Environmental Impact Assessment (EIA)

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In December 2016 the states Assembly decided that a new general hospital for Jersey should be built on part of the site of the existing hospital in the centre of St Helier.

The process of preparing an application for planning permission for the new hospital involves gathering together significant amounts of information to support and explain the application. To consider the potential environmental impacts an Environmental Impact Assessment (EIA) is required.

The EIA process can benefit from public engagement by making it more efficient and avoiding concerns being raised later in the process. We would like to receive comments on the approach we have taken to EIA and the potential environmental impacts that have been identified. Local knowledge of the site and surrounding area can make a valuable contribution to either previously unconsidered impacts or emphasise the importance and sensitivity of the impacts already identified.

If you have any observations on the information we are gathering, particularly if you feel we may have missed something, we would welcome your comments. These comments can then be included in the information we submit in connection with the planning application.

Why we need to change

1. Modern services

Our hospital needs to provide modern, safe, sustainable and affordable healthcare services

2. New demands

Hospital treatments are changing fast and our hospital needs to meet new demands

3. Ageing society

We need to be ready for a larger number of older patients with more complex illnesses

4. Right care, right place

We want to focus on patients that **need** to be treated in hospital and support more care in the community

5. Key staff

A modern hospital is needed to attract key staff

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Issues with our current Hospital

1. Independent survey

An independent survey confirmed that almost every part of our hospital fails to meet modern healthcare standards

2. Lower standards

Attempts to upgrade our current general hospital would fall short of the standards that can be achieved in a new-build hospital

3. Poor value refurbishment

Refurbishment is a short-term fix, poor value for money and causes significant disruption to patients

4. Failing equipment

Much of our equipment is failing, leading to more break-downs and risk of serious disruption to patient care

5. Overcrowding

Our current hospital is overcrowded, has little storage and is hard to keep free of infection

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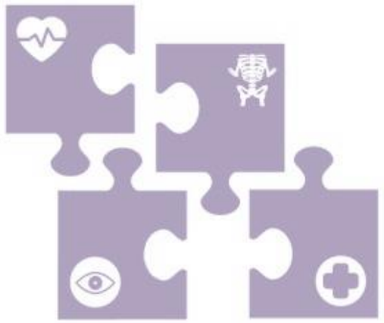

"The current Hospital has developed piecemeal over previous decades."

"The Hospital's physical condition, as assessed in an independent "6 Facet" Condition Survey, hinders achieving the modern standards expected in a Hospital."

Proposition approved by the States Assembly*

"The Future Hospital is a key enabler for a new model of care with patient safety as its paramount concern."

"The fabric of the hospital building and its supporting infrastructure is rapidly becoming inadequate and unsustainable."

*P110-2016 Future Hospital *Lodged au Greffe 19 October 2016*

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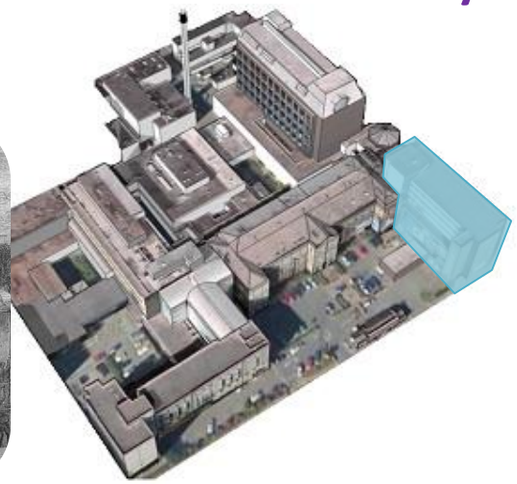
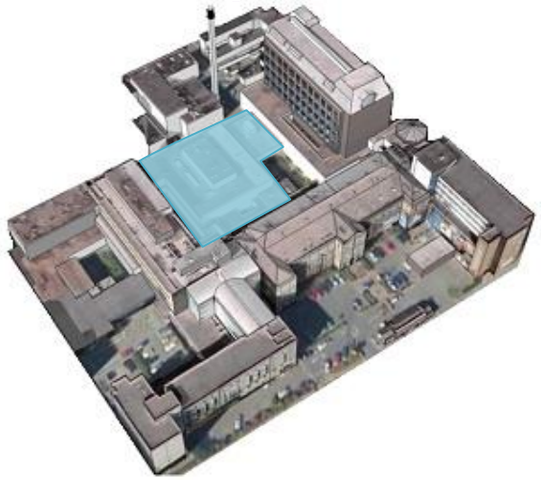
History of Jersey General Hospital

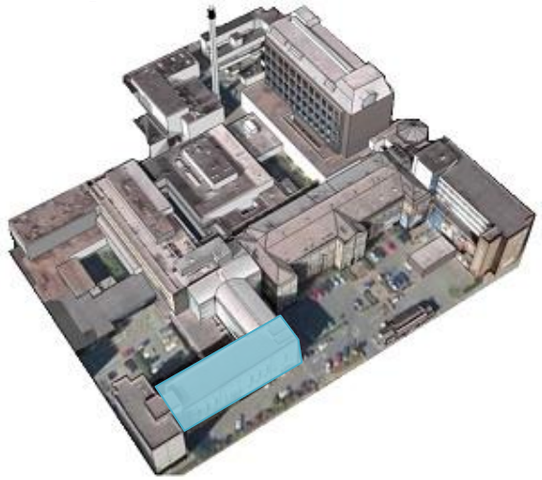
1863 Hospital opened following fire



1950 1960's Wing opened (current A&E)

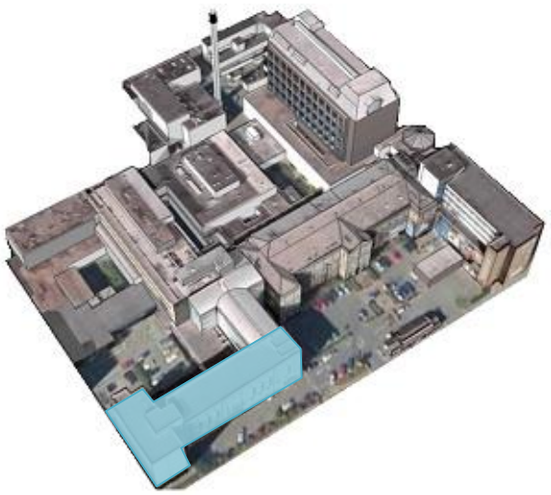


1962 Pathology, Pharmacy & Kitchen block opened

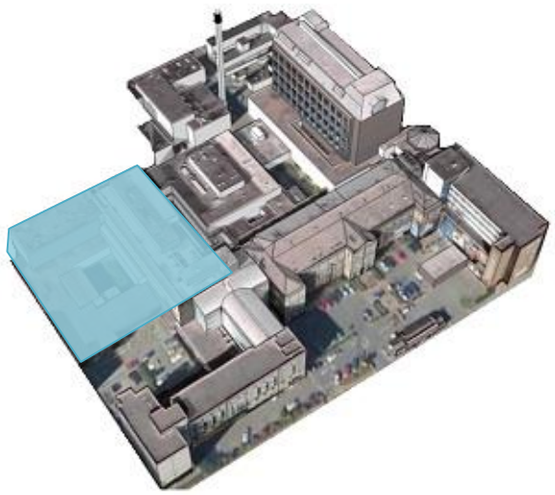


1979 Peter Crill House re-opened as admin offices

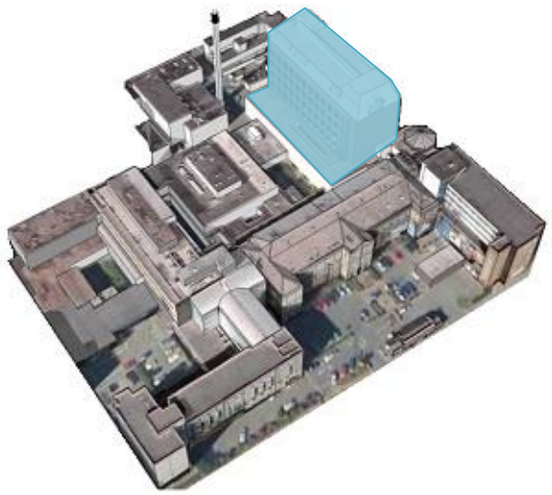
1983 Nurses home opened (now Peter Crill House)



1987 Gwyneth Huelin Wing opened (outpatients)



1994 Parade building opened (high rise)



2007 Peter Crill West Wing extension

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Site Selection Process

The site selection process began in 2012 and followed a UK Government methodology known as HM Treasury Green Book Guidance

- 41 potential sites were tested against 5 criteria:
  - ❑ Size
  - ❑ Site access
  - ❑ Topology e.g. massing context
  - ❑ Restrictions e.g. covenants
  - ❑ Other issues that impact availability

- The best performing long listed sites were ‘short listed’ and scored and ranked for risks, benefits and costs

- 13 sites passed site screening and were ‘long listed’. These sites were scored and ranked for risks and benefits

- The current site was acceptable to the majority of States Members. It was a ‘special place’ as a hospital and, within reason, a ‘special case’ could be made for its approval

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How the Project works on the current site

Goals

- Maintain safe operation of the hospital during project delivery

- Provide a New-Build, fit-for-purpose hospital

- Deliver the hospital in 8 years in a single main construction phase

8 yrs

- Be comparable in cost to new build options

Requirements

- Sensitivity to how we deliver health services

- Sensitivity to the impact of the hospital on this part of St Helier and the opportunities it provides

