#### **STATES OF JERSEY**



#### OUR HOSPITAL: PREFERRED ACCESS ROUTE

Lodged au Greffe on 14th December 2020 by the Council of Ministers

**STATES GREFFE** 

#### PROPOSITION

#### THE STATES are asked to decide whether they are of opinion -

to approve Westmount Road, as a two-way roadway with areas for active modes of travel, such as walking and cycling, as the preferred primary access option for a new hospital at Overdale.

COUNCIL OF MINISTERS

#### REPORT

#### Introduction

On 17 November 2020, The States Assembly voted in favour of adopting P.123/2020, which identified Overdale as the preferred site for Our Hospital. At the same sitting, the Assembly also adopted two amendments to the Proposition, the second of which was proposed by the Connétable of St. Helier and requested the Council of Ministers, prior to the acquisition of land required for access to Our Hospital, to provide a report for approval by the Assembly on alternative access strategies designed to:

- Maximise sustainable modes of travel
- Minimise the impact on homes, leisure facilities and the surrounding environment

The accompanying report cited that a one-way system should be investigated as a potential tool to achieve this.

In addressing the States Assembly, the Connétable of St. Helier stated that his purpose in bringing the amendment was to ensure that properties required to access the Overdale site "should not be purchased until we are absolutely sure that Westmount Road will not work as a one-way system." He also made clear that there was no intention on his part to delay acquisition of properties for the assembly of land required for the hospital building itself but, "merely to make sure that the access up to Westmount Road is properly looked at."

As required by the amendment to P.123/2020 brought forward by the Connétable of St Helier, Appendix 1: Our Hospital – Framework, Criteria and Access Options provides a technical report undertaken by the Our Hospital Design and Delivery Partner, which includes design and construction professionals from the fields of transport planning, engineering, architecture, town and landscape planning. It presents:

- A broad range of access options, including two and one-way road options and supporting measures
- Criteria that should be considered for identifying preferred access options, following consultation with key stakeholders
- An analysis of the options against the criteria to maximise sustainable transport solutions and minimise impact on homes, leisure facilities and the surrounding environment

In addition, the report in Appendix 1: Our Hospital – Framework, Criteria and Access Options also confirms that:

- A vehicular solution is required to ensure year-round access is always maintained, for any time of day,
- A one-way system as the main means of access is not feasible, including any incorporating Westmount Road; and

• The only primary vehicular access route to Overdale that should be taken forward for further analysis is via Westmount Road, and that this access option was properly explored in the technical analyses in support of P.123/2020

#### Methodology

The Design and Delivery Partner, including Arup has provided expert advice to the project on design, transport, engineering and planning (incorporating environmental considerations) to arrive at a robust options appraisal.

The outcome of this options appraisal has been used to support this Proposition on a preferred primary access option for Our Hospital at Overdale. In order to arrive at a preferred site, an extensive range of roadway options – in total 70 one and two-way permutations - were evaluated. All of the options have been appraised against a set of agreed criteria, which were developed and prioritised following consultation and engagement with:

- Jersey Ambulance Service
- A Panel of Health and Community Services staff established to engage with the Our Hospital Project
- The Our Hospitals Citizens' Panel
- Officers from Infrastructure, Housing and Environment (Operations and Transport and Planning)

These key stakeholders agreed that it was appropriate to categorise the agreed criteria in groups, from those that had the most strategic impacts, to those which had more local impacts. For example, if an access option could not provide assurance of blue light access or if it had an extensive number of potential conflict points for pedestrians and vehicles – which could compromise journey safety and security – then the option was discounted. The study also considered more localised criteria such as the area of tree canopy affected and disruption caused to local users and neighbours.

The full criteria can be found at the Appendix 1: Our Hospital – Framework, Criteria and Access Options.

As a result of this extensive appraisal two-way, primary access via Westmount Road has been shown to be the most feasible option.

Based upon the evidence of the options appraisal, this Proposition asks States Members to approve Westmount Road as the preferred access option for a new hospital at Overdale, on the basis that:

- Extensive and detailed technical analysis has been undertaken objectively by technical experts
- The analysis has considered the specific needs of Jersey and what is appropriate for our Island community

- An extensive range of alternatives have been considered
- Consideration has been given to balancing the differing interests of Islanders directly impacted by the access options, and the strategic benefits to the Island of a new hospital
- Consideration has been given to maximising sustainable transport options
- Consideration has been given to minimising the impact on homes, leisure facilities and the surrounding environment

#### Section 1: Supplementary access options

- 1.1 The Our Hospital Project supports methods of sustainable transport in its design of the new hospital. As part of the options appraisal, the feasibility of a range of sustainable transport options has been considered. These include pedestrian and cycle infrastructure, cable car, funicular railway, cycle lift, and shuttle bus options.
- 1.2 However, it is concluded that all these modes of travel need to be supplementary to a vehicular solution and not a replacement for one owing to the operational requirements of a hospital.
- 1.3 Whilst mass transit solutions such as a cable car system or a funicular railway are very appealing in principle, they are impractical as part of a hospital design: these solutions do not allow patients, particularly those with mobility issues, direct access to the hospital main door in all conditions and at all times. Any such transport provision would need to provide suitable departure and landing stations, that would involve greater impact on St Helier areas below the Overdale site, as well as positions of intermediate support for a cable car. In addition, these types of transit solution are costly to design, involve complex engineering works and have associated costs for regular maintenance once in situ.
- 1.4 Installation of mass transit solutions could not be achieved within the timeframe set out in P.54/2019 and would not be deliverable within the £550m affordability limit agreed with the Design and Delivery Partner. In addition, when these solutions experience technical difficulties, they can be more complex to resolve and leave patients, visitors and staff trapped, whereas, a bus that breaks down can allow passengers to disembark easily and be picked up by a replacement bus.
- 1.5 Sustainable transport interventions will be explored further as part of the travel plan in the next design stage.
- 1.6 The most feasible and financially viable sustainable transport option remains a regular bus service or shuttle bus. Therefore, improvements will be made to the routes and frequency of public transport, including bus services to support patient, staff and visitor access. Consideration has also been given to offering a park and ride service, to reduce both patient, staff and visitor parking requirements, but initial assessments suggest that this would not be a popular option amongst staff and patients. Further work will be undertaken on this suggestion.

- 1.7 The primary access route will be supplemented by designated areas to encourage pedestrian and cycle access, for those who have the physical ability to utilise them.
- 1.8 Additional detail can be found in Appendix 1: Our Hospital Framework, Criteria and Access Options.

#### Section 2: Feasibility of a one-way system

- 2.1 The technical assessments undertaken by the Design and Delivery Partner have evaluated the feasibility of a one-way system as a primary access route for Our Hospital at Overdale.
- 2.2 The most significant observation of these assessments is that a single direction access/egress route limits blue-light efficacy by slowing critical response times if ambulances need to approach from the wrong geographical area. The consideration of patient safety and outcomes would need to be a priority over a preference for a one-way system. This would be true for the inbound or outbound journey. In addition, a one-way system limits the resilience of other blue-light services: if there is an accident or incident that blocks the one-way route, these services may not be able to access the hospital.
- 2.3 The one-way routes considered would have other negative impacts on the wider neighbourhoods in the proximity of Overdale. For example, a one-way access via Queen's Road and St John's Road with egress via Westmount Road would increase traffic on roads used by pupils travelling on foot to Rouge Bouillon, Mont a L'Abbe, D'Auvergne and Haute Vallée schools. Other options would result in significant traffic impacts at First Tower and St Aubin's Inner Road or increase traffic on residential streets which would necessitate a greater number of property acquisitions than the preferred option to facilitate access for service vehicles.
- 2.4 A one-way route is likely to require more numerous improvements to the strategic highway network to manage traffic flows and ensure that appropriate infrastructure is in place to meet the needs of a hospital facility. Such a system would be disruptive, complex and have substantial financial and time implications.
- 2.5 None of the one-way options can be delivered within the programme and have considerable planning risk.
- 2.6 Additional detail can be found in Appendix 1: Our Hospital Framework, Criteria and Access Options.

#### Section 3: The preferred access option

- 3.1 As noted in the Site Evaluation Report which formed Appendix 3 of P.123/2020, the proposed preferred primary access option via Westmount Road can provide appropriate access for a hospital facility and could deliver within the planned project timetable and within the agreed affordability limit.
- 3.2 Given the nature of the Island's topography, every access option presents a different set of challenges. It is not necessarily appropriate to promote the benefits of a

single, preferred solution, rather that the impacts of the preferred access option should be balanced against the impacts of other options. Based upon the evidence that can be found in Appendix 1: Our Hospital – Framework, Criteria and Access Options, it is clear that the impacts of the preferred solution on minimising the impact on homes, leisure facilities and the surrounding environment are lesser than those less feasible ones.

- 3.3 The proposed preferred access option does not compromise blue light access resilience, including in adverse weather conditions, with routes available from three directions.
- 3.4 When compared to other options, the proposed preferred primary access option maximises opportunities for supplementary sustainable transport solutions. The proposed preferred option could feasibly be supplemented by areas to encourage pedestrian and cycle access, whereas other options could not, due to being restricted by the need to acquire further properties, listed places or other geographical features. For example, the escarpment at Tower Road or the narrowing of the road restricted by Mont a L'Abbe and Westmount Cemeteries.
- 3.5 Any access option will have some impact on the homes and users of the immediate area. The proposed preferred primary access option minimises the impact of property acquisition for access purposes to three residential properties. Whilst it is regrettable that any residences are impacted, the proposed primary access option provides a lesser impact than many of the numerous alternative options would have on existing properties. The proposed primary access option would also have a lesser impact on other construction costs. For example, the impact of acquiring the three properties for the preferred access option would have a lesser impact than the option to deliver an access option via the George V Cottage Homes, which would have a greater impact on the number of residences, have more ecological impact on areas such as Le Val Andre, and require more complex engineering requirements. In addition, the option to provide a car park and service elevator for blue light and patient access is considered to be costly and carry the same maintenance and breakdown risks as described above with reference to mass transit options.
- 3.6 The Jersey Bowls Club will need to be relocated. However, whilst fully recognising the attachment that the Jersey Bowling Club has for its current grounds and the disruption and inconvenience it will experience, the Club would not need to vacate their current site until September 2021, following the 2021 summer season. The Club is being consulted and alternative sites are being explored.
- 3.7 The Overdale site needs to be accessed by heavy goods traffic in order to enable construction of Our Hospital. The proposed preferred access option would allow construction traffic to access the Overdale site and minimise disruption to other traffic flows and road users. For example, heavy goods vehicles routing from St. Helier's harbours through Cheapside, then Rouge Bouillon, Queen's Road and St. John's Road would result in significantly more traffic disruption and environmental impact than vehicles travelling from the port via Westmount Road. In addition, heavy goods vehicles routing through the Queen's Road option would need to negotiate challenging pinch points and turns for heavy and long vehicles. It is not considered viable that States of Jersey or Honorary Police escorts could be semi-permanently posted at these positions to safeguard the safety of pedestrians, cyclists and other road users, including for this particular route, school children.

- 3.8 Whilst the preferred route will be able to accommodate construction traffic, its overall width would be fixed by operational traffic, including two-way buses and an active travel corridor.
- 3.9 Additional detail about the impacts of the proposed preferred access option compared to other options can be found in Appendix 1: Our Hospital Framework, Criteria and Access Options.

