park over disused railway for primary access, with secondary access provided to the south from Park Road.
Park Road		Primary access via existing Whitchurch Hospital site, with secondary access to the south through Velindre road, or other.
Park Road Plus (Land Ownership)		Primary and secondary access from Park Road dissecting the Whitchurch Hospital site
Engineers Innovative Solution (Park Road)		The "Engineer's Innovative Solution" is indicatively shown as entering the site at the South Western most access currently available.

7.4 The following illustrates the various access route options:

Figure 7-1 – Access Route Options



7.5 These route access options were approved by the Trust Board on the 13th February 2019.

7.6 These original route access options have been developed into a range of long-listed options to be appraised within the Economic Case. The options were developed by a staged process, facilitated by business case advisors (CAPITA), including key officers and advisors. The options development process, from long list to Preferred Option, is outlined in the Economic Case.

7.7 The route access options have different timescales due to planning and construction requirements. This impacts on the delivery of the nVCC Project construction timescales.

7.8 Each route access option will have the necessary road alignments to accommodate various types of vehicles, such as cars and buses etc.

7.9 It is these options and their variants that will be assessed by the Economic Case that will identify the proposal that delivers best public value, including wider social and environmental effects. Demonstrating public value requires a wide range of realistic options to be appraised (the long-list) in terms of how well they meet the spending objectives and critical success factors for the scheme; and

through this process identifying a reduced number of possible options (the short-list) to be examined in further detail.

- 7.10 The shortlisted options are subjected to Cost Benefit Analysis (CBA) to identify the option that offers best public value.
- 7.11 The purpose of the Economic Case is to undertake a detailed analysis of the costs, benefits and risks of a short list of options to select the preferred solution to deliver the benefits identified within the Project. The objective is to demonstrate the relative value for money of the chosen option in delivering the required outcomes and services.
- 7.12 It is noted that route access options should be congruent with the preferred option in the nVCC OBC.

Design Criteria

- 7.13 The design criteria is to prepare Concept Design, as per RIBA Stage 2, that includes outline proposal for structural design, outline specifications and preliminary cost information, with outlined works programmes.