- Purchase of adjacent properties

- Transitional relocation works

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Location

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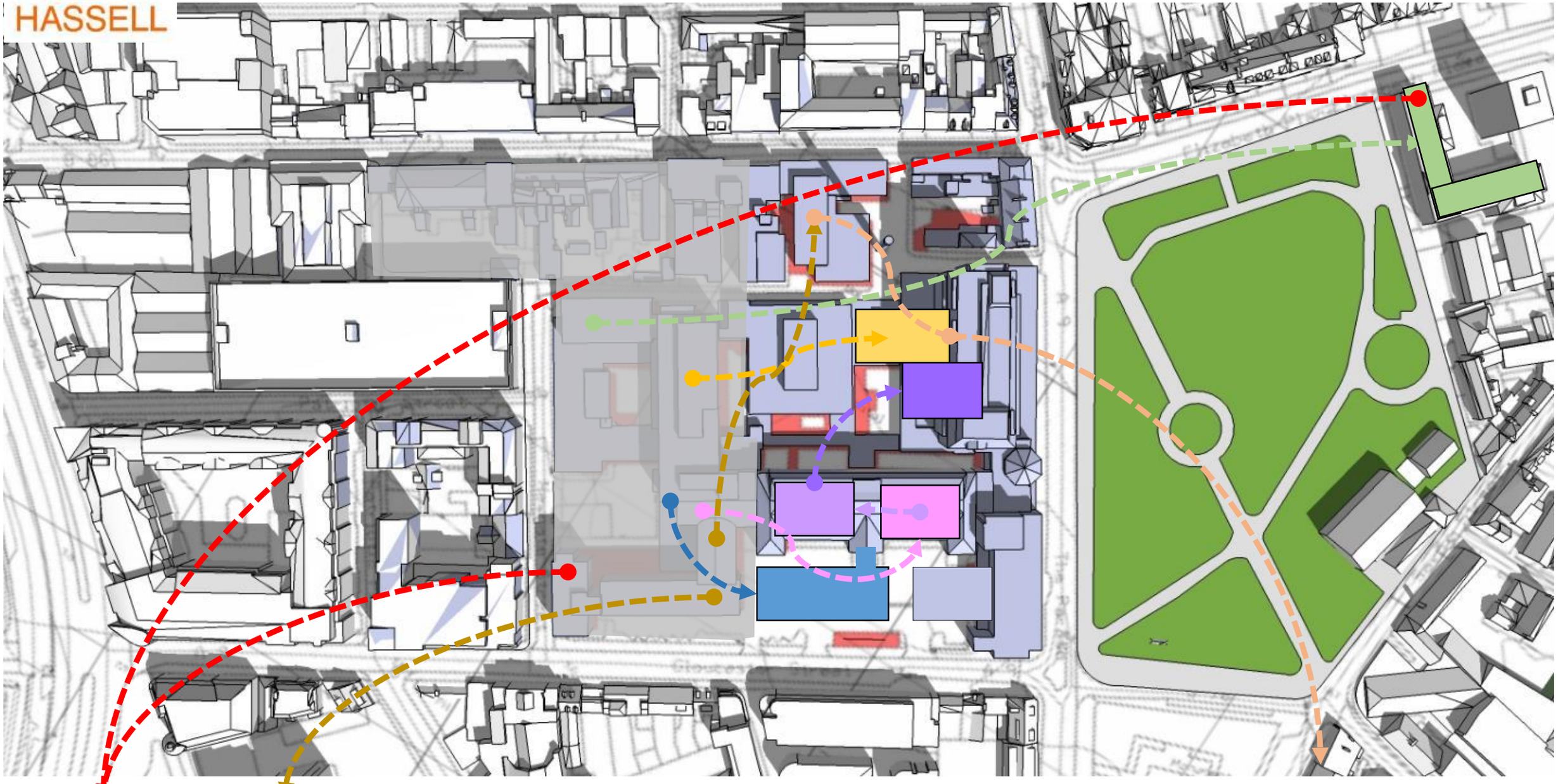
Proposed Relocation Works requirements 2017-2018



Hospital staff accommodation relocated to nearby rented solution	Education centre and admin to nearby offices	Selected outpatients to new temporary clinic block in Gloucester Street carpark	Outpatients to Westaway Court	Gynaecology from Rayner Ward to replanned Maternity	Emergency Assessment from Chevalier to refurbished Rayner Ward	Day Surgery to replanned Chevalier Ward utilising new theatres	Kitchens and Estates Functions to alternative locations	Outpatients to refurbished kitchen area

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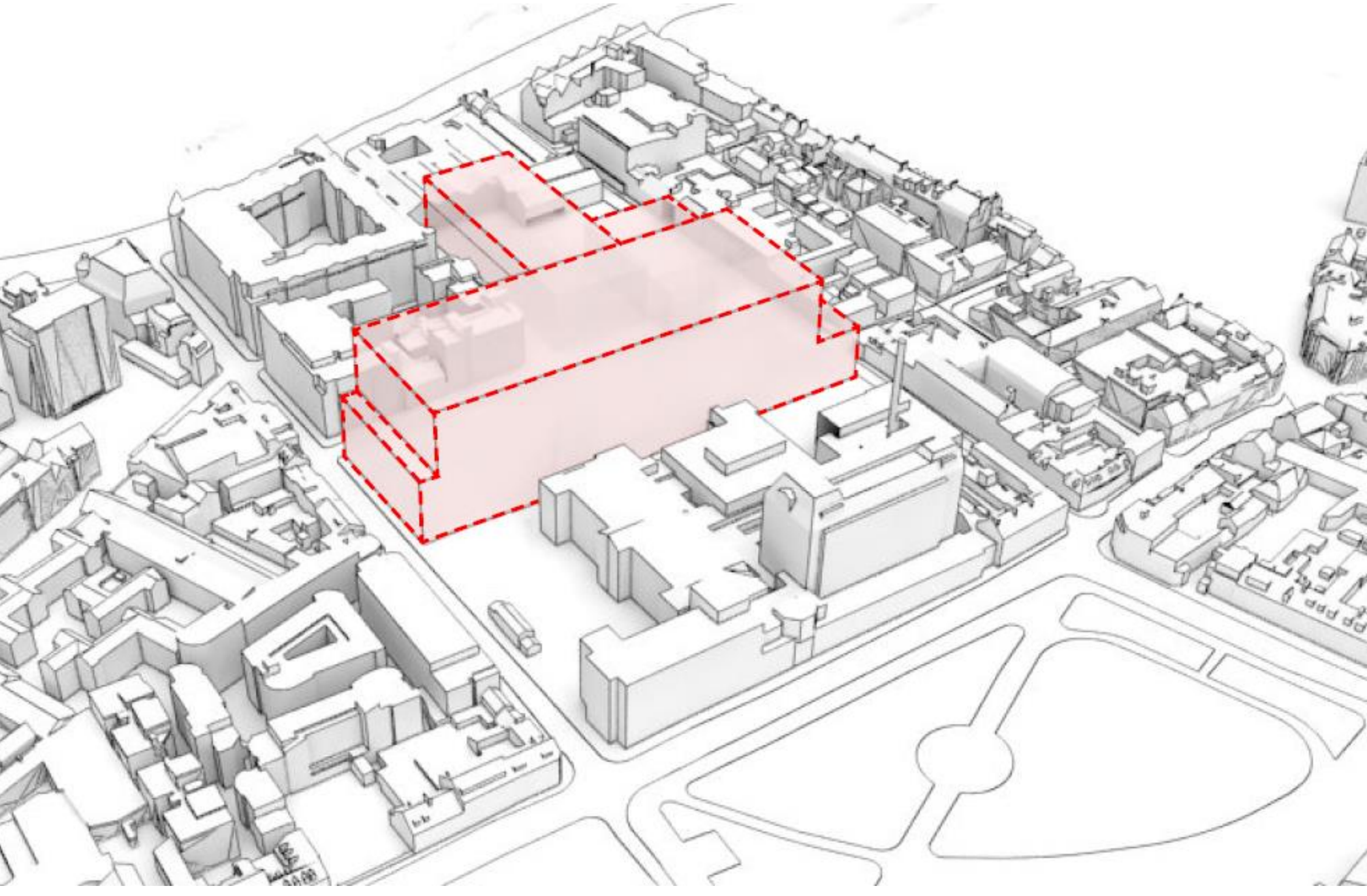
Proposed Building Envelope



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ENVIRONMENTAL IMPACT ASSESSMENT

Environmental Impact Assessment (EIA) is a tool used for identifying and assessing environmental effects associated with a proposed development. Jersey Future Hospital is carrying out an EIA and will submit an Environmental Impact Statement (EIS) which reports the findings of the EIA alongside the planning application. The information provided here is a brief summary of the work carried out to date to identify and assess the significance of environmental effects associated with the construction and operation of Jersey Future Hospital. The topics covered include those that will be included within the EIS submitted to the States of Jersey.

BIODIVERSITY

The Jersey Future Hospital site is set within a largely urban setting, with limited ecological value. For biodiversity, the main focus of the assessment has been on bats and birds.

BATS

A preliminary bat roost inspection was undertaken in February 2017 to determine whether there are any protected species on the site. The tiled pitched roofs of Sutherland Court and the Revere Hotel were assessed as having low potential for roosting bats. Further surveys including full internal and external inspections and dusk emergence and/or dawn re-entry surveys are proposed for these buildings.

No features suitable to support roosting bats or potential entry/exit points were observed on any of the other buildings. None of the trees within the application site had suitability for roosting bats.


Greater Black-backed Gull, *Larus marinus*

BIRDS

The roofs and various ledges of the buildings within the site provide opportunities for nesting birds. A pair of greater black-backed gulls ***(Larus marinus)*** was present on the highest part of the Gwyneth Huelin Wing roof. Several pairs of herring gull (***Larus argentatus)*** were seen across the roofs of the General Hospital buildings. An area of climbing plants in the rear of the Revere Hotel were seen to support a number of dunnock Prunella modularis. Feral pigeons ***(Columba livia domestica)*** were present in numerous locations across the roofs of the General Hospital buildings despite efforts having been made to prevent them, including pigeon spikes on ledges.

The assessment for biodiversity does not consider there to be any significant ecological effects from the proposed project.


Herring Gull, Larus argentatus

AIR QUALITY

The air quality assessment for Jersey Future Hospital will establish baseline air quality conditions in the area and assess the impact on local air quality during the construction and operational phases. The construction phase is likely to give rise to dust due to the demolition and construction of buildings on site, the effects of which will be minimised through dust suppressant measures taking into account the surrounding area.

During the operational phase, the proposed development will not significantly increase traffic (less than an additional 150 vehicles per day) therefore the effects from traffic will be negligible. An older, less efficient combustion plant which is currently in operation at the hospital will be replaced with low Nitrogen Oxide (NOx) boilers and stand-by generators. This will improve air quality in comparison with the existing situation. A detailed modelling assessment of the effects arising from replacement of the on-site combustion plant will be undertaken as part of the environmental assessment work.

NOISE AND VIBRATION

Operational noise and demolition/construction noise and vibration has been assessed at a number of locations (or receptors) identified as potentially sensitive to change around the hospital site and at hospital buildings that will remain operational during demolition and construction phases. A baseline survey has been conducted at locations surrounding the proposed site, see image below. Relevant standards and guidelines have been used to define limits and suggest mitigation methods where required.