#### 4 Section 4: Risk of delay

#### Land assembly

- 4.1 In October 2020, the project team engaged with landowners at Overdale about the potential sale of their properties, as requested by the Council of Ministers. The objective of this engagement was to reach negotiated agreements with landowners to avoid the use of compulsory purchase powers where possible and enable the land to be assembled for a new hospital without delay should P.123/2020 be adopted by the Assembly.
- 4.2 Further to discussions with landowners, it should be noted that all of the residents of the houses immediately affected by the proposed alterations to Westmount Road were willing sellers at the time of adoption of P.123/2020. Some had made arrangements to complete on purchases of new homes. However, the adoption of the Connétable of St. Helier's amendment has meant that house sales have been blocked.
- 4.3 The delay has caused great uncertainty for some residents and put the purchase of their future homes at risk, the stress of which may have a negative effect on their wellbeing. An extended delay will create additional risk to the land assembly programme. This is because it will undermine the relationships that have been established and the negotiations that have taken place with those Westmount residents affected by the preferred access option, who have to this point engaged with the proposals in a positive manner with great understanding of the benefit to Jersey of a new hospital at Overdale.
- 4.4 The interests of any resident who does not wish to sell needs to be balanced against those who do.
- 4.5 Appendix 1 to this Report clearly demonstrates that every primary access route impacts its surrounding area and those Islanders resident nearby. Just as there was no ideal site for Our Hospital, there will be no ideal access route. However, a primary access route via Westmount Road is the option that minimises the immediate impact on homes whilst delivering the reliable access necessary for a new hospital.

#### A new public debate

4.6 Over the years, there has been significant public debate over the site of a new hospital. We are now in a position that the Assembly has supported a preferred site that has a ground swell of support from Islanders. The vocal detractors are in the

minority. It is important that we do not create a new debate about access that could ultimately undermine the delivery of Our Hospital at Overdale and this Proposition provides an opportunity to mitigate this risk.

4.7 Members are asked to note that the Connétable of St. Helier asked for the access route to be 'properly looked at' and did not want to cause unnecessary delay the delivery of the project. This Report and the technical evidence in Appendix 1 demonstrate that this has been done and done thoroughly.

#### Cost of delay

- 4.8 Section 2 of P.123/2020 set out the risks involved with failing to meet the planned timetable for delivery of Our Hospital. There is a 'tipping point' of 2026 where the cost of maintaining the current hospital estate increases sharply. At the same time the threat to service continuity, patient safety and patient experience also increases significantly.
- 4.9 It should also be noted by Members that this project follows a critical path a series and sequence of activities that must be followed in order to deliver on time. A failure to resolve the preferred access option restricts the project's ability to assemble land, progress design, and will delay a planning application for adjustments to access routes. The current programme is for the start on site to begin in earnest once access works have been approved and completed. Any delay means that the project's critical path is likely to be compromised, with associated rising cost implications.
- 4.10 The cost of delay to the project is significant. Should we be unable to resolve the access issue in a timely manner, there is a risk that we would lose the experience and expertise of our Design and Delivery Partner, RokFCC. This would further damage Jersey's reputation in the hospital construction market, which has been negatively impacted due to previous false starts for the project. In this scenario it is possible that the Island would not be able to secure another suitably experienced Design and Delivery Partner without having to repeat a lengthy and expensive procurement process and risk being severely compromised in the commercial negotiations.
- 4.11 The combination of the above factors should they materialise, plus others such as the impact of inflation, would inevitably lead to an increase in the cost of the programme. Whilst appropriate contingency has been built into the cost estimate, calls on it should be minimised where possible to ensure that the finances of the scheme are not adversely impacted.

#### Section 5: Next Steps

5.1 Adopting this Proposition will provide the Our Hospital project assurance that the States Assembly has supported and agreed a preferred access route. It will enable the project to progress detailed design work, not only for the highway works, but for the hospital facility itself, all of which will be dependent on how the site is accessed. Once completed this will also give the Assembly more cost certainty by providing detailed information for the Outline Business Case, that will be brought to the Assembly before summer 2021.

5.2 Should the Assembly adopt this Proposition the next steps will be:

- Continue to engage with Overdale residents, Island clinicians and health professionals, States Members and all Island stakeholders.
- To assemble the land needed to deliver a new hospital at Overdale:
  - Complete purchases with willing sellers
  - Continue to negotiate with other landowners through an extensive engagement and communications plan, which includes further virtual exhibitions, virtual meetings and the formation of community liaison groups
  - Assemble the required land by using compulsory purchase powers, if necessary although this will never be the preferred option
- Proceed with concept and detailed design and subsequently submit a planning application for highway alterations
- Proceed with concept design of the new hospital

#### Section 6: Financial and manpower implications

#### Financial and manpower implications related to access works

- 6.1 It is important to stress that the fees payable to the Design and Delivery Partner and the capital works to deliver the preferred primary access option to Overdale are included within the £550m affordability limit agreed with the Design and Delivery Partner. The specific costs to deliver the off-site highways and junction upgrades is estimated to be £15.1m. Further detail of the affordability limit is outlined in section 6.5 onwards.
- 6.2 The costs to acquire the sites for access works are included in the other site-specific costs outlined on page 11 of P.123/2020 Our Hospital Site Selection: Overdale.
- 6.3 Any delay would result in additional cost to the project, as described above in paragraph 4.11.
- 6.4 There are no additional manpower implications of the preferred access route, apart from the necessary detailed design work that has already been anticipated.

#### Summary of overall project financial and manpower implications

6.5 The detail of the affordability limit for the capital build element of the project is shown in the Table 1 below:

| Design and Delivery Partner (DDP) Costs                       | £m    |
|---|-------|
|   |       |
| Construction of the Hospital                                  | 412.2 |
| Furniture Fixtures & Equipment plus Decant Fees               | 55.3  |
| Delivery Partner Contingency                                  | 14.7  |
| Site-specific Costs, including specific highway works (£15.1) | 38.7  |
| Pre-Construction Services Agreement                           | 29.2  |
| Total Costs – Delivery Partner                                | 550.0 |

#### Table 1

- 6.6 Other site-specific and non-site-specific costs are estimated to be £254.5m, of which by far the largest element is Optimism Bias and Client Contingency. This is broken down in detail on page 11 of P.123/2020 Our Hospital Site Selection: Overdale.
- 6.7 Optimism Bias is a financial allocation that mitigates the tendency to be overly optimistic when pricing capital projects, especially at the earlier stages of the Business Case process. Optimism Bias is an accepted psychological principle and it is recognised HM Treasury best practice to include a detailed Optimism Bias calculation as part of business case development. In line with best practice, it is the Government's intention to review this assessment at each stage during the project lifecycle, which will increase cost certainty at each stage, and decrease Optimism Bias.
- 6.8 The recommended range for a project at this stage Strategic Outline Business Case stage could be as high as 20-24%. However, the extensive work undertaken to date on the Overdale site option has meant that we have been able to reduce this to 18.4%. In addition, the Future Hospital Review Panel's external advisors have agreed that an appropriate Optimism Bias level has been included at this stage.
- 6.9 As noted above, allocations in the business case for Optimism Bias will reduce over time as greater cost certainty is achieved. However, this does not necessarily mean the total cost of the scheme will reduce. As the project progresses, Optimism Bias may be re-allocated into other cost categories as each category reaches a greater degree of cost certainty.
- 6.10 The other large element of the £254.5m site-specific and non-site-specific costs is general Client Contingency. All clients require suitable levels of contingency to manage unexpected cost pressures or changes in client brief during the life of the project. It is best practice to account for a suitable level of contingency to cover client allocated risks.
- 6.11 In a similar way to Optimism Bias, Client Contingency may or may not materialise. The level of Client Contingency has been benchmarked and has been confirmed as appropriate. The Future Hospital Review Panel's external advisors also agreed that an appropriate Client Contingency has been included at this stage.

Government of Jersey

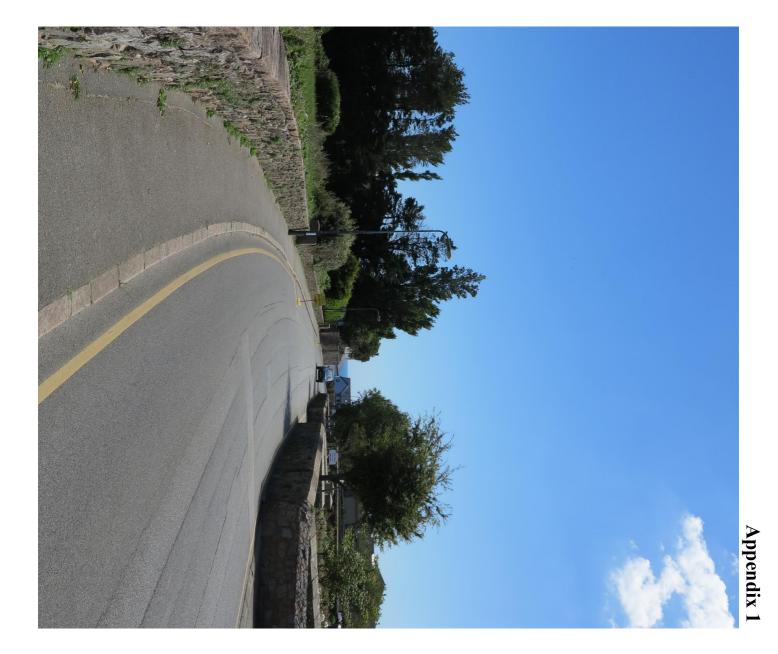
# Our Hospital Project

Access Options Appraisal

277346 December 2020



H Our Hospital





## **Executive Summary**

### Introduction

Overdale was confirmed as the preferred site for Our Hospital Project (OHP) by the States Assembly on 17<sup>th</sup> November 2020. Several amendments were made to the proposition for the Overdale site, including the following:

(a) To request the Council of Ministers, prior to its acquisition of land or properties required to facilitate access to the preferred site for Jersey's new hospital, to present to the States Assembly for a report on alternative access strategies designed to maximize sustainable modes of travel to and from the new hospital, and to minimize the impact on homes, leisure facilities and the surrounding environment of the access interventions currently proposed.

This report has been prepared in response to the above amendment to the proposition and includes an appraisal of the following:

- Access options that provide the principal access route to and from the OHP site for pedestrians, cycles and motor vehicles, the cross-section assumptions for which have been defined by the permanent uses; and
- Supporting measures that do not facilitate all the access requirements for OHP but that have the potential to contribute positively towards the sustainable transport objectives of the scheme.

The report has been prepared following engagement with key stakeholders including the Citizens' and Health Workers' Panels, Ambulance Service and Infrastructure, Housing and Environment (IHE) (Operations and Transport, Public Transport and Planning). All stakeholders have been given the opportunity to comment on the criteria, access options and supporting measures presented in this report.

## **Assessment Criteria**

The appraisal is based on 38 criteria, all of which have been ranked from 1-4, using the following definitions:

- **Rank 1:** any non-compliance has significant Planning or operational risk, or is not deemed to be deliverable;
- Rank 2: multiple criteria with non-compliance should result in an option being discounted;
- Rank 3: Several criteria with non-compliance should result in an option being discounted; and
- Rank 4: compliance is beneficial but not required.