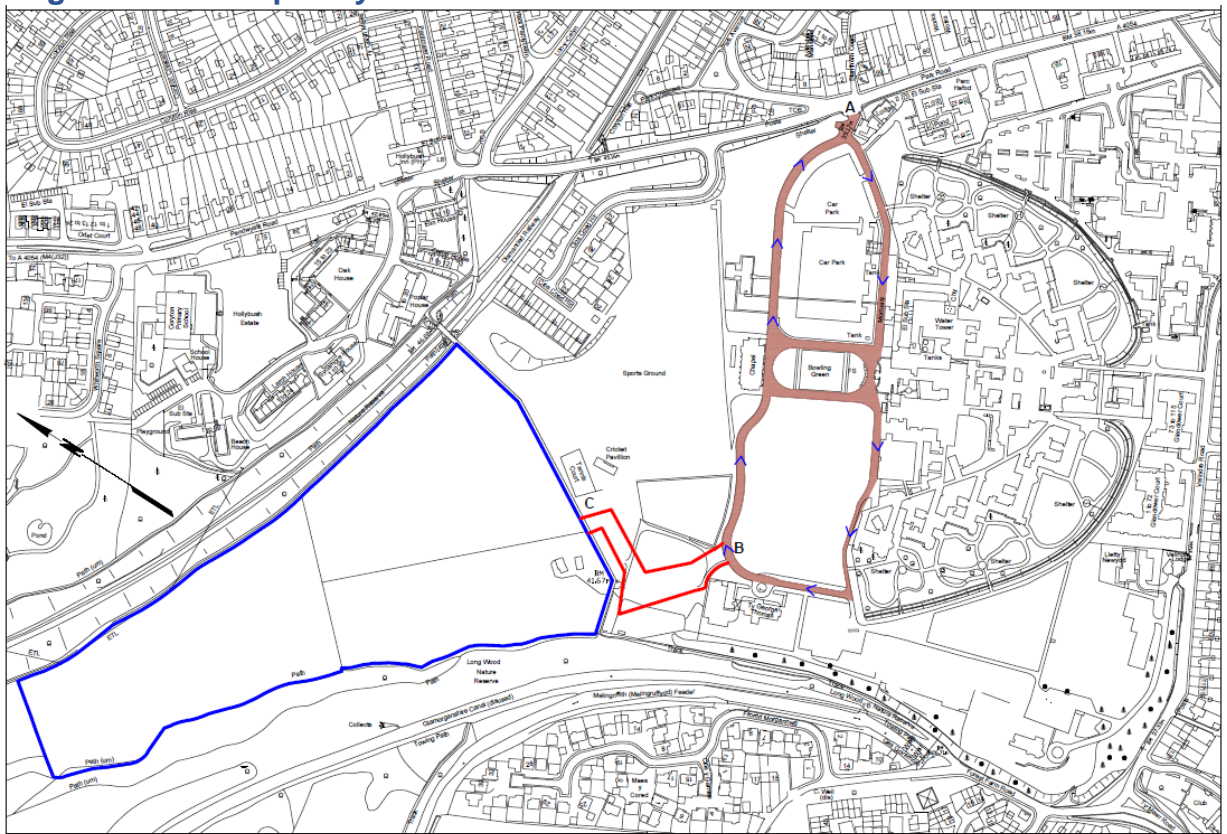
Section 278 works

- 7.14 Section 278 agreement - works to existing highways. Section 278 of the Highways Act 1980 allows a developer to carry out works to the public highway. This is generally necessary where planning permission has been granted for a development that requires improvements to, or changes to, public highways.

8 TEMPORARY CONSTRUCTION ROAD

- 8.1 A Temporary Construction Road may be utilised to allow the enabling works construction to haul vehicles and materials to access the site during the construction phase of certain enabling works options.
- 8.2 The current agreed temporary access would be on the existing Whitchurch Hospital site and supported by a licence from Cardiff and Vale University Health Board.
- 8.3 The current planning condition provides for temporary construction access.
- 8.4 The following diagram outlines the temporary construction access.

Figure 8-1 – Temporary Construction Road



- 8.5 The Temporary Construction Road may, subject to planning approval requirements, be extended to assist the construction works of the nVCC.

9 UTILITIES

9.1 The Enabling Works Project requirements will ensure the following:

- Install all necessary incoming utilities required by the new Hospital to the nVCC site boundary; and
- Provide all necessary outgoing utilities by way of foul and surface water discharge, including allowance for SuDs containment and then discharge to designated water courses.

9.2 The utility requirements for the new Cancer Centre covers:

- Electrical supply;
- Gas supply;
- Water supply;
- Drainage;
- Foul Water drainage; and
- Telecoms.

9.3 All of the utilities are proposing a similar route onto the Velindre Cancer Centre site, via the dismantled railway cutting to the North East. The electrical HV supply from Western Power Distribution contains the largest volume of physical work, the greatest number of 3rd party easements and the most reinforcement to the primary infrastructure.

9.4 The procurement timeline for all of the utilities is between 12 and 18 months.

9.5 The Enabling Works Project Technical Advisers have established the current capacity and the new capacity requirements for the new Cancer Centre. All utility companies have considered the future capacity requirements and are in the process of providing agreed routes.

9.6 There will be utility diversions required as part of the route access construction works.

10 SITE CLEARANCE, PREPARATION AND SURVEYS

10.1 The Enabling Works Project requirements will ensure the following:

- Undertake a site clearance exercise on the meadow site, including notifiable weed spraying or soil sifting extraction and disposal prior, then site scrape and habitats translocation [to be fully defined as to site condition left]; and
- Provide warranted surveys in preparation for the both the construction of the Enabling Works but also the nVCC Hospital Construction.