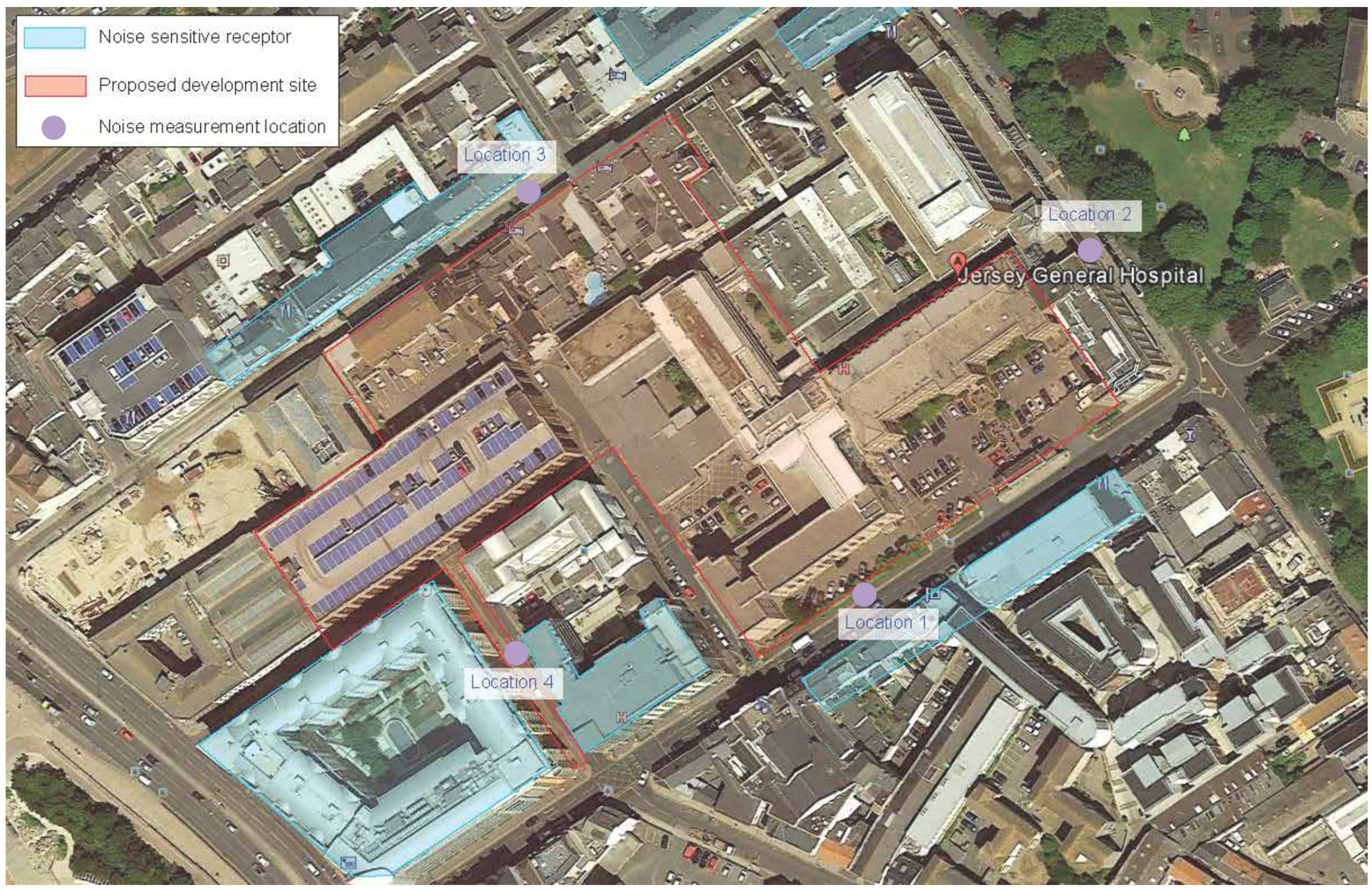
Noise and vibration must be carefully considered due to the close proximity of sensitive receptors to the proposed site. Noise and vibration during demolition and construction, whilst intermittent, has the potential for significant effects without the use of adequate mitigation.

During construction there is the potential for noise and vibration to exceed suggested limits. The appropriate use of mitigation will be used to minimise any potential impact.

During operation of Jersey Future Hospital changes in traffic flows are not considered to result in significant changes to noise levels and noise generated from buildings services (e.g. air conditioning units) will be controlled by planning conditions, based on background noise measurements.

PROPOSED MITIGATION

Mitigation is required for construction and demolition. It is likely to include appropriate work scheduling in consideration of existing hospital buildings to minimise disruption, site planning for the position of noise/vibration sources and control measures for demolition and construction processes and the use of screening.



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ENVIRONMENTAL IMPACT ASSESSMENT

TRAFFIC AND TRANSPORT

Traffic and transport is a key consideration for a scheme of this size. Baseline traffic flow and parking data was obtained from the Department for Infrastructure (DfI) and additional surveys of vehicle flows and pedestrian movements were undertaken to fully understand the existing conditions.

Future vehicle trips and the resulting parking demand associated with planned developments such as the Jersey International Finance Centre have been forecast to understand future conditions when the Jersey Future Hospital is operational.

The aging and growing population in Jersey has been reflected through the use of 'growth' factors which have been applied to the existing number of patients, visitors and staff associated with the hospital.

Both positive and negative traffic and transport effects have been identified which are set out below based on different users:

CONSTRUCTION PHASE

SUSTAINABLE TRANSPORT

- Pedestrian safety will be prioritised in the vicinity of the development site
- Increased walking distances from bus stops on the Esplanade and Liberation Station due to the closure of the Newgate Street entrance
- Average daily (Monday-Friday) construction vehicle deliveries (HGVs) 3-12

LOCAL HIGHWAY NETWORK

- Improvements to the St Aubin's Road/ Peirson Road/Kensington Street junction
- Signals will remove the need to give way at the Seaton Place junction with Gloucester Street
- Temporary closures on Kensington Place, Newgate Street. Potential for temporary lane closures on Gloucester Street.

PARKING

- Construction of two-half decks (120 spaces) will increase the overall capacity of parking in St Helier
- Improved provision of parking reserved for patients and visitor
- On-street parking on The Parade and Gloucester Street (East) to be reserved for the hospital in order to prioritise patient needs.
- Reduction in provision of parking for the commuters and public not associated with the hospital.
- To construct the additional decks and the footbridges to the hospital, some elements of the car park will need to be closed temporarily, reducing the overall provision of parking in St Helier

FINAL STATE

SUSTAINABLE TRANSPORT

- Travel Plan will be implemented that will offer a range of measures and incentives to encourage travel by sustainable forms of transport
- Improved infrastructure for pedestrians including wider footways and proposed signalised crossings
- Creation of public realm in the vicinity of the Granite Block and on The Parade
- Minor localised increase in congestion and traffic. This will be mitigated by increasing the widths of footways and proposing signalised crossings.

LOCAL HIGHWAY NETWORK

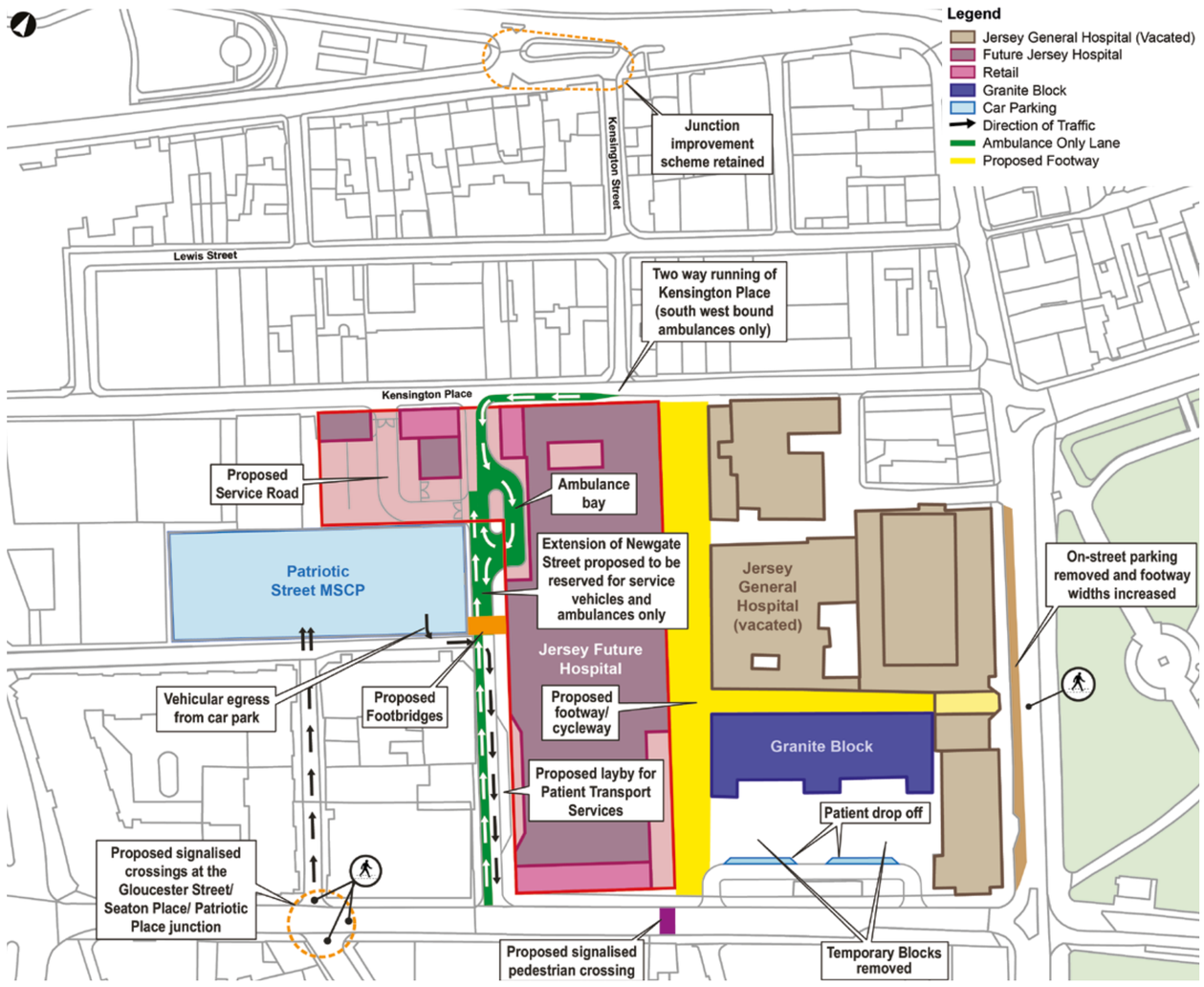
- Lasting improvement to the St Aubin's Road/Peirson Road/Kensington Street junction
- Ability for drivers (patients/visitors) to fix their route to Patriotic Street Multistorey Car Park knowing spaces will be available.
- Slight increase in flows associated with the ageing population of Jersey which would have occurred regardless of whether the Jersey Future Hospital is developed.

PARKING

- Proposed footbridges between Patriotic Street MSCP and Jersey Future Hospital.
- Ease of access for the disabled and parent and child spaces that will be located near to the new footbridges.
- Increased provision of parking designated for patients
- Better circulation and wayfinding for all users of the multi storey car park
- Reduction in provision of parking for the commuters and public not associated with the hospital.
- Removal of on-street parking on The Parade to improve pedestrian amenity

PROPOSED MITIGATION

There is a suite of proposed mitigation that will be implemented to manage the identified traffic and transport impacts during all stages of the project. These are illustrated on accompanying drawings included on the transport and connectivity board. Once built, traffic would be managed around the site as shown in the drawing on the right.