The criteria cover a wide range of topics including cost, programme, town planning risk, operational risk, necessary confidence of uninterrupted access, safety of patients and neighbours, accessibility by all travel modes and highway network capacity.

## Access Option Appraisa

The comprehensive appraisal of 71 highway access options indicates that the majority should not be taken forward for further investigation as they are not deliverable within the programme (access works completed by March 2022) or affordable within the contract limit. One-way access options that utilise Tower Road, Queen's Road, and St John's Road are also not being taken forward to further investigation owing to the increase in traffic on residential streets, increasing risk to neighbours, including schools and disruption. The extent of traffic mitigation likely to be required at junctions, that could involve property acquisitions or suboptimal design, were also factors considered.

Access Option 7 is the only option that has not been discounted. This is the option identified in the Site Evaluation Report and includes works to Westmount Road to improve the horizontal and vertical alignment of the street. Whilst this access option does require the acquisition of three properties and the bowling green, it can be delivered within programme and is affordable within the contract limit. There is also deemed to be less Planning risk associated with this scheme, in comparison to access options from King George V Cottage Homes and the A1 St Aubin's Road owing to visual and environmental impacts.

# **Supporting Measure Appraisal**

Supporting measures have been considered which improve accessibility for a single mode of travel or contribute towards a reduction in the proportion of trips made by car. Unlike the access options, they cannot provide all access requirements for the hospital. Supporting measures include parking strategies, mass transit and other sustainable travel interventions.

Whilst most of these supporting measures will be explored further in the subsequent design stages, it is recommended that some are discounted at this stage, including the following:

- The parking strategies that involve Park & Ride that have been put forward in this assessment given these solutions would not be feasible during the current pandemic. Therefore, there is potential that these solutions may not be suitable in the future. Variations of these that may involve existing car aprks will be further explored as part of the evolving bus strategy; and
- Mass transit solutions such as cables cars and funicular railways as they have substantial construction and operational costs and land take for base stations, whilst also being unlikely to be warranted given the number of hospital workers and users likely or able to use these methods of transport.

## **Summary and Conclusions**

All potential access options have been investigated and it is concluded that Option 7 is the most appropriate option with regards to Planning and operational risk and deliverability. The recommended access option and a combination of supporting measures can meet the objectives of the project to deliver a new hospital for Jersey, maximise sustainable modes of travel and minimise the impact on homes, leisure facilities and the surrounding environment.

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## Introduction

## 1.1 Background

Overdale was confirmed as the preferred site for Our Hospital Project (OHP) by the States Assembly on 17<sup>th</sup> November 2020. Several amendments were made to propositions for the Overdale site, including the following:

(b) To request the Council of Ministers, prior to its acquisition of land or properties required to facilitate access to the preferred site for Jersey's new hospital, to present to the States Assembly for a report on alternative access strategies designed to maximize sustainable modes of travel to and from the new hospital, and to minimize the impact on homes, leisure facilities and the surrounding environment of the access interventions currently proposed.

This report has been prepared in response to the above amendment to the proposition and presents a comprehensive appraisal of numerous access options. This follows an initial appraisal of four options with associated sub-options undertaken as part of the site selection process, as presented in the Site Evaluation Report (October 2020).

This report includes an appraisal of access options, including the following:

- New access roads;
- Works to enhance the horizontal and vertical alignment of existing roads;
- Existing roads;
- Combination of existing and proposed one-way streets; and
- Supporting measures that could contribute towards a reduction in the proportion of vehicle trips generated by the site by offering viable and attractive alternative routes for other forms of travel.

Given OHP is anticipated to be one of the largest employers in Jersey, it is essential that any access strategy includes infrastructure that enables journeys to be made by sustainable modes of travel. As detailed further in this report, all access roads therefore include an allowance for active modes of travel, including footways and cycleways. In addition, the roads will be designed to accommodate buses passing in opposite directions, alongside other operational vehicles associated with the hospital including ambulances and service vehicles.

This appraisal of access options for OHP has been undertaken using 38 criteria that have been developed through consultation with key stakeholders, including Ambulance Service. IHE (Orations and Transport, Public Transport and Planning) and the Citizens' and Heath Workers' Panel. The wider project team has contributed into this study, including ROKFCC, Arup, Gleeds, Llewelyn Davies, LDA, Temple and Urban Council. The findings of this appraisal are summarised in this report alongside recommendations.

1.2 Overdale Site

The Overdale Site lies either side of Westmount Road in the Parish of St Helier. It is set at the western extent of St Helier Built-Up Area boundary, as shown in Figure 1 below.



## **Figure 1: Overdale Site Location**

The site is currently accessed from Westmount Road with routes north to Tower Road and southeast to St Aubin's Road. As noted in the Site Evaluation Report, the existing highways serving the site are not deemed to be appropriate in their current form with regards to horizontal and vertical alignment to facilitate all access requirements for a new general hospital. Given the existing transport network does not facilitate access to Overdale by all sustainable modes of transport, works are required for the proposed development to comply with Policy GD 1 (5) of the Revised 2011 Island Plan (2014). Specifically, the policy states a development will not be permitted unless it contributes, where appropriate, to reducing dependence on the car in accordance with Policy SP 6:

- is accessible by pedestrians, cyclists and public transport users, including those with mobility impairments;
- will not lead to unacceptable problems of traffic generation, safety or parking;
- provides a satisfactory means of access, manoeuvring space within the site and adequate space for parking; and
- developments to which the public has access must include adequate arrangements for safe and convenient access for all and in particular should meet the needs of those with mobility difficulties.



An initial appraisal of various access options was therefore undertaken to inform the Site Evaluation Report, including various alignments from King George V Cottage Homes, A1 St Aubin's Road, Westmount Road and Tower Road. the Site Evaluation Report concluded that all access options for King George V Cottage Homes and the A1 St Aubin's Road could not be delivered within the programme or cost plan, and routes to the north via Tower Road would result in substantial traffic impacts on residential streets and have further impacts on the wider transport network.

# **1.3** Stakeholder Engagement

To inform this appraisal of alternative access options, the project team has consulted with numerous stakeholders, including the following:

- Ambulance Service;
- IHE Operations and Transport, Transport Planning, Highways and Infrastructure Maintenance and Public Transport; and
- IHE Planning.

The above stakeholders have been given the opportunity to comment on the methodology of the report with regards to the criteria, access options and supporting measures. In addition to the above, both the Citizens' and Health Workers' Panel have been consulted on the criteria, access options and supporting measures.

As a result of the stakeholder engagement described above, several additional criteria have been added and access options have been reviewed.

1.4 Report Structure

The remainder of this report has been structured as follows:

- Chapter 2 presents the criteria;
- Chapter 3 sets out the indicative design assumptions for the various options;
- Chapter 4 presents the findings of the appraisal of the access options;
- Chapter 5 summarises the appraisal of Supporting measures options; and
- Chapter 6 summarises the findings of this report.



# 2 Assessment Criteria

## 2.1 Introduction

This section presents the assessment criteria used to inform the appraisal of all access options and supporting measures. The assessment criteria have been developed following consultation with the wider project team and includes a consideration of a wide range of issues from planning risk items such as landscape and ecology to transport items such as congestion and sustainable travel.

As noted in Section 1.3, the criteria presented in this report were also developed in consultation with various stakeholders. Several criteria were added to the assessment, such as identifying whether active travel routes would have a gradient of less than 1:12. Other criteria have been amended to remove potential ambiguity such as impacts on habitat being phrased as 'area of habitat lost' following comments from IHE Planning.

Other suggestions have not been included within this appraisal but have been noted and will be given full consideration in the subsequent design stages. For example, stakeholders noted that access options should be appraised in the context of irregular weather conditions such as snow. Whilst providing 24/7 access to the hospital in all weather conditions is critical, this will be applicable to all access options and therefore does not provide a basis upon which various options can be compared. A strategy will however need to be identified for the chosen access route to ensure access can always be maintained in infrequent but disruptive adverse weather conditions such as snow and ice.

# 2.2 Ranking of Criteria

As presented in the following section, there are 38 criteria upon which each access option will be assessed. The criteria have therefore been ranked to identify those criteria deemed most critical when reviewing options, and those categorised as preferable or beneficial. Table 1 below sets outs the definitions of the proposed rankings.

## Table 1: Assessment Criteria Ranking

| Rank | Rank Definition   |
|------|---|
| 1    | Any non-compliance has significant Planning or operational risk, or is not deemed to be deliverable |
| 2    | Multiple criteria with non-compliance should result in an option being discounted                   |
| 3    | Several criteria with non-compliance should result in an option being discounted                    |
| 4    | Compliance is beneficial but not required   |

The appraisal of access options and supporting measures in the subsequent chapters is based upon a review of all criteria. However, given that there are 38 criteria in total, only those categorised as Rank 1 are shown in this report. The full appraisal with all criteria can be found in Appendix A (access options) and Appendix B (supporting measures).



## 2.3 Proposed Criteria

The agreed criteria for access appraisal is set out in Table 2 below. These criteria have been used to assess all access options and supporting measures. As detailed in the appraisals, not all criteria may however be applicable to all supporting measures.

## Table 2: Criteria for Access Appraisal

| Priority | Criteria   | Unit of                |
|----------|--|------------------------|
| -        | Programme complete by March 2022   | Yes or no              |
| 1        | Number of conflict points/interfaces for pedestrians and vehicle (journey safety and security) | Number                 |
| 1        | Blue light resilience guaranteed   | Yes or no              |
| 1        | Is there journey time certainty for staff and patients (24 hrs day, 7 days a week)             | Yes or no              |
| 1        | Number of schools affected (Impact on journey to school safety)                                | Number                 |
| 1        | Daily predicted impact from in-use carbon (sustainability)                                     | kgCO2e/m2              |
| 1        | Number of houses/apartments displaced  | Number                 |
| 1        | Impact on Overdale Masterplan for the new hospital   | Yes or no              |
| 1        | Is the option attractive to OHP staff  | Yes or no              |
| 1        | Is the option affordable within the contract limit   | Yes or no              |
| 1        | Ongoing Maintenance Costs (Annual)   | £APPROX                |
| 1        | Ongoing Operating Cost (Annual)  | £APPROX                |
| 2        | Is the option resilient to adverse weather and high seas                                       | Yes or no              |
| 2        | Area of tree canopy lost   | m <sup>2</sup>         |
| 2        | Number of Listed Buildings and Places impacted   | Number                 |
| 2        | Potential visual impact  | Low, medium<br>of high |
| 2        | Does it perform against the policies of the current Island Plan (Planning Risk)                | Yes or no              |
| 2        | What is the percentage of users that would use this option                                     | %                      |
| 2        | Robustness to uncertainty such as pandemic   | Yes or no              |
| 2        | Number of residences impacted - this is estates not just fronting houses                       | Number                 |
| 3        | Number of junctions impacted/created by this option  | Number                 |
| ω        | Does this option create a conflict between junctions   | Yes or no              |
| 3        | Is the gradient more than 1:10 (motor vehicles)  | Yes or no              |
| 3        | Is the road able to accommodate a 12m rigid truck (Operation)                                  | Yes or no              |
| 3        | Is the road able to accommodate 16.5m heavy goods vehicle (Construction)                       | Yes or no              |
| 3        | Is the gradient more than 1:10 (active travel)   | Yes or no              |
| 3        | Is the gradient more than 1:12 (active travel)   | Yes or no              |
| ω        | Total overall Property Take in m <sup>2</sup>  | m <sup>2</sup>         |
| ω        | Area of habitat lost   | m <sup>2</sup>         |
| ω        | Number of existing traffic hot spots worsened or created                                       | Number                 |

| Priority | Criteria   | Unit of<br>measurement |
|----------|--|------------------------|
| 3        | Number of leisure facilities affected by increase in traffic movements | Number                 |
| 3        | Short journey direct shuttle bus options available                     | Yes or no              |
| 3        | Are you able to cycle along the desire line                            | Yes or no              |
| 3        | Does it use tried and tested on island technology                      | Yes or no              |
| 4        | Vibration of existing receptors - no of receptors within 50m           | Number                 |
| 4        | Noise in existing receptors - no of receptors within 50m               | Number                 |
| 4        | Air Quality for existing receptors - no of receptors within 200m       | Number                 |
| 4        | Benefits provided beyond facilitating access to OHP                    | Number                 |

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# 2.4 Assumptions and Definitions

The section outlines the assumptions made by the project team in appraising the various access options.