10.2 The scope for the site clearance and preparation is detailed below:

- Preparation of GIMS (Green Information Management System) - Design landscaping for the discharge of GIMS that will only include the woodland edge management zone and mitigation associated with the access road and bridges. Provide a GIMS Plan for delivery, establishment and ongoing maintenance and monitoring of the site Management Plan and provide an update of Arboriculture Assessment;
- Preparation of CEMP (Construction Environmental Management Plan) - Report comprising COSHH measures, runoff pollution prevention, referring out to Soil Resource Plan, Construction Lighting Strategy, Pollutions Prevention Guidelines PPG), Flood Response, Discharge Consent Restrictions, Noise Management Plan, Dust Management Plan. In addition, includes a Site Waste Management Plan (SWMP), Concrete Washwater Management Plan and an Invasive Species Management Plan;
- Construction Drainage Design and Installation - Construct perimeter ditch and settlement pond;
- Construction Lighting Strategy - Sets out restrictions on height of lighting, direction of lighting, identifying sensitive receptors and requirements for screening (if any);
- Operational Lighting Design (covering Bridges & Access Road only) - Design and drawings to comprise lighting design for bridges and access road to prevent light spill onto residences and ecologically sensitive areas;
- Construction Traffic Management Plan (for Enabling Works only) - Report and plans outlining diversion, closure plans, public engagement/notice periods for closures, delivery hours, restrictions to number, proposed routing of deliveries and construction traffic, speed limits etc.;
- Tree Protection Measures; and
- Soil Strip and Vegetation Clearance - in accordance with Soil Resource Survey and Ecology recommendations.

10.3 The site clearance and preparation is expected to be undertaken by the contractor undertaking the construction of the access works.

Surveys

10.4 The surveys required as part of the Enabling Works are detailed below:

- Condition Assessment of Reptile Receptor site;
- Mapping of Invasive Species;
- Reptile surveys of receptor site to assess the population present (if any);
- Bat Tree Assessments (including hibernation assessment);
- Enhancement and creation of habitat at Receptor site (could be brought forward to autumn/late summer 2019);
- Installation of Reptile fencing;
- Deployment of Reptile Mats (minimum two weeks before translocation exercise);
- Badger Update Survey;
- Translocation Exercise;
- Installation of Bat, Bird and Inset Boxes (prior to vegetation clearance in retained habitat);
- Destructive search for Reptiles to clear the site;
- Soil Surveys to facilitate soil strip and determine treatment requirements for landscaping soils - required to discharge pre-commencement condition; and
- Baseline Noise Survey for Utilities.

11 COMMUNITY BENEFITS

- 11.1 It is important to set the context for Community Benefits that supports the Welsh Government's vision of Sustainable Development being the central organising principle for Welsh Public bodies. This section provides a link to the Welsh Government's procurement policy and highlights how the OBC complies.
- 11.2 Sustainable Development is the goal, supported by the 'four pillars' of economic capital, social, capital environmental and cultural well-being.
- 11.3 Welsh procurement policy, based on sustainable procurement principles, is a key mechanism for delivering Sustainable Development, influencing the ethos and practice of how, what and why we procure. Good sustainable procurement practice is therefore an integral part of the Welsh Government's vision that Sustainable Development will be the central organising principle for Wales. Welsh procurement policy aims to address and balance economic, social and environmental issues and impacts.
- 11.4 Community Benefits policy is one strategy to address and balance these issues. Examples of Community Benefits that support the three pillars of Sustainable Development – the economy, society and environment are:
- Creating recruitment and training opportunities from your contract is an example of one community benefit that seeks to address the socio-economic impacts of unemployment or economic inactivity particularly for disadvantaged people;
 - Ensuring supply chain opportunities are visible to Wales based suppliers to compete for will both support the economy and help create employment and training opportunities; and
 - Minimising waste to landfill.

Figure 11-1 – Community Benefits



- 11.5 The details of the Community Benefits requirements are outlined in Appendix OBC/SC6.

12 KEY SITE (AND ACCESS) REQUIREMENTS

12.1 The purpose of this section is to:

- Summarise the methodology which has been applied for forecasting future capacity requirements at the nVCC; and
- Provide an overview of the service and capacity requirements in relation to the building footprint, the functional requirements; and the Major Medical equipment requirements.