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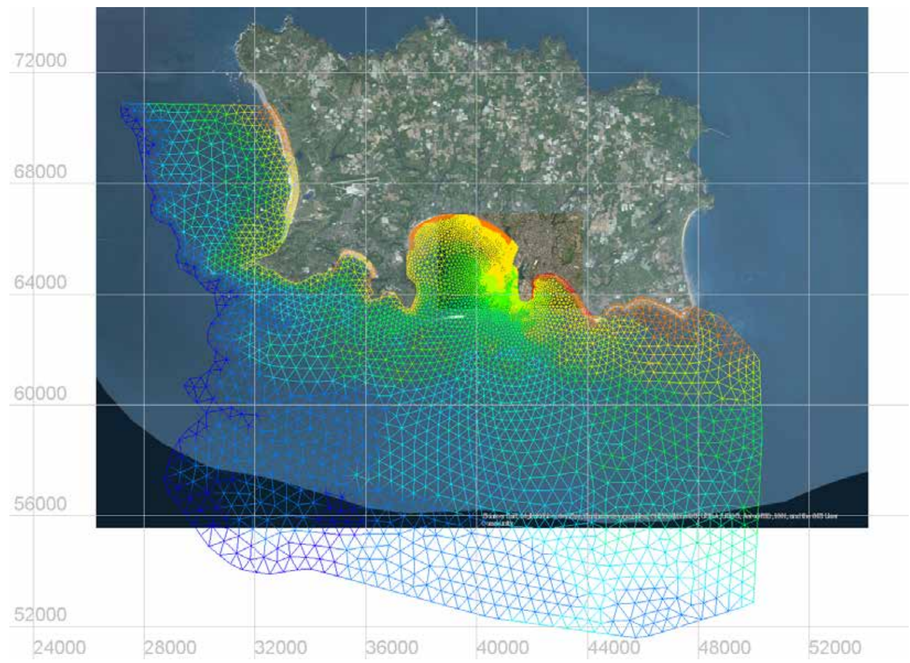
ENVIRONMENTAL IMPACT ASSESSMENT

WATER AND FLOODING

It is important to protect the proposed Jersey Future Hospital from flood events. Sustainable drainage measures will be considered during the design process to determine whether they can be used for the site to provide protection against flooding.

Several key aspects of Jersey water resources will be assessed:

- Foul and surface water drainage – an assessment with be made to determine whether the new hospital will increase or decrease foul and surface water flows in the area
- Flooding – in depth flood modelling will be used to consider the vulnerability of the hospital to extreme flooding. This would include consideration of:
  - Groundwater flooding
  - Tidal flooding
  - Surface water flooding



Wave Modelling

HERITAGE

There are a number of heritage assets in the surrounding area of Jersey Future Hospital that would be impacted by the development; this includes a number of listed buildings on Gloucester Street, Kensington Place and Elizabeth Place in addition to other areas of cultural historic interest such as Cheapside. None of the listed buildings will be physically negatively affected by the development, however, the setting of them will be altered due to the change in the height, scale and massing of the new hospital buildings being proposed

The most important listed buildings that will be affected include

HISTORIC 1860 HOSPITAL BUILDING

The 1860 Hospital and later Entrance Lodge are of the highest heritage value and are Grade 1 Listed Buildings. Originally constructed as a poor house in 1765, the original hospital was twice destroyed by fire before it was finally rebuilt in its current guise in 1860. The Entrance Lodge, fronting Gloucester Street, was built in 1877. There is a clear visual, architectural and historic association between the original Hospital and the Entrance Lodge and this association contributes to the value of the assets.

THE OPERA HOUSE

The Opera House is a Grade 2 Listed Building and an impressive example of late 19th century theatre design (rebuilt following fire in the early 20th century), comparable to examples in Britain. The Opera House makes a positive contribution to the street scene.

Other heritage assets, which are of lower value, but will be affected include:

GLOUCESTER STREET

There are a small number of Grade 4 assets on Gloucester Street, forming parts of earlier 19th century terraced houses. Some external features survive (including fluted pilasters incorporating rare scallop shell and ball ornaments on two of the buildings) but their significance is derived from their group value and the contribution they make to the street scene.

KENSINGTON PLACE

A closely related group of Grade 4, mid-late 19th terraced houses, all of which retain some original external features and contribute to the streetscape.

CHEAPSIDE

Cheapside is a culturally important part of the St Helier, notable for its strong Portuguese community which has created a thriving social quarter. There is one Grade 4 Listed Building and two Potential Listed Buildings

ELIZABETH PLACE

A series of Grade 3 terraced houses of early 19th century date as shown on the Le Gros map of 1834, retaining several original features, some external and some internal. They have value as a group.

Mitigation of scheme effects would be achieved through continued careful and sensitive design. Direct physical changes to the 1860 hospital building would aim to restore historic fabric and therefore enhance the asset. However, to identify historic fabric and to ensure a record of the structure a detailed historic building survey is proposed on the original historic hospital.

ARCHAEOLOGY

In terms of archaeology (buried heritage assets), there is potential for the survival of historic and earlier archaeology at depth throughout the development area, notably possible Roman activity, palaeoenvironmental deposits and the remains of Newgate Prison. The heritage value of the archaeology is currently unknown, but is likely to be low. During construction, if any archaeological remains are found, these will be recorded.

WASTE

An assessment has been made of the likely significant environmental effects of solid waste generation, associated with the demolition, construction and operation of the Jersey Future Hospital. A review of legislation adopted by the States of Jersey was undertaken to set the context for the assessment – these included those relating to waste and environmental issues and policies, to waste collection and treatment and waste management infrastructure.

During demolition and construction, an appreciable amount of waste would be generated. This would need to be removed off-site for recycling, recovery or disposal. The recycling and recovery capacity on Jersey is currently sufficient to manage the quantities of waste being predicted. Disposal of demolition and construction waste will be minimised as far as possible.

As with all hospitals, the operation of JFH will generate both non-hazardous and hazardous healthcare waste. The future use of waste management facilities to manage both types of waste will not be significantly different to the existing waste management regime and is unlikely to cause any future capacity issues.

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ENVIRONMENTAL IMPACT ASSESSMENT

GEOLOGY, HYDROGEOLOGY AND CONTAMINATION

The purpose of assessing geology, hydrogeology and contamination is to identify whether there are likely to be any issues related to the physical and chemical composition of ground below the existing hospital site. The ground below the hospital (termed 'made' ground) is likely to be made up of historic construction and demolition materials associated with the historic expansion of the hospital. These materials have the potential to contain contaminative substances (e.g. heavy metals, asbestos) which in turn may pose risks to both human health and controlled waters.

As the current and proposed site layout is predominantly covered with hardstanding material, there is little risk posed by the made ground deposits to human health and controlled waters. However, during the demolition and construction phases the made ground deposits will be exposed which could allow human contact and potential passing of contaminants into the groundwater.

A detailed ground investigation will be carried out in order to determine the precise physical and chemical composition of the ground. This allows for the potential risks posed by the ground to be assessed and allows for suitable mitigation measures to be adopted as necessary. The ground investigation will also provide data on the groundwater level beneath the site which in turn will allow for a further assessment of the potential effects from the proposed foundations and basements.

Example of small areas of exposed ground within existing hospital grounds

SOCIOECONOMIC

The socio-economic assessment considers the potential effects of the project on community facilities, local residents and local businesses who may experience a direct effect (e.g. demolition or employment opportunities) or indirect effect (e.g. reduced amenity during construction or increased spend from construction workers) during both construction and operation of the hospital.

The assessment therefore considers both positive and negative effects on existing hospital services, local residents, local businesses, community facilities and tourism. It will also consider the potential employment generated through the project during construction and operation of the new hospital.

CONSTRUCTION

During construction it is anticipated that the key potential impacts would include:

- Impacts to business owners and residents;
- Impacts on businesses and residents surrounding the project in respect of amenity effects (e.g. access, noise and air quality);
- Impacts on hospital services during the construction phase;
- Impacts on land use and the property market from temporary relocation of some hospital functions;
- Employment benefits of construction including employment opportunities generated and potential for training / up-skilling;
- Impacts associated with increased spend of the construction workforce in the local area (e.g. accommodation and leisure); and
- Impacts to leisure and tourism.

OPERATION

During operation the following potential impacts are anticipated:

- Impacts to local residents during operation of the new hospital;
- Impacts to local businesses in terms of commercial space created;
- Potential long term employment secured through the development;
- Potential contribution of the project to wider regeneration of St Helier; and
- Potential community benefits through improved hospital provision and facilities.

MITIGATION

Where necessary mitigation measures will be used in order to reduce the negative impacts and maximise positive impacts identified. These include:

- Relocation assistance for residents and businesses effected through property purchase and demolition;
- A phased programme of enabling projects to re-house hospital services and ensure that the hospital continues to function as per current operations;
- A series of construction management measures to limit the impacts of traffic, noise and dust on businesses and residents in the surrounding areas; and
- Liaison with the Construction Council to ensure that any skills development meets skills gaps within the Jersey construction sector, ensuring sustainable benefits to the labour market.

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New hospital services for a healthier Jersey

ENVIRONMENTAL IMPACT ASSESSMENT

WIND

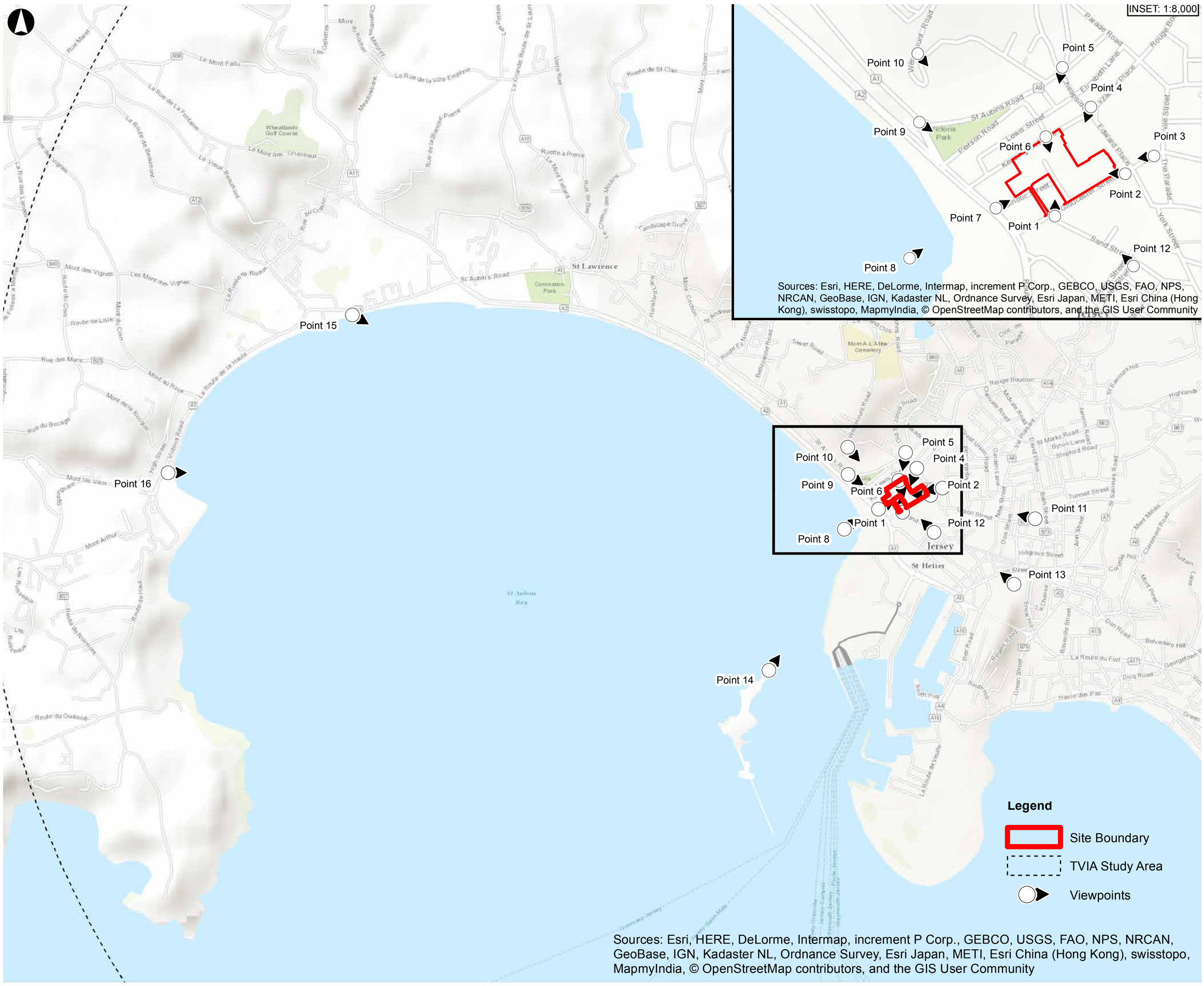
The height, shape and orientation of the proposed Jersey Future Hospital, as well as the influence of the surrounding buildings, may change the windiness at ground level around the new hospital. Any excessive windiness would have effects on pedestrian comfort and safety. Success in addressing environmental wind issues can enhance the usability of external public spaces including building entrances. An assessment is to be included which identifies whether the proposed building is likely to result in windiness that would affect pedestrians, cyclists and vehicles.