## **Blue light resilience guaranteed**

Resilience is guaranteed if the access option provides two appropriate entry and egress routes from the hospital.

# Journey time certainty for staff and patients

For this criterion, it has been assumed that traffic impacts associated with OHP could be mitigated. Journey time certainty is therefore assumed to be achieved if there are multiple routes to and from the hospital, for all modes of transport.

## Is the option attractive to OHP staff

Option is attractive if it allows staff to choose how they would like to travel to work i.e. it accommodates access by all modes of transport.

# Is the option resilient to adverse weather and high seas

Criteria assessed against the Shoreline Management Plan (SMP) for Jersey. The supporting measure is considered to be resilient if the SMP considered that the supporting measure was not shown to be at risk of flooding during the 1 in 200-year tidal event including 100 years for climate change, the 1 in 200-year tidal overtopping event including 20 years for climate change and a 1 in 100-year fluvial/pluvial storm event return period 2-hour duration including 40% allowance for climate change and a continuing loss rate of 6.5mm/hr.

## Area of tree canopy lost

For the purposes of this assessment, any trees overhanging an existing highway would need to be removed should works to the highway be required.

Construction works adjacent to existing trees is required to follow the guidelines set out in the British Standard: BS 5837:2012. Any changes to existing highways, even if the route is not widened, is required to follow this standard. The areas of tree canopy impacted by the proposed highways and changes to existing highways is a worst-case scenario. Every effort will be made to retain as many of the trees immediately adjacent to existing highways as possible.

## Potential visual impact

Potential visual impact has been assessed based on the following assumptions:

- Low option that uses existing highways.
- Medium option of a new highway route or re-alignment of existing route that will require a change to existing terrain and addition of retaining walls and embankments.
- **High** Option that will build a new significant structure above the ground, for example cable car, funicular railway and lift.

# Does it perform against the policies of the current Island Plan?

Consideration of key policies including the following:

- GD1 General Development considerations
- GD5 Skyline, Views and Vistas
- SP 1 Spatial Strategy
- SP4 Protecting the historical environmen
- SP6 Reducing dependence on the car (but this is a bit of a hostage to fortune)
- TT1 Protection of the Island's footpath and cycle network
- TT2 Footpath provision and enhancement and walking routes
- TT8 Access to public transport
- GD 5 Skyline, views and vistas
- NE 7 Green Zone
- BE 3 Green Backdrop Zone
- BE 4 Shoreline Zone
- ERE 1 Safeguarding agricultural land
- H11 Loss of housing units
- SCO 4 Protection and enhancement of open space
- HE 1 Protecting listed buildings and places
- NE 1 Conservation and enhancement of biological diversity

It should be noted that none of the proposed options, which include land outside of the highway or highway mitigation, wholly comply with the Island Plan.

All options require some mitigation and the degree to which they could otherwise be said to cause harm to policies of importance, varies. Nevertheless, some options offer greater opportunities for enhancement and delivering policy objectives that others, when considered in relation to the Plan as a whole.

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# **3** Potential Access Options

## 3.1 Introduction

This section presents the various access options that have been considered in this appraisal, alongside the design assumptions that have been made.

Given the level of detail available at this very early stage and the substantial number of access options being reviewed, it is not possible to prepare detailed designs for each option and to do so would not be resource efficient. The appraisal of the various access options has therefore been informed by several design assumptions, including the indicative cross-sections presented in Section 3.2, with these based on typical industry values and guidance considered in the Jersey context.

Following agreement on the access routing for OHP, should there be a requirement to construct new roads or do works to existing streets, these cross-sections will be revisited to reflect site specific constraints and findings from engagement with key stakeholders such as IHE Operations and Transport.

## 3.2 Cross-Sections

For the purposes of this access appraisal, the following indicative corridor widths have been assumed:

- Two-way streets: 12m
- One-way streets: 10m

As illustrated in the figures below, these indicative corridor widths include the following provision:

- A carriageway for motor vehicles including buses and emergency and service vehicles;
- An active travel route for pedestrians and cyclists; and
- Verge, required for retaining structures, safety barriers and provide sufficient forward visibility. These are deemed to be required given the existing topography near Overdale.

The potential access options appraised in this report therefore include provision for sustainable modes of transport including walking, cycling and bus, not just the provision of access for cars and service vehicles. The vehicles to be used temporarily during construction have been assessed and they are not increasing the cross section defined by the permanent uses.

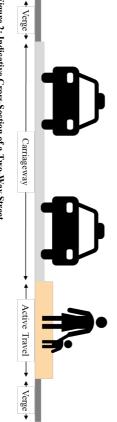


Figure 2: Indicative Cross-Section of a Two-Way Street

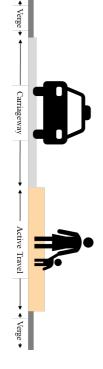


Figure 3: Indicative Cross-Section of a One-Way Street

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A total of 71 access options have been appraised as part of this study, all of which can be found illustrated in the figures attached to this report.

There are 16 two-way access options (Options 1-16) as shown in Table 3, including options which include a mix of the existing network, enhanced links and new streets to facilitate access to OHP. These options propose the same point of access and egress for the majority of journeys to and from the hospital. This includes various highway alignments from the following locations/roads:

- King George V Cottage Homes;
- A1 St Aubin's Road;
- Westmount Road; and
- Old St John's Road.

In addition to the two-way access options, there are 55 one-way access options that have been appraised (Options 17-71). These access options propose alternative entry and egress routes to and from the OHP site for motor vehicles, whilst it is assumed pedestrians and cycle would use the same points for access and egress. These access options include a mix of new access roads from King George V Cottage Homes and the A1 St Aubin's Road and existing streets such as Westmount Road, Tower Road and St John's Road.



# 4 Access Option Appraisal

## 4.1 Introduction

This section presents an appraisal of all options that can meet the entire access requirement for the hospital. An appraisal of the supporting measures is detailed in the following chapter.

This chapter includes an appraisal of the following:

- New access roads via King George V Cottage Home, St Aubin's Road, and Old St Johns Road;
- Works to enhance the horizontal and vertical alignment of existing roads such as Westmount Road;
- Existing roads such as Tower Road and St Johns Road; and
- Combination of existing and new one-way routes.

As detailed in the previous chapter, it has been assumed that any new access road includes provision for pedestrians, cycles and motor vehicles.

# 4.2 Two-Way Access Options

This section presents an appraisal of the two-way access options that involve physical highway works including realignment works. A description of the options reviewed are set out in Table 3 below.

# **Table 3: Description of Two-Way Access Options**

| Option Ref | Description  |
|------------|--|
| Option 1   | New access road via King George V Cottage Homes  |
| Option 2   | New access road via King George V Cottage Homes with reduced gradient  |
| Option 3   | New access road via King George V Cottage Homes with reduced gradient  |
| Option 4   | New access road from the A1 St Aubin's Road  |
| Option 5   | New access road with realignment of the A1 St Aubin's Road   |
| Option 6   | Westmount Road existing arrangement  |
| Option 7   | Realignment of Westmount Road via Bowls Clubs  |
| Option 8   | Realignment of Westmount Road south of Westmount Court   |
| Option 9   | Realignment of Westmount Road to the east of the Bowls Club  |
| Option 10  | New access road between the A1 St Aubin's road and Westmount Road  |
| Option 11  | New access road from Old St John's Road via southern field   |
| Option 12  | New access road from Old St John's Road via northern field   |
| Option 13  | New access road between Queen's Road and St John's Road  |
| Option 14  | New access road from King George V Cottage Homes with car parking at lower level to hospital and connecting elevators  |
| Option 15  | Realignment of Westmount Road via Bowls Clubs with footway/cycleway elevated above the carriageway   |
| Option 16  | Access via Westmount (North) and St John's Road and Queen's Road beyond. Westmount Road (South) is stopped up as a no through route to prevent access to the hospital. |

A detailed appraisal of the above options can be found in Appendix A. A summary of the appraisal including all Rank 1 criteria is set out in Table 4 overleaf.







# Table 4: Appraisal of Two-Way Access Options Summary

| 0                  | 0                    | Yes                                 | No                         | 0                   | No                      | 159                   | 3                   | No                        | No                       | 8                             | Yes       | Option 16  |
|--------------------|----------------------|-------------------------------------|----------------------------|---------------------|-------------------------|-----------------------|---------------------|---------------------------|--------------------------|-------------------------------|-----------|------------|
| 500                | 25000                | No                                  | Yes                        | 3                   | No                      | 97                    | 0                   | Yes                       | Yes                      | 8                             | No        | Option 15  |
| 1000               | 10000                | No                                  | Yes                        | 5                   | Yes                     | 8                     | 0                   | Yes                       | Yes                      | 2                             | No        | Option 14  |
| 700                | 33000                | No                                  | Yes                        | 4                   | No                      | 110                   | 1                   | Yes                       | Yes                      | 22                            | Yes       | Option 13  |
| 1000               | 48000                | No                                  | Yes                        | 2                   | No                      | 145                   | 3                   | Yes                       | Yes                      | 13                            | Yes       | Option 12  |
| 1000               | 47000                | No                                  | Yes                        | 16                  | No                      | 143                   | 3                   | Yes                       | Yes                      | 13                            | No        | Option 11  |
| 300                | 15000                | No                                  | Yes                        | 3                   | No                      | 45                    | 0                   | Yes                       | Yes                      | 2                             | No        | Option 10  |
| 600                | 26000                | No                                  | Yes                        | 3                   | No                      | 66                    | 0                   | Yes                       | Yes                      | 8                             | No        | Option 9   |
| 500                | 25000                | No                                  | Yes                        | 0                   | Yes                     | 104                   | 0                   | Yes                       | Yes                      | 8                             | No        | Option 8   |
| 500                | 25000                | Yes                                 | Yes                        | 3                   | No                      | 97                    | 0                   | Yes                       | Yes                      | 8                             | Yes       | Option 7   |
| 0                  | 0                    | Yes                                 | Yes                        | 0                   | No                      | 97                    | 0                   | Yes                       | Yes                      | 8                             | Yes       | Option 6   |
| 1000               | 47000                | No                                  | Yes                        | 0                   | Yes                     | 141                   | 0                   | Yes                       | Yes                      | 2                             | No        | Option 5   |
| 500                | 23000                | No                                  | Yes                        | 0                   | Yes                     | 89                    | 0                   | Yes                       | Yes                      | 2                             | No        | Option 4   |
| 500                | 25000                | No                                  | Yes                        | 14                  | Yes                     | 80                    | 0                   | Yes                       | Yes                      | 2                             | No        | Option 3   |
| 600                | 26000                | No                                  | Yes                        | 14                  | Yes                     | 90                    | 0                   | Yes                       | Yes                      | 2                             | No        | Option 2   |
| 400                | 19000                | No                                  | Yes                        | 14                  | Yes                     | 57                    | 0                   | Yes                       | Yes                      | 2                             | No        | Option 1   |
| Operating<br>Costs | Maintenance<br>Costs | Affordable within<br>Contract Limit | Attractive to<br>OHP Staff | Houses<br>Displaced | Impact on<br>Masterplan | Carbon<br>Consumption | Schools<br>Affected | Journey Time<br>Certainty | Blue-Light<br>Resilience | Quantum of<br>conflict points | Programme | Option Ref |