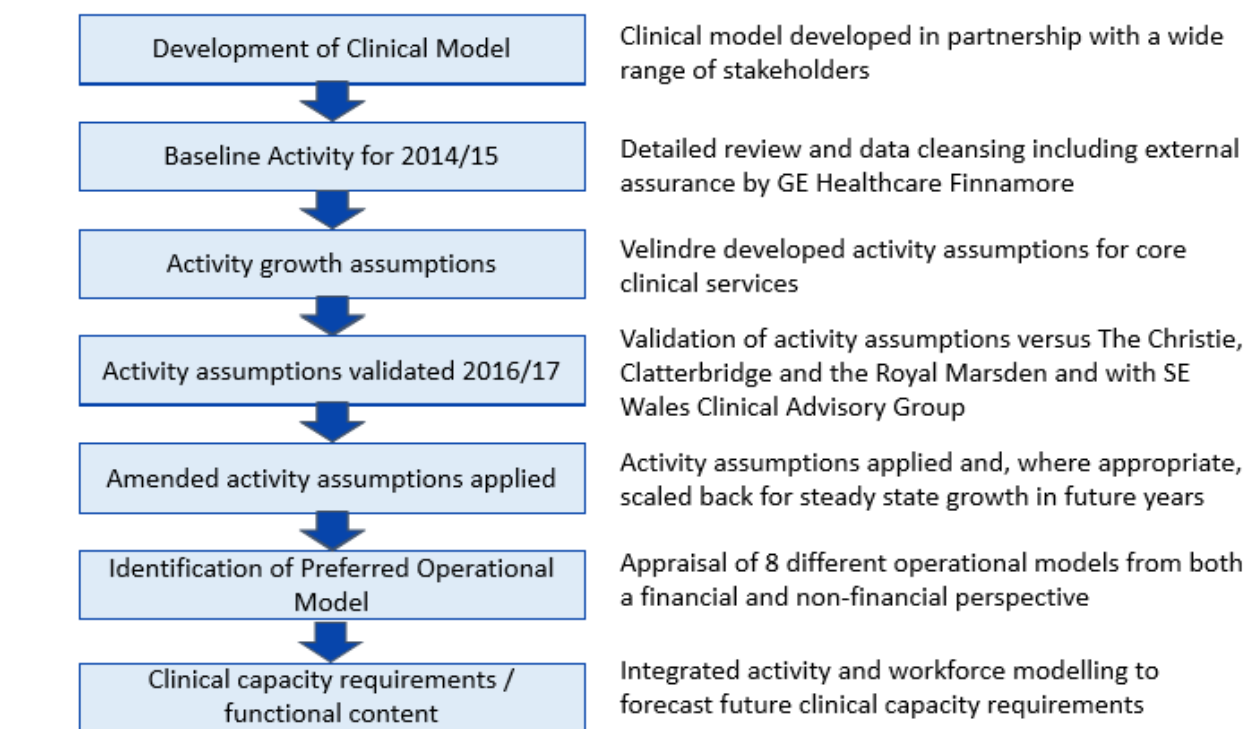
Modelling Future Capacity Requirements

12.2 The Trust has developed a comprehensive activity model to forecast future capacity requirements for the nVCC. 2016/17 has been used as the baseline activity year for the model. The 2016/17 data set has been subject to rigorous review, including external validation, to ensure the accuracy of the data.

12.3 The functionality of the model has been subjected to quality assurance tests by the Trust's Technical Advisors, by GE Healthcare Finnermore and by the Trust Programme Team.

12.4 A summary of the process followed in forecasting future capacity requirements is shown in Figure 12-1 (see Appendix OBC/SC7 for full methodology).

Figure 12-1: Methodology for Forecasting Future Capacity Requirements



Clinical Growth Assumptions

- 12.5 The Trust has developed a set of clinical growth assumptions for its core services. These clinical growth assumptions have been developed in partnership with clinical colleagues from across South East Wales and are informed by cancer incidence projections provided by the Welsh Cancer Intelligence and Surveillance Unit (WCISU).
- 12.6 The assumptions, following the availability and validation of 2016/17 activity data, have recently been reviewed by the VCC Senior Management Team and by the VCC service and clinical leads respectively. The main output of this review was a reduction in assumed growth rate for Radiotherapy from 4% to 2% between 2016/17 and 2022/23.
- 12.7 The clinical growth assumptions have been approved by the TCS Programme Management Board and by the TCS Programme Clinical Advisory Board.