TOWNSCAPE AND VISUAL IMPACT

In order to achieve its function, the proposed built form will be large in scale. It will be between 40-50m high and has been located and designed to fit within the grid pattern of the streets and complement surrounding modern and historic built form. The aim of the townscape and visual impact assessment is not only to assess the level of effects on the townscape and local views from construction and operation of the development, but also to identify opportunities to influence where appropriate the design, size and appearance of the development. In order to minimise the level of negative effects on views and the local urban environment, mitigation design has been focused on measures embedded into the main development and associated public realm.

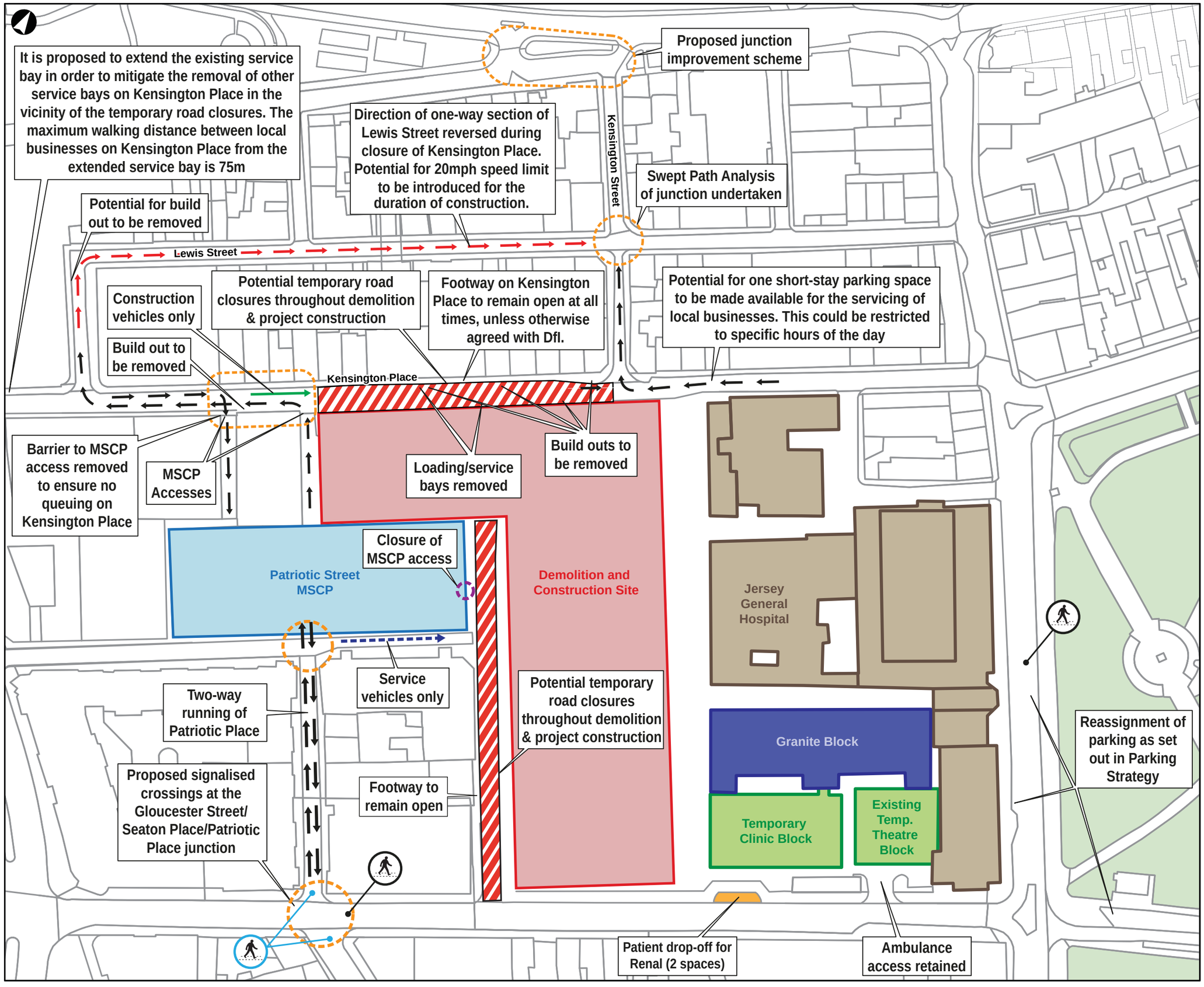
Effects on local urban character and on the visual amenity of local people and visitors has been assessed using a set of representative sensitive receptors across a study area within 5 km of the site. Receptors assessed include townscape and landscape character areas as defined by the States of Jersey. The visual assessment is based on approximately 20 representative views, which represent the most sensitive visual receptors – as shown on the townscape viewpoint plan

This process has followed industry best practice guidance set out in Guidelines for Landscape and Visual Impact Assessment (GLVIA3) by the UK's landscape Institute.



Construction Stage Est. 2019-2024

- Nine completed relocation schemes to accommodate the demolition of the Gwyneth Huelin Block and Peter Crill House
- Health services continue being delivered from the remainder of the site



Legend

- Jersey General Hospital
- Demolition & Construction Site
- Granite Block
- Car Parking
- Temporary Blocks
- Road Closure
- Direction of Traffic
- Existing Signalised Pedestrian Crossing

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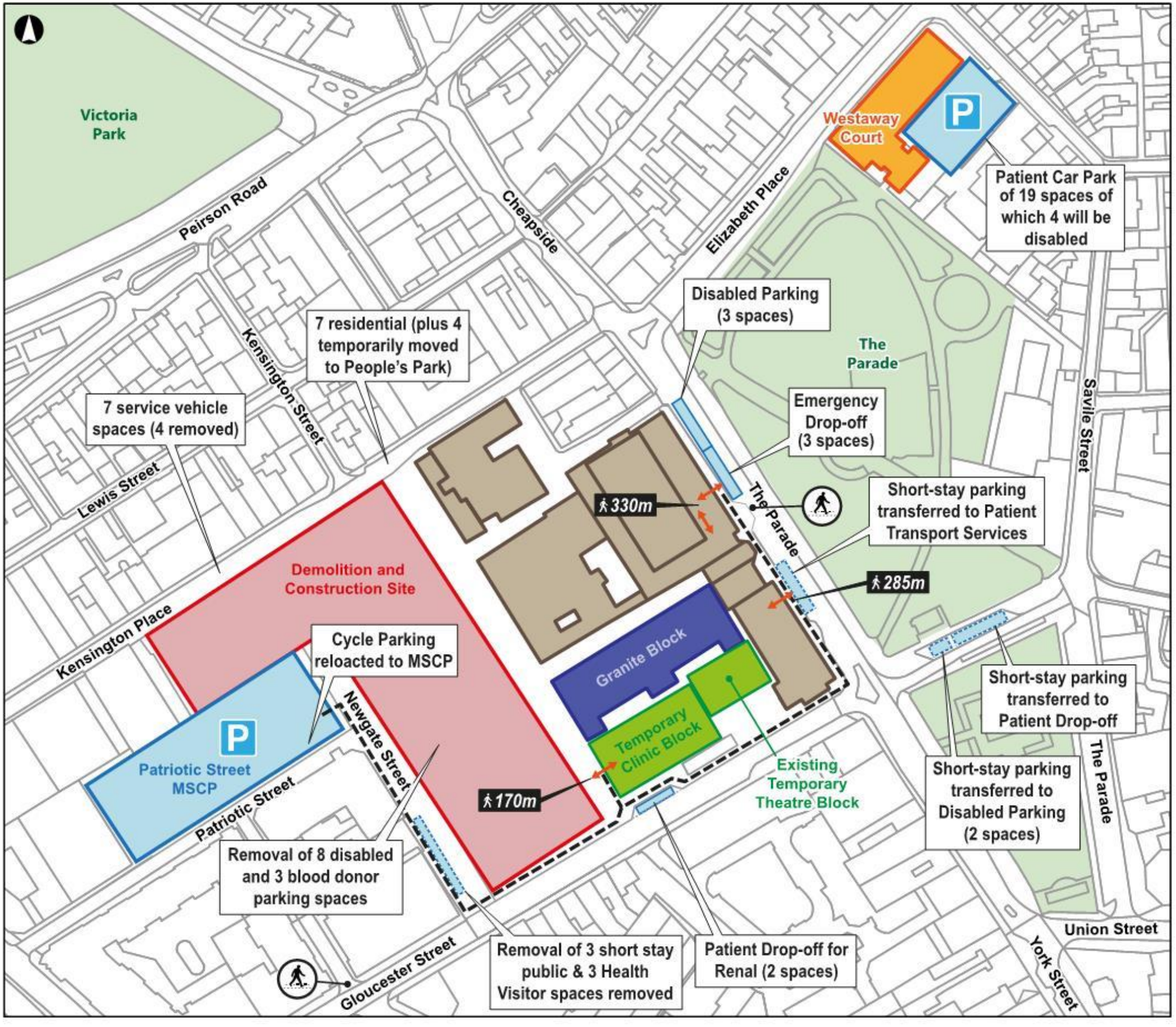
TRANSPORT INFRASTRUCTURE