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Grouped by location of the option, the findings can be summarised as follows

## King George V Cottage Homes

There are four access options proposing a two-way street between the A1 St Aubin's Road and the OHP site via King George V Cottage Homes, including Options 1, 2, 3 and 14. As noted in Table 4, all of these options are not deliverable within the programme or the financial contract limit. On these criteria alone, all access options via King George V Cottage Homes will not be taken forward for further investigations as they are not affordable.

In addition to cost and programme, the appraisal highlighted several other criteria supporting the conclusion that these will not be taken forward for further investigation, including the following:

- Road safety considerations with regards to potential conflict between junction locations on the A1 St Aubin's Road;
- It is anticipated that many, if not all the residents of King George V Cottage Homes would be displaced;
- Active travel infrastructure, including provision for pedestrians and cycles, would be located beyond the extent of the built-up area of St Helier and therefore less attractive; and
- Furthermore, there would be significant challenges integrating the access roads with the existing pedestrian and cycle network.

IHE Transport and Operation also noted concerns with regards to traffic impacts and associated congestion at key junctions on the network, including the signal-controlled junctions at First Tower.

### Recommendation:

• Options 1, 2, 3 and 14 are not taken forward for further investigation

## A1 St Aubin's Road

In addition to the access options via King George V Cottage Homes, there are three other twoway access options from the A1 St Aubin's Road, including Options 4, 5 and 10. Both Options 4 and 5 are not deliverable within programme or the contract limit. In addition, it is recommended these options are not taken forward for further investigation because of the following:

- All options require substantial engineering works which are likely to have significant environmental effects;
- Access is located beyond the extent of the built-up area of St Helier and therefore would integrate poorly with the existing active travel network; and
- In comparison to other options, there would be a large ecological impact with regards to loss of trees and habitat.

The alignment presented for Option 10 would result in a gradient that is too steep for pedestrians, cycles and motor vehicles and should therefore be discounted.

• Options 4, 5 and 10 are not taken forward for further investigation

## Westmount Road

There are several Westmount options including the existing alignment (Option 6) and works to provide various alternative alignments (Options 7, 8, 9 and 15).

As noted in the introduction, the existing highway network is not able to accommodate the larger service vehicles associated with OHP and does include adequate provision for pedestrians and cyclists. The existing road is therefore not deemed to be sufficient to provide access to a general hospital. Option 6 therefore does not comply with the Island Plan (Rank 2 criteria) and several additional Rank 3 criteria and should therefore not be taken forward for further study.

Option 7 includes works to improve the alignment of Westmount Road and includes provision for pedestrians and cycles. As set out in Table 4, this scheme can be delivered within programme and the contract limit. Whilst this scheme does not provide the desirable 1:12 gradient for active travel and results in three residential properties being displaced, the option performs well overall and is recommended to be progressed to the next design stage with further enhancements for active travel to be reviewed at this stage.

Options 8, 9 and 15 are not deliverable within programme or the contract limit and are therefore are not going to be taken forward for further investigation. These options would also require extensive civil engineering works to deliver and therefore have the potential to result in significant environmental effects. Both Options 8 and 9 would also have a significant impact on West Park and People's Park respectively.

### **Recommendation:**

- Option 7 is progressed to the next design stage
- Options 6, 8, 9 and 15 are not taken forward for further investigation

## **Old St John's Road**

There are two options that propose access into the site from the east via Old St John's Road, including Options 11 and 12. The alignments presented for these options would result in a gradient that is too steep for pedestrians, cycles and motor vehicles and should therefore be discounted. It is also not considered appropriate for all traffic associated with OHP route on Old St John's Road given it is a narrow residential street.

#### **Recommendation:**

• Options 11 and 12 are not taken forward for further investigation



### St John's Road

Option 13 proposes an access via St John's Road and a new link with Queen's Road via an existing stepped pedestrian route. Analysis of the link road between St John's Road and Queen's Road indicates the resulting gradient would be too steep to accommodate pedestrians, cycles and motor vehicles and this option should therefore be discounted.

Option 16 proposes access to the hospital from the north, via a combination of Tower Road, St John's Road and Queen's Road. This option would result in a significant increase in traffic on walking routes to Haute Vallee School, D'Auvergne and Rouge Bouillon School. The traffic impacts of this access option are anticipated to result in many junctions operating over capacity. To provide sufficient mitigation at several junctions along Queen's Road, property acquisitions could be required.

IHE Transport and Operation noted concerns with potential access options from the north with regards to the impact on walking routes to nearby schools and the traffic impacts on the capacity of the highway network.

**Recommendation:** 

Option 13 and 16 are not taken forward for further investigation



# 4.3 One-Way Routes with New Infrastructure

In addition to the potential two-way access routes presented in the previous section, this section presents one-way access options that utilise a combination of existing and new streets. These routes are described in Table 5 below.

# Table 5: Description of One-Way Access Options

| rable 3: Descrip  | rable 5: Description of One-way Access Options                                   |  |
|-------------------|--|--|
| <b>Option Ref</b> | Inbound Route Ref  | Outbound Route Ref   |
| Option 17         | Option 1 (one-way)   | Option 6 (one-way with no improvements to existing active travel infrastructure) |
| Option 18         | Option 2 (one-way)   | Option 6 (one-way with no improvements to existing active travel infrastructure) |
| Option 19         | Option 3 (one-way)   | Option 6 (one-way with no improvements to existing active travel infrastructure) |
| Option 20         | Option 4 (one-way)   | Option 6 (one-way with no improvements to existing active travel infrastructure) |
| Option 21         | Option 5 (one-way)   | Option 6 (one-way with no improvements to existing active travel infrastructure) |
| Option 22         | Option 6 (one-way with no improvements to existing active travel infrastructure) | Option 1 (one-way)   |
| Option 23         | Option 6 (one-way with no improvements to existing active travel infrastructure) | Option 2 (one-way)   |
| Option 24         | Option 6 (one-way with no improvements to existing active travel infrastructure) | Option 3 (one-way)   |
| Option 25         | Option 6 (one-way with no improvements to existing active travel infrastructure) | Option 4 (one-way)   |
| Option 26         | Option 6 (one-way with no improvements to existing active travel infrastructure) | Option 5 (one-way)   |
| Option 27         | Option 1 (one-way)   | Option 6 (one-way with active travel route)                                      |
| Option 28         | Option 2 (one-way)   | Option 6 (one-way with active travel route)                                      |
| Option 29         | Option 3 (one-way)   | Option 6 (one-way with active travel route)                                      |
| Option 30         | Option 4 (one-way)   | Option 6 (one-way with active travel route)                                      |
| Option 31         | Option 5 (one-way)   | Option 6 (one-way with active travel route)                                      |
| Option 32         | Option 6 (one-way with active travel route)                                      | Option 1 (one-way)   |
| Option 33         | Option 6 (one-way with active travel route)                                      | Option 2 (one-way)   |
| Option 34         | Option 6 (one-way with active travel route)                                      | Option 3 (one-way)   |
| Option 35         | Option 6 (one-way with active travel route)                                      | Option 4 (one-way)   |
| Option 36         | Option 6 (one-way with active travel route)                                      | Option 5 (one-way)   |
| Option 37         | Option 1 (one-way)   | Option 7 (one-way)   |
| Option 38         | Option 2 (one-way)   | Option 7 (one-way)   |
| Option 39         | Option 3 (one-way)   | Option 7 (one-way)   |
| Option 40         | Option 4 (one-way)   | Option 7 (one-way)   |
| Option 41         | Option 5 (one-way)   | Option 7 (one-way)   |

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| <b>Option Ref</b> | Inbound Route Ref                           | <b>Outbound Route Ref</b>                   |
|-------------------|---|---|
| Option 42         | Option 7 (one-way)                          | Option 1 (one-way)                          |
| Option 43         | Option 7 (one-way)                          | Option 2 (one-way)                          |
| Option 44         | Option 7 (one-way)                          | Option 3 (one-way)                          |
| Option 45         | Option 7 (one-way)                          | Option 4 (one-way)                          |
| Option 46         | Option 7 (one-way)                          | Option 5 (one-way)                          |
| Option 47         | Option 1 (one-way)                          | Option 8 (one-way)                          |
| Option 48         | Option 2 (one-way)                          | Option 8 (one-way)                          |
| Option 49         | Option 3 (one-way)                          | Option 8 (one-way)                          |
| Option 50         | Option 4 (one-way)                          | Option 8 (one-way)                          |
| Option 51         | Option 5 (one-way)                          | Option 8 (one-way)                          |
| Option 52         | Option 8 (one-way)                          | Option 1 (one-way)                          |
| Option 53         | Option 8 (one-way)                          | Option 2 (one-way)                          |
| Option 54         | Option 8 (one-way)                          | Option 3 (one-way)                          |
| Option 55         | Option 8 (one-way)                          | Option 4 (one-way)                          |
| Option 56         | Option 8 (one-way)                          | Option 5 (one-way)                          |
| Option 57         | Tower Road (East)                           | Option 6 (one-way)                          |
| Option 58         | Tower Road (West)                           | Option 6 (one-way)                          |
| Option 59         | Option 6 (one-way)                          | Tower Road (East)                           |
| Option 60         | Option 6 (one-way)                          | Tower Road (West)                           |
| Option 61         | Tower Road (East)                           | Option 6 (one-way with active travel route) |
| Option 62         | Tower Road (West)                           | Option 6 (one-way with active travel route) |
| Option 63         | Option 6 (one-way with active travel route) | Tower Road (East)                           |
| Option 64         | Option 6 (one-way with active travel route) | Tower Road (West)                           |
| Option 65         | Tower Road (East)                           | Option 7 (one-way)                          |
| Option 66         | Tower Road (West)                           | Option 7 (one-way)                          |
| Option 67         | Option 7 (one-way)                          | Tower Road (East)                           |
| Option 68         | Option 7 (one-way)                          | Tower Road (West)                           |
| Option 69         | Option 6 (one-way)                          | Tower Road/St John's Road (one-way)         |
| Option 70         | Option 6 (one-way with active travel route) | Tower Road/St John's Road (one-way)         |
|                   |   |   |

A detailed appraisal of the above options can be found in Appendix A. A summary of the appraisal, including the high priority criteria, is set out in Table 6 overleaf.