Table 12-1: Clinical Growth Assumptions for Core Services

Service	Annual Clinical Growth Assumption
	2016/17 - 2022/23
Radiotherapy	2%
SACT	5%
Inpatients	2%
Outpatients and Ambulatory Care	2%
Radiology (CT & MRI) and Nuclear Medicine	9%

- 12.8 In addition a validation exercise has been undertaken to compare the Trust's clinical growth assumptions against the following Cancer Centres from across the UK.
- The Beatson West of Scotland Cancer Centre;
 - The Clatterbridge Cancer Centre NHS Foundation Trust;
 - The Christie Cancer NHS Foundation Trust;
 - Leeds Teaching Hospital NHS Trust; and
 - The Royal Marsden NHS Foundation Trust.
- 12.9 The validation exercise demonstrated that the Trust's clinical growth assumptions were in line with those from other Cancer Centres across the UK, where comparable data is available.

Preferred Operational Model

- 12.10 The Trust undertook a combined financial and non-financial appraisal (see Appendix OBC/SC8) of a wide range of operational delivery models. The primary objective of this appraisal was to identify the option which provided best value for money.
- 12.11 Eight different operating scenarios, including the current model, were evaluated by a multidisciplinary group. The different scenarios that were considered extended working hours as well as five, six and seven day operational models.
- 12.12 The evaluation workshop, which was externally facilitated, was attended by TCS Programme representatives and Clinical Service Leads. The assessment was undertaken based upon:
- A non-financial assessment of options against the Projects Spending Objectives and Critical Success Factors; and
 - A financial (capital and revenue) assessment of options.
- 12.13 The preferred operating scenario (Scenario 8) scored the highest based on a combined non-financial and financial score. This scenario included the following components for core patient services:
- Radiotherapy service - 5 days a week, 9.5 hours a day;
 - 7-day Radiotherapy service for category 1 emergency patients and for urgent palliative patients;
 - Outpatient service – 5 days a week, 2 sessions a day;
 - SACT service – 5 days a week, 12 hours a day; and
 - Inpatient service – 7 days a week, 24 hours a day

Forecast Capacity Requirements

- 12.14 Following the activity and capacity modelling process outlined above, the Trust has been able to establish its core capacity requirements, referred to hereafter as the 'Do Minimum' requirements, in relation to:
- Building footprint requirement for the nVCC;
 - Functional content requirements e.g. number of Inpatient beds, for the nVCC; and
 - Major Medical equipment requirements for the nVCC.

Building Footprint for the New Velindre Cancer Centre – Do Minimum

- 12.15 The activity and capacity analysis has demonstrated that the required building footprint for the nVCC, based upon the Do Minimum service requirements, is 30,689m² compared to the existing Velindre Cancer Centre footprint of 17,777m². This analysis, which is summarised in Table 12-2 has been presented to, and validated by, NHS Wales Shared Services and WG Officers.

Functional Content Requirements for the New Velindre Cancer Centre – Do Minimum

- 12.16 The activity and capacity analysis has demonstrated the following Functional Content requirements for core services at the nVCC, based upon the Do Minimum service requirements. Table 12-3 summarises these requirements compared against functional capacity which is currently available at the existing Velindre Cancer Centre (2018).

Table 12-3: Functional Content Requirements for Core Services within the New Velindre Cancer Centre

Department	Existing (2018)	nVCC (2022)	Variance
Radiotherapy Linear Accelerators	8	8	0
Outpatient Consultation Rooms	24	28	+4 rooms
SACT Chairs	17	16	-1 chair
Inpatient Beds	47	50	+ 3 beds

Major Medical Equipment Requirements for the New Velindre Cancer Centre – Do Minimum

- 12.17 The activity and capacity analysis has identified the Major Medical equipment requirements for the nVCC, based upon the Do Minimum service requirements. The Major Medical equipment requirements for the nVCC, with a unit value of [REDACTED] compared to Major Medical equipment which is currently operational at the existing Velindre Cancer Centre (2018) are summarised in Table 12-4.