DEMOLITION & CONSTRUCTION



Legend

- Pedestrian Access Point
- 285m — Distance from Patriotic Street MSCP (approx.)
- Car Parking
- Pedestrian Crossing Facility

Future Hospital
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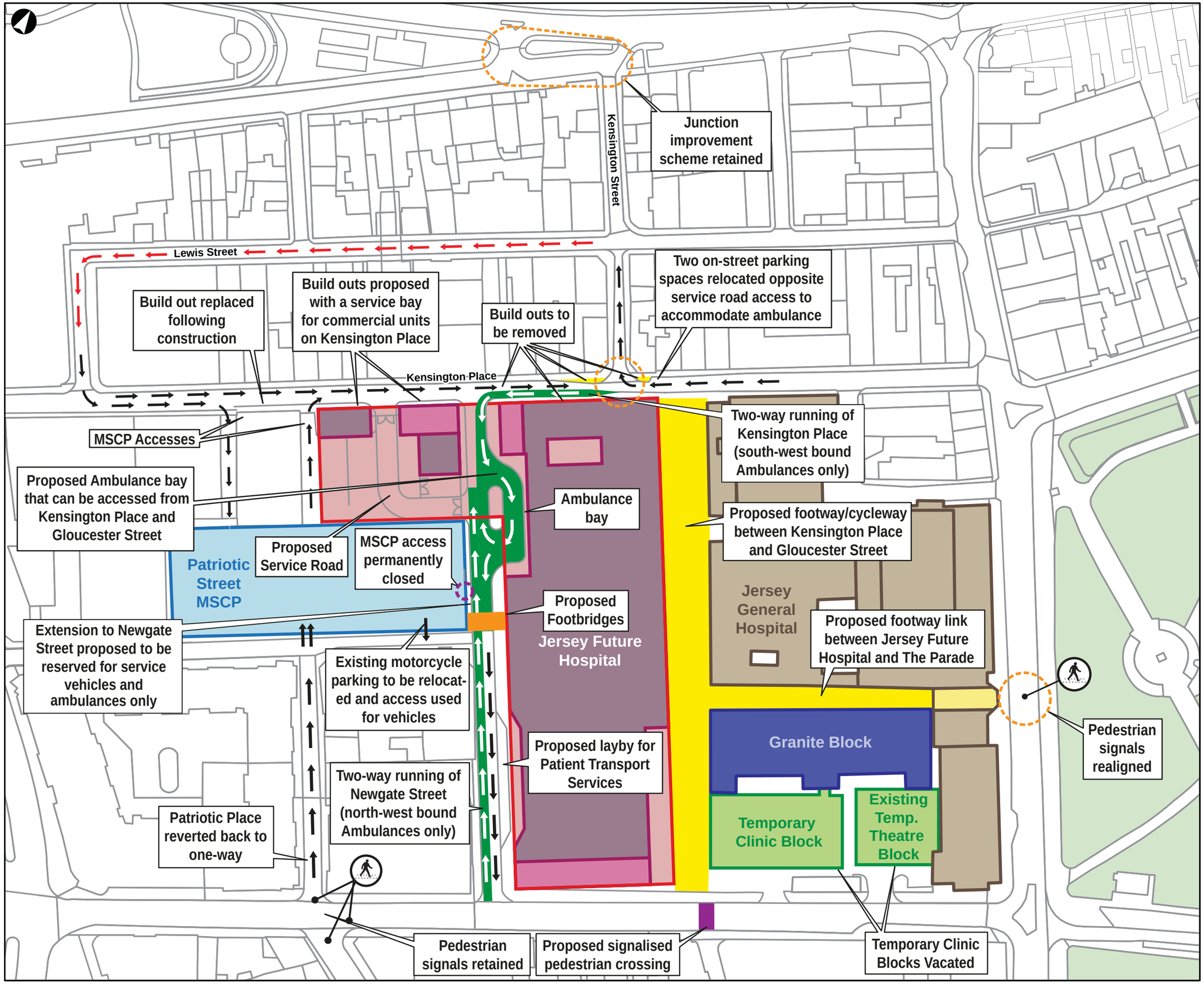
PARKING STRATEGY

CONSTRUCTION & DEMOLITION

Interim Stage
Est. 2024-2025 (9-18 months)

- Most transport infrastructure will be available when the New Hospital is opened
- The remainder will be provided when temporary units are removed



Legend

- Jersey General Hospital
- Future Jersey Hospital
- Retail
- Granite Block
- Car Parking
- Temporary Blocks
- Direction of Traffic
- Ambulance Only Lane
- Proposed Footway

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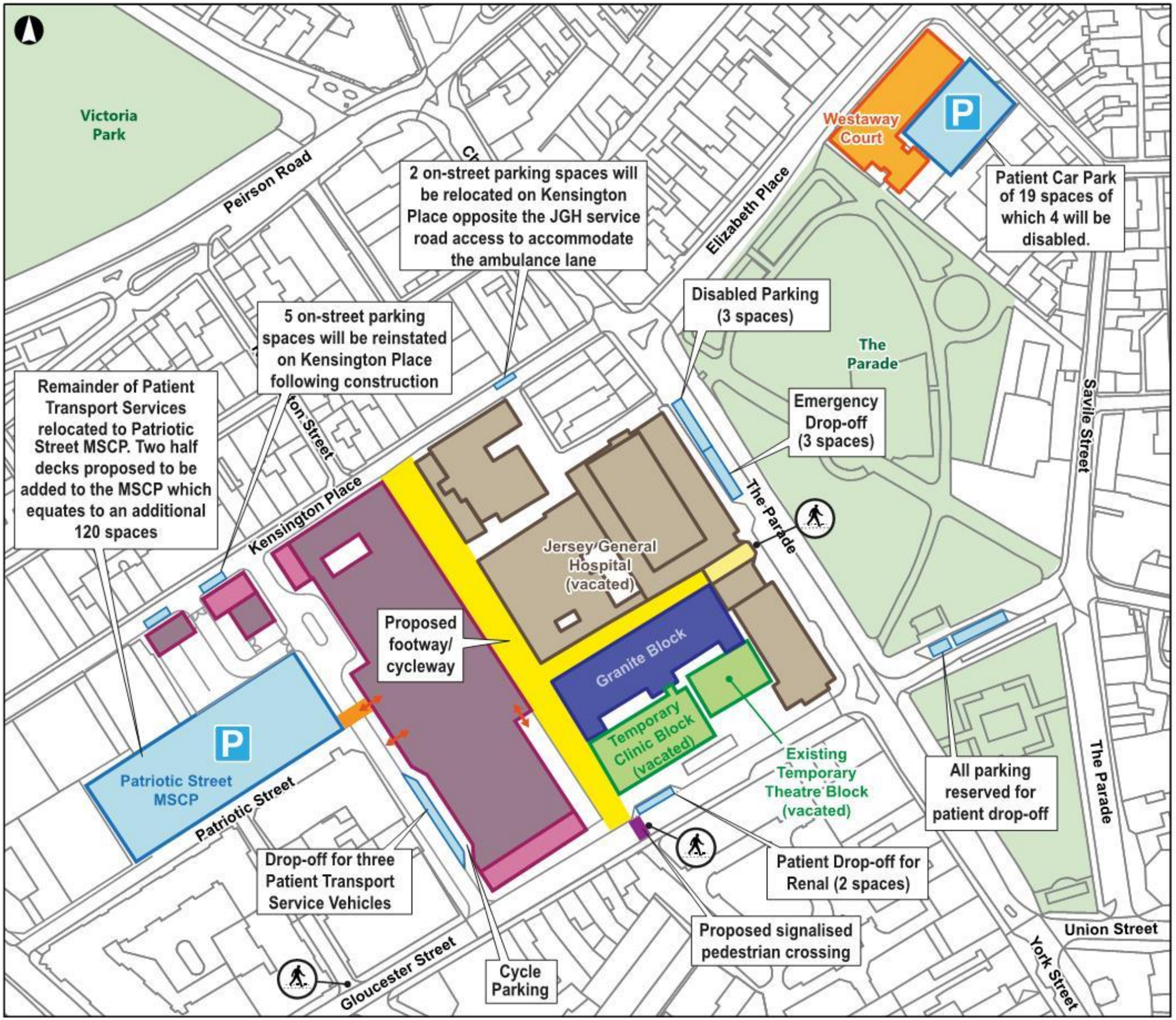
TRANSPORT INFRASTRUCTURE

INTERIM STATE



Legend

- Jersey General Hospital
- Future Jersey Hospital
- Retail
- Granite Block
- Westaway Court
- Temporary Blocks
- Car Parking
- Pedestrian Access Point
- Pedestrian Crossing Facility
- Proposed Footway

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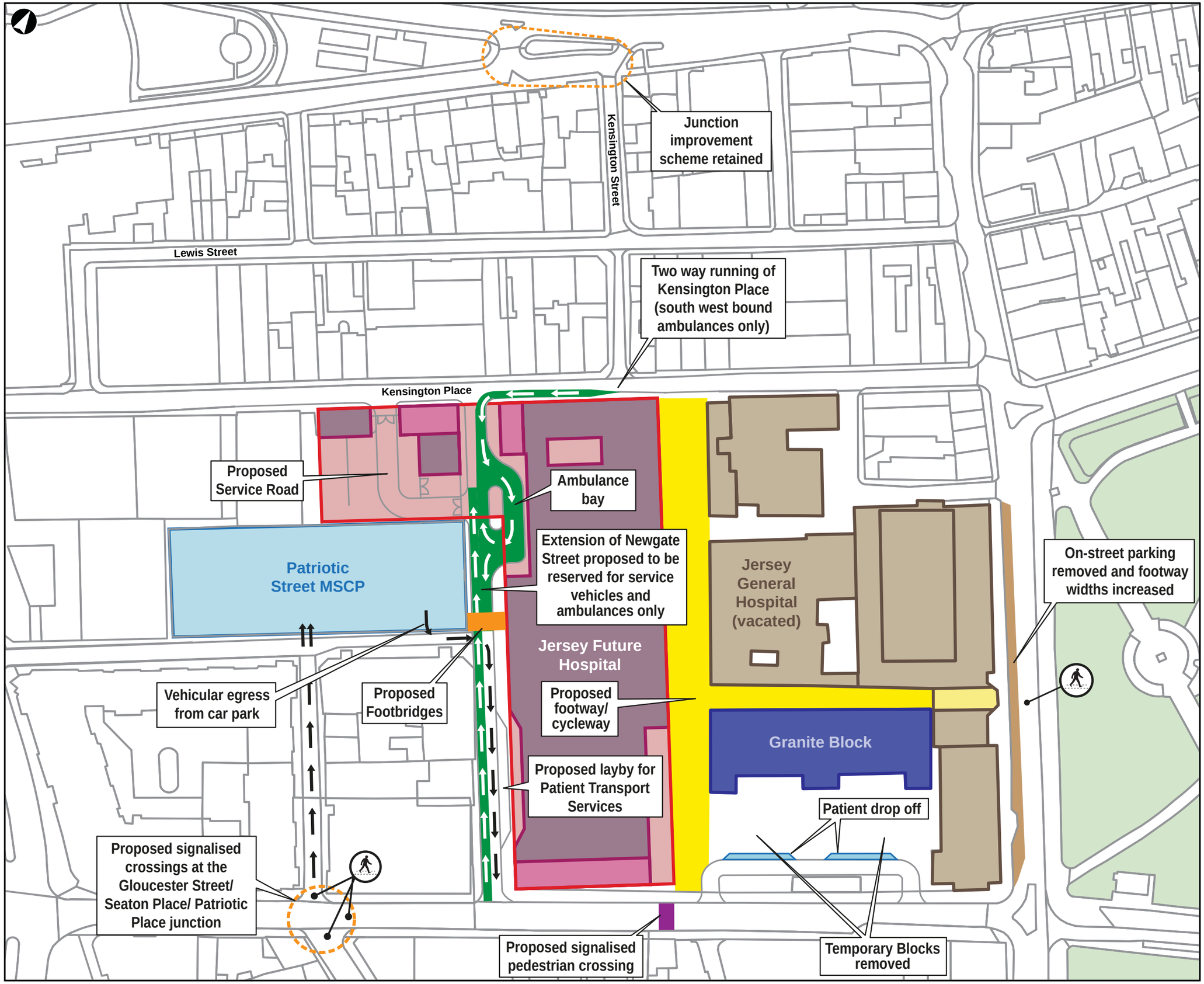
PARKING STRATEGY