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# Table 6: Appraisal of One-Way Access Options Summary

| 1100               | 27000                | No                                     | Yes                        | 0                   | Yes                     | 122                   | 0                   | No                        | Yes                      | 5                             | No        | Option 51  |
|--------------------|----------------------|--|----------------------------|---------------------|-------------------------|-----------------------|---------------------|---------------------------|--------------------------|-------------------------------|-----------|------------|
| 1100               | 27000                | No                                     | Yes                        | 0                   | Yes                     | 96                    | 0                   | No                        | Yes                      | 5                             | No        | Option 50  |
| 1200               | 28000                | No                                     | Yes                        | 14                  | Yes                     | 92                    | 0                   | No                        | Yes                      | 5                             | No        | Option 49  |
| 1200               | 28000                | No                                     | Yes                        | 14                  | Yes                     | 97                    | 0                   | No                        | Yes                      | 5                             | No        | Option 48  |
| 1000               | 24000                | No                                     | Yes                        | 14                  | Yes                     | 80                    | 0                   | No                        | Yes                      | 5                             | No        | Option 47  |
| 1100               | 27000                | No                                     | Yes                        | 3                   | Yes                     | 119                   | 0                   | No                        | Yes                      | 5                             | No        | Option 46  |
| 1100               | 27000                | No                                     | Yes                        | 3                   | Yes                     | 93                    | 0                   | No                        | Yes                      | 5                             | No        | Option 45  |
| 1200               | 28000                | No                                     | Yes                        | 17                  | Yes                     | 68                    | 0                   | No                        | Yes                      | 5                             | No        | Option 44  |
| 1200               | 28000                | No                                     | Yes                        | 17                  | Yes                     | 94                    | 0                   | No                        | Yes                      | 5                             | No        | Option 43  |
| 1000               | 24000                | No                                     | Yes                        | 17                  | Yes                     | 77                    | 0                   | No                        | Yes                      | 5                             | No        | Option 42  |
| 1100               | 27000                | No                                     | Yes                        | 3                   | Yes                     | 119                   | 0                   | No                        | Yes                      | 5                             | No        | Option 41  |
| 1100               | 27000                | No                                     | Yes                        | 3                   | Yes                     | 93                    | 0                   | No                        | Yes                      | 5                             | No        | Option 40  |
| 1200               | 28000                | No                                     | Yes                        | 17                  | Yes                     | 68                    | 0                   | No                        | Yes                      | 5                             | No        | Option 39  |
| 1200               | 28000                | No                                     | Yes                        | 17                  | Yes                     | 94                    | 0                   | No                        | Yes                      | 5                             | No        | Option 38  |
| 1000               | 24000                | No                                     | Yes                        | 17                  | Yes                     | 77                    | 0                   | No                        | Yes                      | 5                             | No        | Option 37  |
| 700                | 16000                | No                                     | Yes                        | 3                   | Yes                     | 126                   | 0                   | No                        | Yes                      | 5                             | No        | Option 36  |
| 500                | 12000                | No                                     | Yes                        | 3                   | Yes                     | 97                    | 0                   | No                        | Yes                      | 5                             | No        | Option 35  |
| 500                | 11000                | No                                     | Yes                        | 17                  | Yes                     | 53                    | 0                   | No                        | Yes                      | 5                             | No        | Option 34  |
| 500                | 13000                | No                                     | Yes                        | 17                  | Yes                     | 104                   | 0                   | No                        | Yes                      | 5                             | No        | Option 33  |
| 500                | 12000                | No                                     | Yes                        | 17                  | Yes                     | 121                   | 0                   | No                        | Yes                      | 5                             | No        | Option 32  |
| 500                | 0006                 | No                                     | Yes                        | 3                   | Yes                     | 126                   | 0                   | No                        | Yes                      | 5                             | No        | Option 31  |
| 500                | 11000                | No                                     | Yes                        | 3                   | Yes                     | 97                    | 0                   | No                        | Yes                      | 5                             | No        | Option 30  |
| 500                | 13000                | No                                     | Yes                        | 17                  | Yes                     | 53                    | 0                   | No                        | Yes                      | 5                             | No        | Option 29  |
| 500                | 12000                | No                                     | Yes                        | 17                  | Yes                     | 104                   | 0                   | No                        | Yes                      | 5                             | No        | Option 28  |
| 400                | 0006                 | No                                     | No                         | 17                  | Yes                     | 121                   | 0                   | No                        | Yes                      | 5                             | No        | Option 27  |
| 500                | 12000                | No                                     | No                         | 0                   | Yes                     | 119                   | 0                   | No                        | Yes                      | 5                             | No        | Option 26  |
| 500                | 11000                | Yes                                    | No                         | 0                   | Yes                     | 93                    | 0                   | No                        | Yes                      | 5                             | No        | Option 25  |
| 500                | 13000                | Yes                                    | No                         | 14                  | Yes                     | 68                    | 0                   | No                        | Yes                      | 5                             | No        | Option 24  |
| 500                | 12000                | No                                     | No                         | 14                  | Yes                     | 94                    | 0                   | No                        | Yes                      | 5                             | No        | Option 23  |
| 400                | 0006                 | No                                     | No                         | 14                  | Yes                     | 77                    | 0                   | No                        | Yes                      | 5                             | No        | Option 22  |
| 500                | 12000                | No                                     | No                         | 0                   | Yes                     | 119                   | 0                   | No                        | Yes                      | 5                             | No        | Option 21  |
| 500                | 11000                | Yes                                    | No                         | 0                   | Yes                     | 93                    | 0                   | No                        | Yes                      | 5                             | No        | Option 20  |
| 500                | 13000                | Yes                                    | No                         | 14                  | Yes                     | 68                    | 0                   | No                        | Yes                      | 5                             | No        | Option 19  |
| 500                | 12000                | No                                     | No                         | 14                  | Yes                     | 94                    | 0                   | No                        | Yes                      | 5                             | No        | Option 18  |
| 400                | 0006                 | No                                     | No                         | 14                  | Yes                     | 77                    | 0                   | No                        | Yes                      | 5                             | No        | Option 17  |
| Operating<br>Costs | Maintenance<br>Costs | Affordable<br>within<br>Contract Limit | Attractive to<br>OHP Staff | Houses<br>Displaced | Impact on<br>Masterplan | Carbon<br>Consumption | Schools<br>Affected | Journey Time<br>Certainty | Blue-Light<br>Resilience | Quantum of<br>conflict points | Programme | Option Ref |
|                    |                      |  |                            |                     |                         |                       |                     |                           |                          |                               |           |            |

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| Option Ref | Programme | Quantum of<br>conflict points | Blue-Light<br>Resilience | Journey Time<br>Certainty | Schools<br>Affected | Carbon<br>Consumption | Impact on<br>Masterplan | Houses<br>Displaced | Attractive to<br>OHP Staff | Affordable<br>within<br>Contract Limit | Maintenance<br>Costs | Operating<br>Costs |
|------------|-----------|-------------------------------|--------------------------|---------------------------|---------------------|-----------------------|-------------------------|---------------------|----------------------------|--|----------------------|--------------------|
| Option 52  | No        | 5                             | Yes                      | No                        | 0                   | 80                    | Yes                     | 14                  | Yes                        | No                                     | 24000                | 1000               |
| Option 53  | No        | 5                             | Yes                      | No                        | 0                   | 76                    | Yes                     | 14                  | Yes                        | No                                     | 28000                | 1200               |
| Option 54  | No        | 5                             | Yes                      | No                        | 0                   | 92                    | Yes                     | 14                  | Yes                        | No                                     | 28000                | 1200               |
| Option 55  | No        | 5                             | Yes                      | No                        | 0                   | 96                    | Yes                     | 0                   | Yes                        | No                                     | 27000                | 1100               |
| Option 56  | No        | 5                             | Yes                      | No                        | 0                   | 122                   | Yes                     | 0                   | Yes                        | No                                     | 27000                | 1100               |
| Option 57  | Yes       | 11                            | No                       | No                        | 3                   | 126                   | Yes                     | 0                   | No                         | No                                     | 47000                | 1900               |
| Option 58  | Yes       | 8                             | No                       | No                        | 1                   | 142                   | Yes                     | 0                   | No                         | Yes                                    | 23000                | 1000               |
| Option 59  | Yes       | 11                            | No                       | No                        | 3                   | 126                   | No                      | 0                   | No                         | No                                     | 47000                | 1900               |
| Option 60  | Yes       | 8                             | No                       | No                        | 1                   | 142                   | No                      | 0                   | No                         | Yes                                    | 23000                | 1000               |
| Option 61  | Yes       | 11                            | No                       | No                        | 3                   | 126                   | No                      | 0                   | Yes                        | No                                     | 47000                | 1900               |
| Option 62  | Yes       | 8                             | No                       | No                        | 1                   | 142                   | No                      | 0                   | Yes                        | No                                     | 23000                | 1000               |
| Option 63  | Yes       | 11                            | No                       | No                        | 3                   | 126                   | No                      | 0                   | Yes                        | No                                     | 47000                | 1900               |
| Option 64  | Yes       | 8                             | No                       | No                        | 1                   | 142                   | No                      | 0                   | Yes                        | No                                     | 23000                | 1000               |
| Option 65  | Yes       | 11                            | No                       | No                        | 3                   | 126                   | No                      | 3                   | Yes                        | Yes                                    | 62000                | 2500               |
| Option 66  | Yes       | 8                             | No                       | No                        | 1                   | 142                   | No                      | 3                   | Yes                        | Yes                                    | 39000                | 1600               |
| Option 67  | Yes       | 11                            | No                       | No                        | 3                   | 126                   | No                      | 3                   | Yes                        | No                                     | 62000                | 2500               |
| Option 68  | Yes       | 8                             | No                       | No                        | 1                   | 142                   | No                      | 3                   | Yes                        | No                                     | 39000                | 1600               |
| Option 69  | Yes       | 8                             | No                       | No                        | 0                   | 120                   | No                      | 3                   | Yes                        | Yes                                    | 47000                | 1900               |
| Option 70  | Yes       | 8                             | No                       | No                        | 0                   | 120                   | No                      | 3                   | Yes                        | No                                     | 47000                | 1900               |
| Option 71  | Yes       | 8                             | No                       | No                        | 0                   | 120                   | No                      | 6                   | Yes                        | No                                     | 44000                | 1800               |



# **One-Way Access Options via St Aubin's Road**

There are numerous one-way access options that propose a combination of existing streets and a new access road from St Aubin' Road, including Options 17-56. As detailed in the previous section, all access roads from St Aubin's Road, including those via King George V Cottage Homes, are recommended to be discounted given they cannot be delivered within programme or affordable within the contract limit. These options are also anticipated to result in significant environmental effects. It is therefore recommended that these one-way options are also discounted.