Table 12-4: Major Medical Equipment Requirements for the New Velindre Cancer Centre

Department	Equipment	Existing (2018)	nVCC (2022)	Additionality
Radiotherapy	Linear Accelerator	8	8	0
Radiotherapy	CT Simulator	2	2	0
Radiotherapy	Papillon System	0	1	1
Radiotherapy	Brachytherapy System	1	1	0
Radiology	MRI Scanner	1	2	1
Radiology	CT Scanner	1	2	1
Radiology	Imaging System (Plain Film/Fluoroscopy System)	2	2	0
Nuclear Medicine	Gamma Camera	1	1	0
Pharmacy	Robotic Dispensing System	0	1	1

13 SPENDING OBJECTIVES

Introduction

- 13.1 This section outlines the spending objectives for the Enabling Works Project. The Project Spending Objectives (PSOs) outline what the Project is aiming to achieve (considering benefits it should deliver or risks it should mitigate) and provide a basis for appraising potential options and for post-project evaluation.

Spending Objectives

- 13.2 The Project Spending Objectives for the Enabling Works Project are set down below:

Table 13-1: Spending Objectives

Ref	Spending objective	Related benefits / considerations
SO1	To prepare site to allow MIM contractor to successfully deliver nVCC	<ul style="list-style-type: none">• Site ready by required date• Minimise MIM risks• Fully serviced site – utilities et al
SO2	To provide access to nVCC site	<ul style="list-style-type: none">• Allows primary and ancillary or emergency access• Allows vehicle and pedestrian access• Allows specialist access (e.g. crane)• Reduces traffic congestion
SO3	To accommodate the potential Metro development	<ul style="list-style-type: none">• Enables development of Metro
SO4	To accommodate the future use of the nVCC site	<ul style="list-style-type: none">• Provides future proofing• Allows increase in service demand and capacity
SO5	To minimise disruption during the construction period of the Enabling Works	<ul style="list-style-type: none">• Reduced disruption to local area
SO6	To maximise sustainable development	<ul style="list-style-type: none">• Mitigates risk to local wildlife• Minimise environmental impact• Provide for Future Generations and Wellbeing requirements

Critical Success Factors

13.3 The critical success factors for the Enabling Works Project are set down below:

Table 13–2 Critical Success Factor

CSF	The option will be assessed in relation to how well it:
Strategic fit	<ul style="list-style-type: none">• Meets agreed spending objectives and business needs• Aligns with national and local strategy / policy• Enables delivery of TCS programme
Value for money	<ul style="list-style-type: none">• Optimises public value (social, economic, environmental) in terms of potential costs, benefits, and risks
Capacity and capability	<ul style="list-style-type: none">• Matches the ability and capacity of workforce and/or potential suppliers to deliver the required services• Is likely to be attractive to potential suppliers
Potential affordability	<ul style="list-style-type: none">• Can be funded from available sources of finance• Initial high-level costs align with funding expectations
Potential achievability	<ul style="list-style-type: none">• Is likely to be delivered given the Trust's and partner organisations' ability to respond to the scale of change required• Matches level of available skills required for successful delivery• Can be delivered within the required timescales

13.4 The Economic Case will appraise the access route options using the spending objectives and critical success factors.

14 PROJECT RISKS, CONSTRAINTS, DEPENDENCIES AND ASSUMPTIONS

Risks

- 14.1 Identifying, mitigating and managing key risks is crucial to successful delivery of intended outcomes and benefits within the anticipated timescales and spend.
- 14.2 A full Risk Register for the nVCC Enabling Works Project has been developed, see Appendix OBC/SC9.
- 14.3 The nVCC Enabling Works Project Risk Register is managed by the nVCC Project Management Office (PMO). The exact role of the PMO in managing risks is described within the Management Case.