INTERIM STATE

Final State

Est. 2025

- The New Hospital will be operational and all infrastructure will be provided



Legend

- Jersey General Hospital (Vacated)
- Future Jersey Hospital
- Retail
- Granite Block
- Car Parking
- Direction of Traffic
- Ambulance Only Lane
- Proposed Footway

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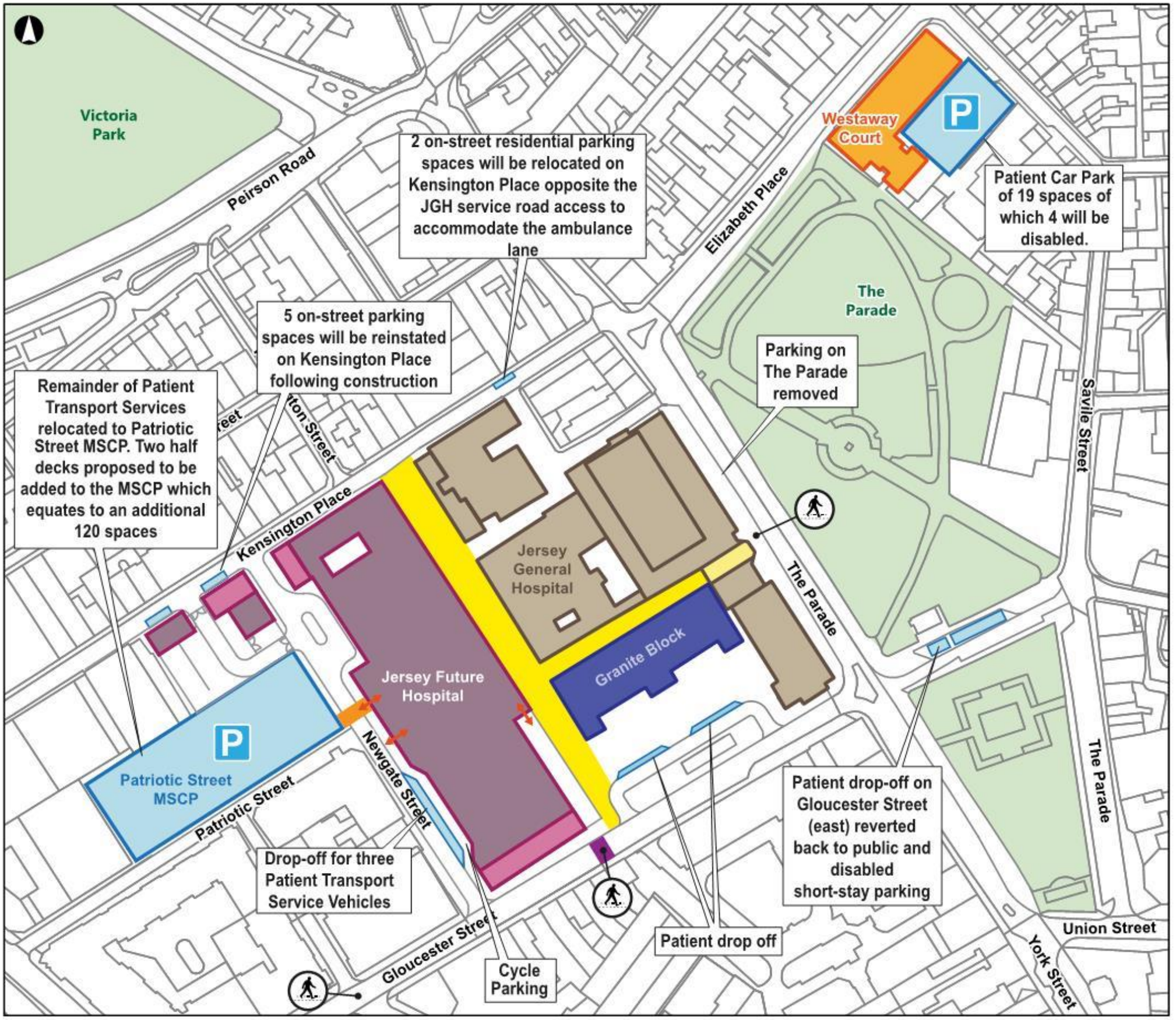
TRANSPORT INFRASTRUCTURE

FINAL STATE



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PARKING STRATEGY

FINAL STATE

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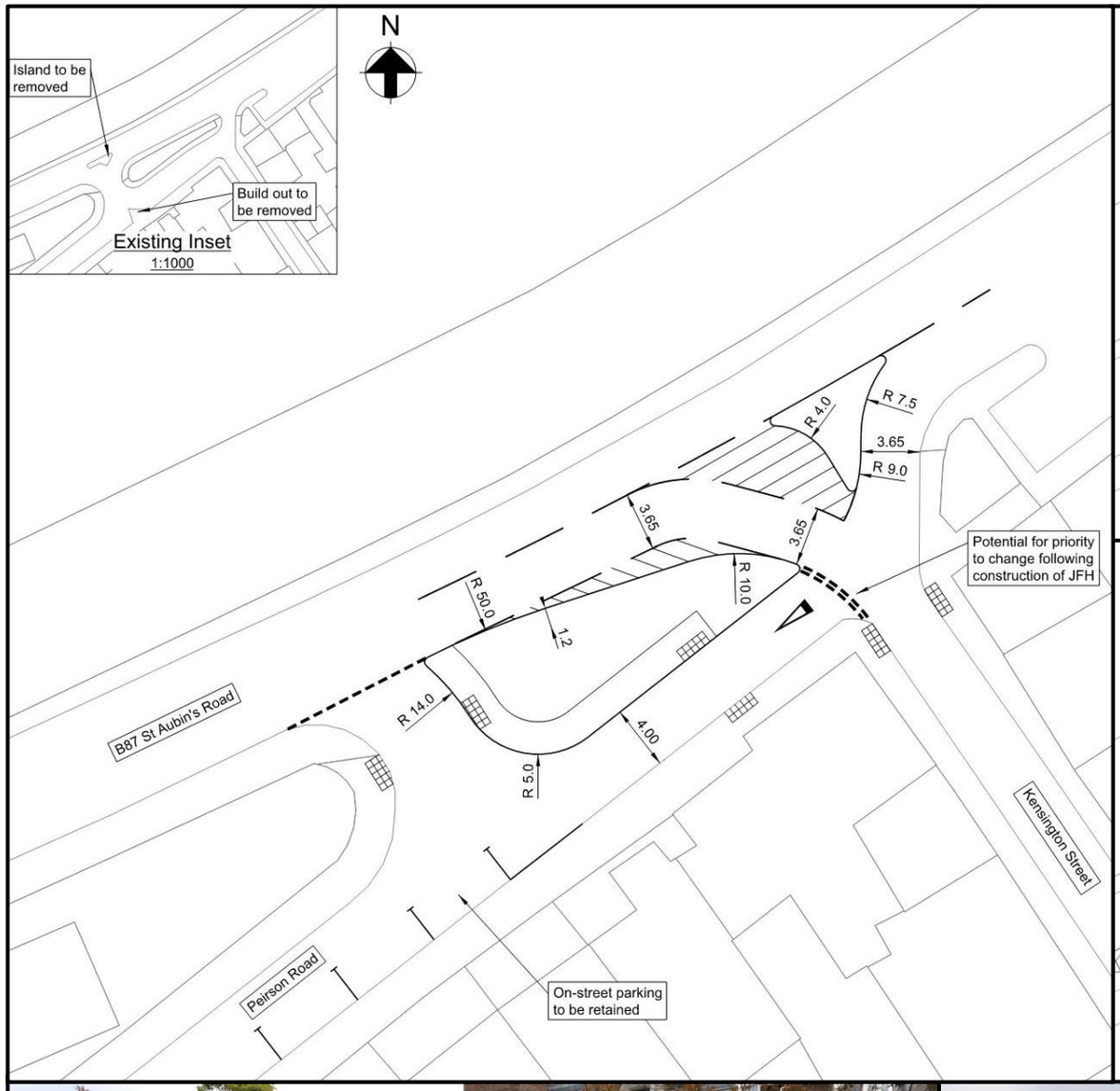
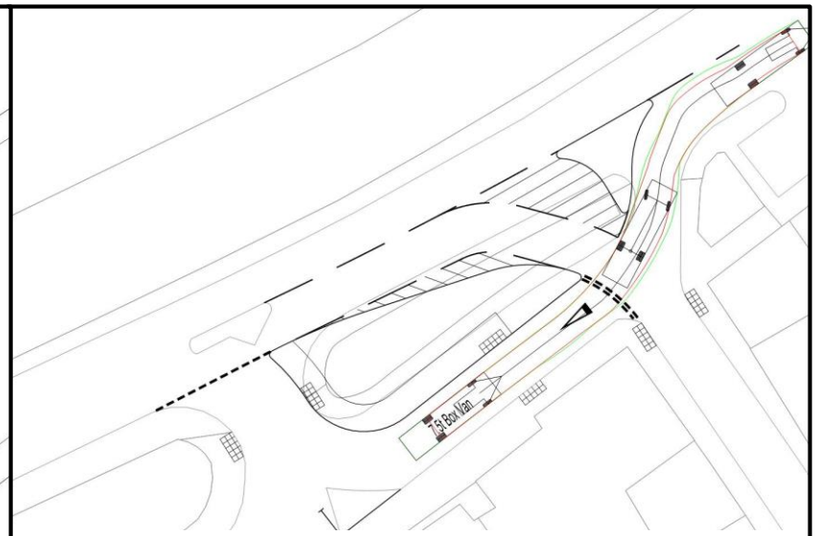
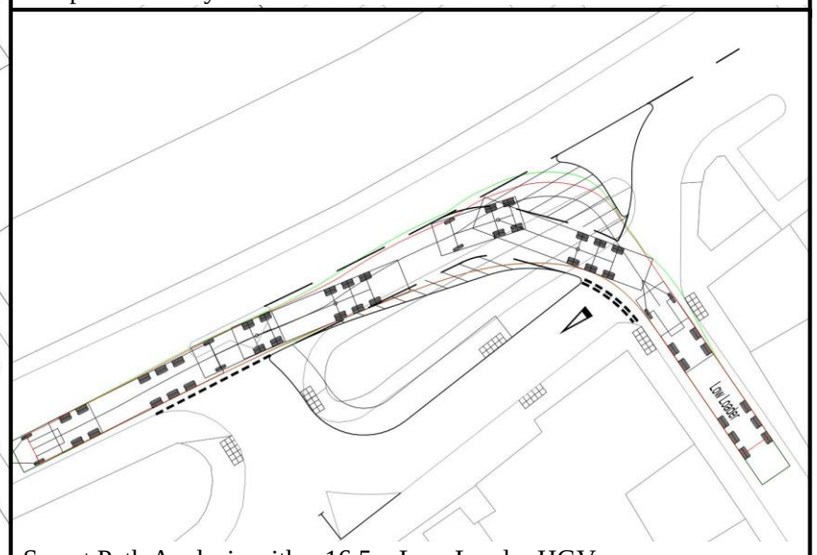
St Aubin's Road/Peirson Road/Kensington Street Improvement Scheme