#### Recommendation:

Options 17-56 are not taken forward for further investigation

## Tower Road (West)

There are several one-way access options that include an access/egress combination of Westmount Road and Tower Road (west), including Options 58, 60, 62, 64, 66 and 68. It is recommended that these one-way access options are discounted as a result of the following:

- Single access/egress route reduces blue-light resilience and journey time certainty for staff and patients;
- Tower Road (west) is not deemed to be suitable as the principle access road for a hospital given the existing vertical and horizontal alignment;
- The traffic impacts on the A1 St Aubin's Road would be significant and difficult to mitigate without substantial works and property acquisition; and
- The options would increase traffic near a First Tower School

IHE Transport and Operation also noted concerns with these potential access options with regards to the capacity of existing junctions and the traffic impacts on residential streets.

### **Recommendation:**

• Options 58, 60, 62, 64, 66 and 68 are not taken forward for further investigation

# Tower Road (East) and Queen's Road

There are several one-way access options that include an access/egress combination of Westmount Road and Tower Road (east)/St John's Road (north)/Queen's Road, including Options 57, 59,61, 63, 65 and 67.

The findings of the appraisal indicate these options should be discounted for several reasons including the following:

- Single access/egress route reduces blue-light resilience and journey time certainty for staff and patients;
- These options would result in a significant increase in traffic on walking routes to Haute Vallee School, D'Auvergne and Rouge Bouillon School;

- The traffic impacts on residential streets such as St John's road are not deemed to be appropriate; and
- The traffic impacts are anticipated to result in many junctions operating over capacity. To
  provide sufficient mitigation at several junctions along Queen's Road, property
  acquisitions could be required.

IHE Transport and Operation noted concerns with these potential access options with regards to the impact on walking routes to nearby schools and the traffic impacts on the capacity of the highway network.

#### **Recommendation:**

• Options 57, 59,61, 63, 65 and 67 are not taken forward for further investigation

# Tower Road (East) and St John's Road

There are three options that propose a combination of Westmount Road and St John's Road, including Options 69, 70 and 71. It is recommended that these options are discounted for the following reasons:

- Single access/egress route reduces blue-light resilience and journey time certainty for staff and patients;
- The existing highway is unlikely to be able to accommodate largest vehicle required to service the hospital;
- Traffic impacts on residential streets such as St John's Road are not deemed to be appropriate; and
- To mitigate traffic impacts at constrained junctions such as the St John's Road/Old St John's Road/Cheapside, there is a likely requirement for property acquisition.

#### **Recommendation:**

• Options 69, 70 and 71 are not taken forward for further investigation

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# 5 Appraisal of Supporting Measures

## 5.1 Introduction

This chapter of the report presents an appraisal of the supporting measures, including those that improve accessibility for a single mode of travel or contribute towards a reduction in the proportion of trips made by car. This includes the following:

- Parking Strategies;
- Mass Transit Options; and
- Single Mode Measures.

As these measures do not satisfy all access requirements for the OHP, not all assessment criteria identified in Chapter 2 may apply. As all supporting measures are associated with the operation of the hospital and do not facilitate construction, from a programme perspective they do not need to be completed by March 2022 but when the hospital is expected to be in operation.

## 5.2 Parking Strategies

Several parking strategies have been reviewed as part of this study, as detailed in Table 7 below. This includes a mix of strategies that reduce overall parking provision for staff, patients, visitors, or a combination of all users.

# **Table 7: Supporting Measures - Parking Strategies**

| Ref      | Description  |
|----------|--|
| Supp. 1  | Car free campus (except for accessible parking and emergency drop-off) with Park & Ride and a high frequency shuttle bus service |
| Supp. 2  | Reduced on-site car park. Introduction of Park and ride from bespoke parking area to be found/acquired                           |
| Supp. 3  | Reduced on-site car park. Using existing public car parking stock and a hopper bus   |
| Supp. 4  | Staff Parking off-site in an existing GoJ owned facility   |
| Supp. 5  | Staff Parking off-site in a site to be acquired  |
| Supp. 6  | Visitor Parking off-site in an existing GoJ owned facility   |
| Supp. 7  | Visitor Parking off-site in a site to be acquired  |
| Supp. 8  | Patient Parking off-site in an existing GoJ owned facility   |
| Supp. 9  | Patient Parking off-site in a site to be acquired  |
| Supp. 10 | Staff Parking restriction. Ability to park 4 out 5 working days etc.   |
| Supp. 11 | Visitor Parking restriction. 30-minute max stay.   |
| Supp. 12 | Sufficient on-site parking for staff and patients, with consideration given to promoting sustainable travel                      |

## 5.3 Mass Transit

Table 8 presents several mass transit options that have been appraised as part of this study, including cables cars, funicular railways and more traditions public transport modes. Supporting figures are attached to this report for Supporting Measures 13, 14, 15 and 16.

# **Table 8: Supporting Measures - Mass Transit**

| Ref      | Description   |
|----------|---|
| Supp. 13 | Supp. 13 Cable Car (localised station within St Helier)   |
| Supp. 14 | Cable Car (part of a series of stops connecting Fort Regent with Overdale and calling at numerous positions within St Helier town centre) |
| Supp. 15 | Supp. 15 Funicular railway from Peoples Park  |
| Supp. 16 | Supp. 16 Funicular railway from the rear of Park Heights  |
| Supp. 17 | Supp. 17 Metro/Subway with elevator and escalator access to subterranean stations   |
|          |   |

# 5.4 Single Mode Measures

Supp. 18

Bus service improvement to high frequency (Every 10 minutes)

Table 9 presents the remaining supporting measures appraised as part of this study. Figures are attached to the report for Supporting Measures 20, 21 and 22.

# **Table 9: Supporting Measures - Single Mode Measures**

| RefDescriptionSupp. 19High quality segregated pedestrian and cycle infrastructure on Westmount, Tower Road, and<br>Old St Johns RoadSupp. 20A Norwegian cycle lift on Westmount RoadSupp. 21External escalator replacing existing stepped route from Westmount ApartmentsSupp. 22External elevator located to the rear of Park Heights providing access to the southern fieldSupp. 23Expansion of cycle hire schemeSupp. 24Expansion of electric cycle schemeSupp. 25Wider area signage strategy, potential use of Variable Message Signs (VMS) to advise of lessSupp. 26Car Club/Car ShareSupp. 27Education, communication, and travel planning incentives |          |  |
|---|----------|--|
|   | Ref      | Description  |
|   | Supp. 19 | High quality segregated pedestrian and cycle infrastructure on Westmount, Tower Road, and Old St Johns Road              |
|   | Supp. 20 | A Norwegian cycle lift on Westmount Road   |
|   | Supp. 21 | External escalator replacing existing stepped route from Westmount Apartments  |
|   | Supp. 22 | External elevator located to the rear of Park Heights providing access to the southern field                             |
|   | Supp. 23 | Expansion of cycle hire scheme   |
|   | Supp. 24 | Expansion of electric cycle scheme   |
|   | Supp. 25 | Wider area signage strategy, potential use of Variable Message Signs (VMS) to advise of less congested routes in advance |
|   | Supp. 26 | Car Club/Car Share   |
|   | Supp. 27 | Education, communication, and travel planning incentives   |

# 5.5 Summary of Appraisal

A detailed appraisal of the supplementary options described in this chapter can be found in Appendix B. A summary of the appraisal, including the high priority criteria, is set out in Table 10 overleaf.

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# Table 10: Appraisal of Supporting Measures Summary

| 2500               | 2500                 | No                                     | No                         | 0                   | Yes                     | n/a                         | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 27   |
|--------------------|----------------------|--|----------------------------|---------------------|-------------------------|-----------------------------|---------------------|---------------------------|--------------------------|-------------------------------|-----------|------------|
| 5000               | 5000                 | No                                     | No                         | 0                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 26   |
| 5000               | 2500                 | No                                     | No                         | 0                   | Yes                     | n/a                         | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 25   |
| 2000               | 0                    | No                                     | No                         | 0                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 24   |
| 2000               | 0                    | No                                     | No                         | 0                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 23   |
| 10000              | 1000                 | No                                     | No                         | 0                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 22   |
| 10000              | 1000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 21   |
| 200                | 5000                 | No                                     | No                         | 0                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 20   |
| 500                | 1000                 | No                                     | No                         | 0                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 19   |
|                    |                      |  |                            |                     | res                     | <b>Single Mode Measures</b> | S                   |                           |                          |                               |           |            |
| 500                | 1000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 18   |
| 500000             | 500000               | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | No        | Supp. 17   |
| 100000             | 80000                | No                                     | No                         | 14                  | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 16   |
| 125000             | 80000                | No                                     | No                         | 5                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 15   |
| 150000             | 100000               | No                                     | No                         | 15                  | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 14   |
| 100000             | 50000                | No                                     | No                         | 5                   | Yes                     |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 13   |
|                    |                      |  |                            |                     |                         | Mass Transit                |                     |                           |                          |                               |           |            |
| 1000               | 2000                 | Yes                                    | Yes                        | 0                   | No                      |                             | n/a                 | Yes                       | n/a                      | n/a                           | Yes       | Supp. 12   |
| 0                  | 0                    | No                                     | n/a                        | 0                   | No                      |                             | n/a                 | Yes                       | n/a                      | n/a                           | Yes       | Supp. 11   |
| 0                  | 0                    | No                                     | No                         | 0                   | No                      |                             | n/a                 | Yes                       | n/a                      | n/a                           | Yes       | Supp. 10   |
| 5000               | 5000                 | No                                     | n/a                        | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 9    |
| 5000               | 5000                 | No                                     | n/a                        | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 8    |
| 5000               | 5000                 | No                                     | n/a                        | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 7    |
| 5000               | 5000                 | No                                     | n/a                        | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 6    |
| 5000               | 5000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 5    |
| 5000               | 5000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 4    |
| 5000               | 5000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 3    |
| 5000               | 5000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 2    |
| 5000               | 5000                 | No                                     | No                         | 0                   | No                      |                             | n/a                 | No                        | n/a                      | n/a                           | Yes       | Supp. 1    |
|                    |                      |  |                            |                     |                         | Parking Strategy            |                     |                           |                          |                               |           |            |
| Operating<br>Costs | Maintenance<br>Costs | Affordable<br>within<br>Contract Limit | Attractive to<br>OHP Staff | Houses<br>Displaced | Impact on<br>Masterplan | Carbon<br>Consumption       | Schools<br>Affected | Journey Time<br>Certainty | Blue-Light<br>Resilience | Quantum of<br>conflict points | Programme | Option Ref |
|                    |                      |  |                            |                     |                         |                             |                     |                           |                          |                               |           |            |

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Many of the parking strategies reviewed seek to relocate elements of the OHP parking requirements offsite, supported with a Park & Ride, include Supporting Measures 1-9. These parking strategies aim to reduce motor vehicle traffic near the site by locating parking demand elsewhere, therefore improving the environment for active travel modes.

These parking strategies all require substantial investment to fund a Park & Ride service, and in many options, acquisition of an existing car park. As such, these schemes are not affordable within the contract limit.

In the context of the current pandemic, a Park & Ride option would not be feasible, as a large proportion of journeys to the hospital would need to be made by bus. These supporting measures therefore do not provide the necessary robustness to change.

It is understood that Park & Ride facilities are unlikely to be well received in Jersey given the actual and perceived increased journey times and the need to transfer between two modes of travel. It is therefore recommended that Supporting Measures 1-9 are discounted.