Constraints

- 14.4 The main constraints in relation to the Enabling Works Project are outlined in Table 14-1:

Table 14-1: Main Constraints of the Enabling Works Project

Constraint	Overview
Financial Constraints	The infrastructure solution must represent best value for money inclusive of reasonable risk allowances and quantified risk.
Timescale Constraints	Enabling Works shall be satisfactorily complete well in advance of reaching the Financial Close of the procurement process of nVCC.
Service Continuity	Disruption and disturbance of the enabling works must comply with the requirements set out. Delivery of patient services at the existing facility must be maintained during the period of construction.
Compliance with Statutory Requirements	Design and construction must satisfy the demand of statutory approvals including planning, inclusive of anticipated constraints specific to environmental mitigation.

Dependencies

- 14.5 A number of dependencies have been identified in relation to the nVCC Enabling Works Project. These are provided in Table 14-2 overleaf.

Table 14-2: Main Dependencies of the nVCC Enabling Works Project

Dependency	Overview
Capital Funding Availability	Access to capital funding is critical to deliver the Project.
Revenue Funding Availability	Access to revenue funding is required to support the recurring revenue implications associated with the nVCC Project.
Welsh Government Support	The Outline Business Case must be approved by the WG.
Partnership Working	Co-production in the design and implementation of the Project that involves Asda, Cardiff Council and Cardiff and Vale UHB.
Wider Health Strategy and Governance	It is important that general health strategy and governance in Wales, that underpins the nVCC Project remains broadly consistent over the period of change.
Site Enabling Works	The site enabling works Project must be completed by the completion of the nVCC Competitive Dialogue process (as a key enabler of the nVCC Project).

Assumptions

- 14.6 The key assumptions underpinning the nVCC Enabling Works Project are provided in Table 14-3:

Table 14-3: Main Assumptions for the Enabling Works Project

Assumption	Overview
Implementation of the wider TCS programme	<p>It is assumed that the following capital Projects identified within the TCS Programme are funded and the nVCC has been 'sized' on the basis of this assumption.</p> <ul style="list-style-type: none"> • Radiotherapy Satellite Centre at Nevill Hall Hospital; and • Non-surgical cancer Outreach centres across South East Wales delivering SACT and Outpatient services.
Clinical Growth Assumptions	<p>The nVCC has been 'sized' on the basis of a number of clinical growth assumptions, summarised below:</p> <ul style="list-style-type: none"> • Radiotherapy activity will increase by 2% per annum through to 2022; • SACT activity will increase by 5% per annum through to 2022; • Outpatient activity will increase by 2% per annum through to 2022; • Inpatient activity will increase by 2% per annum through to 2022; and • Radiology and Nuclear Medicine activity will increase by 9% per annum through to 2022.

Flexibility for Expansion on the Site of the New Velindre Cancer Centre

- 14.7 It is important to highlight that there is significant expansion space (compared to the approved Outline Planning Application) on the identified site for the

nVCC. This expansion capacity is fundamental to the Trust's mitigation strategy in the event that either:

- a) The other capital Projects within the TCS Programme are not supported; or
- b) The clinical growth assumptions prove to be understated.

14.8 The Trust has identified alternative uses for some of the proposed nVCC accommodation in the event that clinical growth assumptions do not fully materialise.

15 CONCLUSION

- 15.1 The Strategic Case has demonstrated the requirement for investment to support the site access and enabling works which will enable the development of the chosen site.
- 15.2 Providing a 'prepared' site de-risks the nVCC Project by providing a site ready for construction by a preferred bidder. The Enabling Works OBC, therefore provides the case for the 'site enabling works' needed to support the nVCC Project to develop a new Velindre Cancer Centre.
- 15.3 The key factors supporting the case for investment are:
- The existing patient environment at the Velindre Cancer Centre is sub-optimal and does not promote patient recovery and well-being;
 - There is insufficient patient and family car parking at the existing Velindre Cancer Centre;
 - A high proportion of accommodation at the existing Velindre Cancer Centre is non-compliant with statutory requirements;
 - The existing Velindre Cancer Centre built on a 'like for like' basis would have a building footprint of circa 28,000m² compared to the existing building footprint of 17,777m²;
 - There is no space to expand on the existing Velindre Cancer Centre estate;
 - The chosen site for development requiring route access; and
 - The MIM policy will be supported by a 'prepared' site.