Swept Path Analysis with a 7.5t Box Van



Swept Path Analysis with a 16.5m Low Loader HGV

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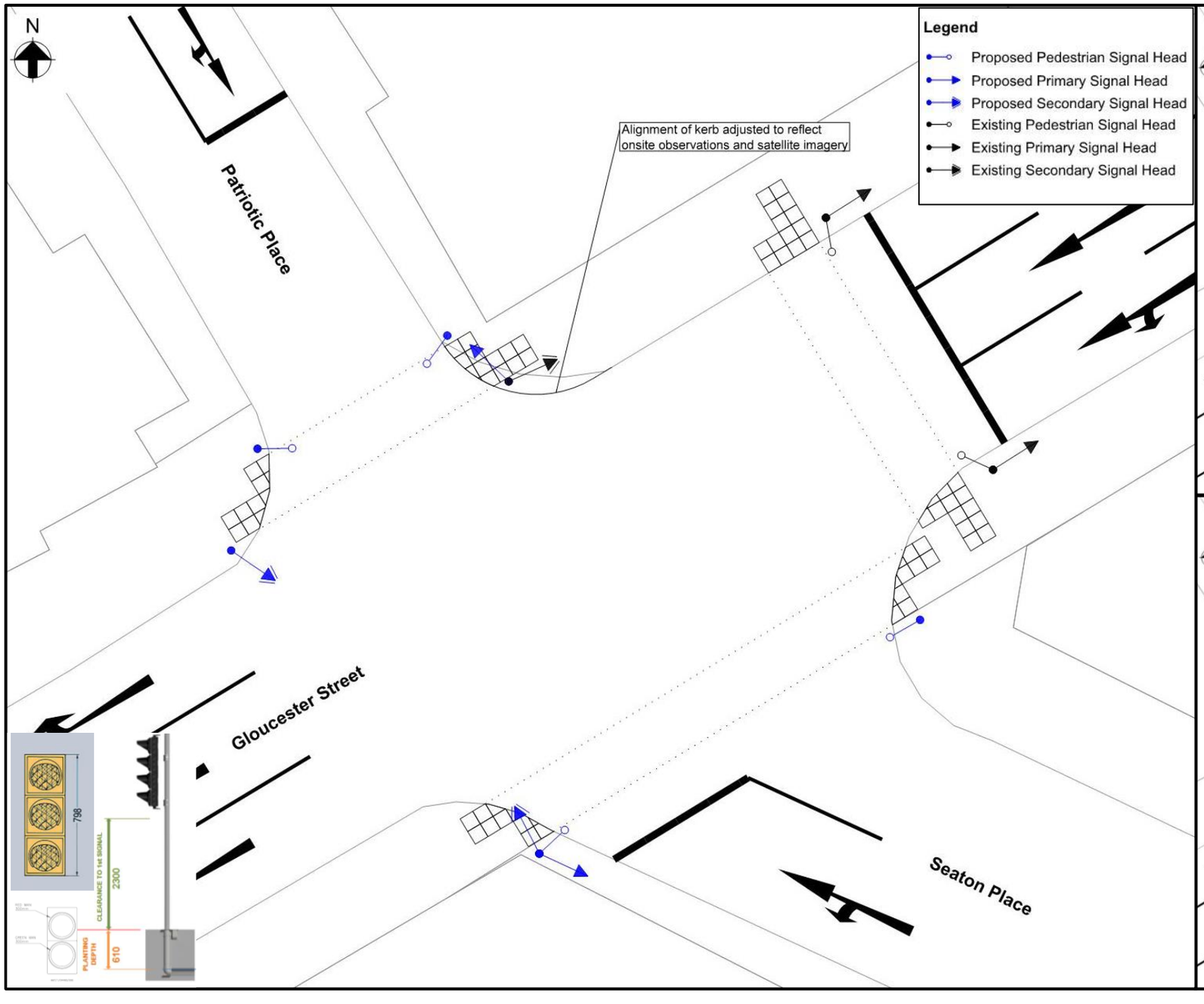
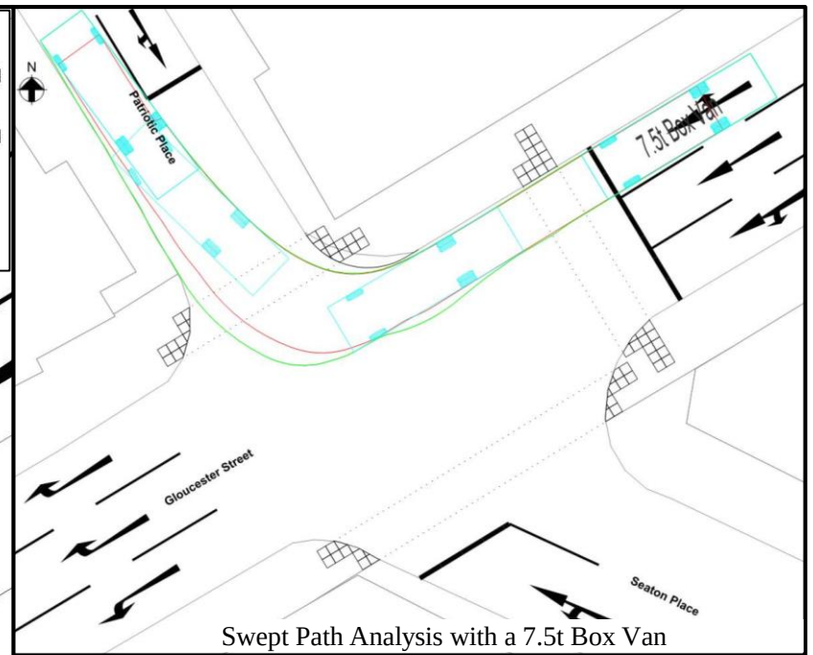
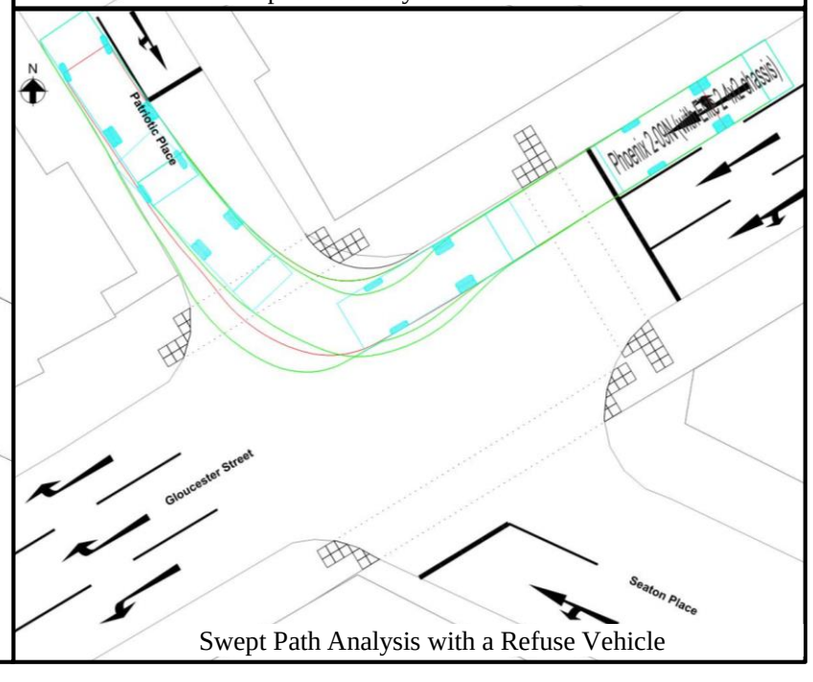
Gloucester Street/Seaton Place/Patriotic Place Temporary Signals





Swept Path Analysis with a 7.5t Box Van



Swept Path Analysis with a Refuse Vehicle

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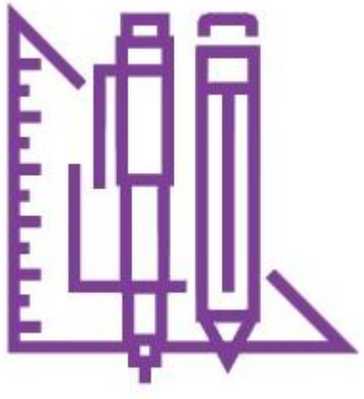
Development timeline

Current Stage

2016	Winter/ Spring 2017	Summer 2017	Autumn 2017	2018	2018	2019	2024
States decision on site selection	Information collected to support planning application including EIA	Outline planning application submitted to establish principle	Planning application determined	Detailed design complete	Submission to Planning of detailed design for approval with reviewed EIA	Start build	Hospital opens



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Get involved

If you can help us to make sure that the environmental impacts of the new hospital are properly considered talk to a member of the team, fill in a comment form or go online at futurehospital.je to give us your observations

Online: www.futurehospital.je/haveyoursay/

Email: futurehospital@gov.je

Facebook: Search for 'Future Hospital Jersey' and 'like' the page

Twitter: Please follow @future_hospital

Phone: Call 447862

You can find out more about the journey on our website: **www.futurehospital.je**