The other parking strategies (Supporting Measures 10-12) that have been reviewed will be considered further in the subsequent design stages. Supporting Measure 10 seeks to restrict staff use of the car park from 5 to 4 days a week. This is a common travel planning measure to encourage staff to travel by alternative modes of transport. This potential strategy will however need to be explored in further detail to ensure staff have reasonable alternative choices to traveling by car. Restricting visitor parking to 30-minutes may also not prove to be acceptable and therefore will need to be explored further.

### Recommendation:

- Supporting Measures 1-9 are not taken forward for further investigation
- Supporting Measures 10-12 are explored further in the next design stage

Whilst it is not proposed to take the specific Park & Ride schemes identified in this appraisal forward for further investigation, the potential for a Park & Ride scheme will be explored as part of the evolving Bus Strategy and supporting measures for the site.

## **Mass Transit Options**

Supporting Measures 13-17 include mass transit solutions such as cable cars, funicular railways and underground rail. As set out in Table 10, all options have substantial construction, operating and maintenance cost and are not affordable within the contract limit. The cable cars and funicular railway are also anticipated to have a high visual impact and therefore there is substantial planning risk with these options.

Unless these solutions are integrated with a car park, they are only likely to serve a limited proportion of journeys to the hospital. This is particularly relevant for the mass transit options from Park Heights, Old St John's Road, as they are not located along the desire line to the hospital and are separated from the town centre with a significant walk at an incline between.

Supporting Measure 18 seeks to improve bus service provision at the OHP site to one bus every 10-minutes. This would provide many patients, visitors and staff with an alternative

mode of travel to the motor vehicle. It has been suggested from discussions with IHE that a frequency of 5-15 minutes should be targeted.

#### **Recommendation:**

- Supporting Measures 13-17 are not taken forward for further investigation
- Supporting Measure 18 is explored further in the next design stage

## Single Mode Measures

There are several other supporting measures reviewed as part of this study, all of which will be explored further as part of the next design stage. Based on the findings of the appraisal, initial considerations include the following:

- **Supporting Measure 19**: the access option will include a pedestrian and cycle route to the OHP site. Further enhancements to the existing pedestrian and cycle network will also be explored to maximise opportunities for journeys to be made by active modes of travel;
- Supporting Measure 20: whilst this emerging technology has been shown to be effective in Norway, it may not be appropriate for this scheme, however it will be explored further in the next design stage;
- **Supporting Measure 21**: there are no outdoor escalators in Jersey and the technology would need to be investigated to explore resilience to coastal conditions. Given the likely requirement for the escalator to be covered, the visual impacts of this scheme are 'high' so there is potential for significant planning risk associated with this supporting measure;
- Supporting Measure 22: there are also no outdoor elevators in Jersey, so the technology
  would also need to be explored. The visual impacts are also 'high' so there is potential for
  significant planning risk associated with this supporting measure;
- **Supporting Measure 23 and 24**: the expansion of the existing cycle and electric cycle hire schemes will be explored as part of the travel plan;
- Supporting Measure 25: given the limited route option choices in Jersey, this scheme is unlikely to be that effective. IHE also noted there is limited existing road space to install VMS and mobile phones with real-time travel information are more likely to be more effective;
- Supporting Measure 26: both a car share database and expansion to the current car club provision in Jersey will be explored in the next design stage as part of the Travel Plan; and
- Supporting Measure 27: a Travel Plan will be prepared in support of OHP that will
  include measures to encourage a higher proportion of journeys to be made by sustainable
  modes of travel.

#### Recommendation:

Supporting Measures 19-27 to be investigated further in the next design stage, however many could be introduced later as they are not fundamental to the Masterplan

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# **6** Summary and Conclusions

This Access Appraisal has been prepared in support of Our Hospital Project (OHP), a proposed general hospital at the existing site of the Overdale hospital. This study has been prepared following Amendment 2 to the proposition for the Overdale site.

The report has been prepared following engagement with key stakeholders including the Citizens and Health Workers' Panels, Ambulance Service and IHE (Operations and Transport, Public Transport and Planning). All stakeholders were given the opportunity to comment on the criteria, access options, and supplementary options presented in this report.

The appraisal has been based on 38 criteria, all of which were ranked from 1-4, depending on the extent to which they are deemed critical to meeting the objectives of the scheme. The criteria cover a wide range of topics including uninterrupted access, safety of neighbours, disruption to residents, operational considerations, cost, programme, Planning risk, accessibility by all travel modes, and the highway network capacity.

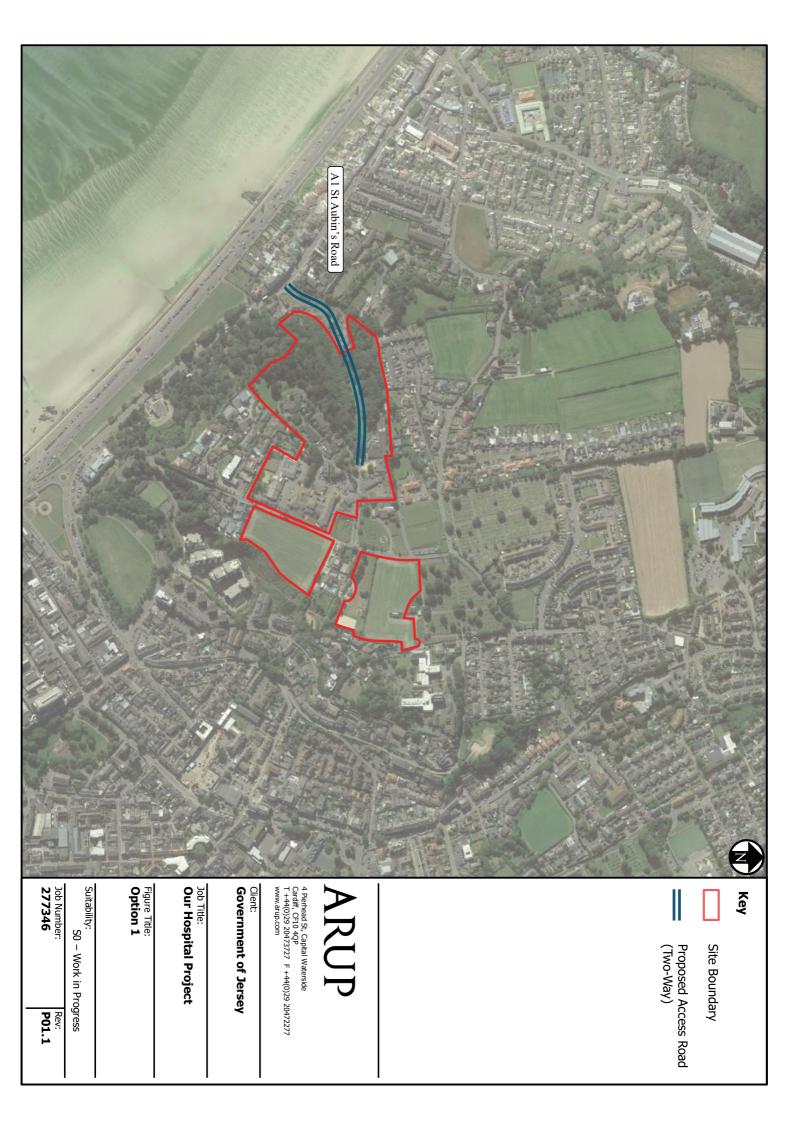
The appraisal includes a review of access options and supplementary measures. There are numerous one-way and two-way access options reviewed, the majority of which include provision for motor vehicles, pedestrians and cycles. New access routes have been explored from King George V Cottage Homes, the A1 St Aubin's Road, Westmount Road and Old St John's Road. One-way access options have also been explored that use a combination of the above, alongside Tower Road to the north

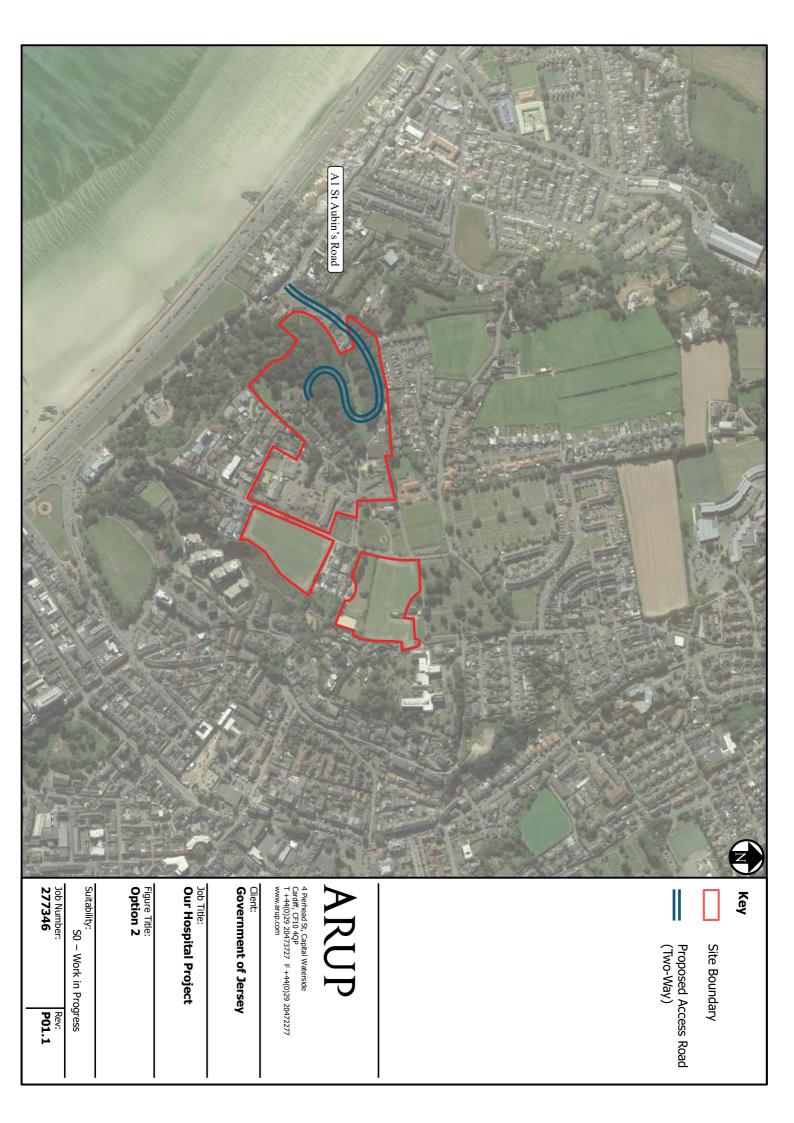
Of the access options reviewed, Access Option 7 is the solution that is recommended to be taken forward for further investigation. This is the option identified in the Site Evaluation Report and includes works to Westmount Road to improve the horizontal and vertical alignment. Whilst this access option does require the acquisition of three properties and the bowling green, it will deliver journey time certainty, allows works to be complete within programme, and within the contract limit. There is also deemed to be less planning risk associated with this scheme, in comparison to access options from King George V Cottage Homes and the A1 St Aubin's Road. In addition, it does not result in significant increases in traffic on residential streets, unlike one-way options that utilise routes to the north.

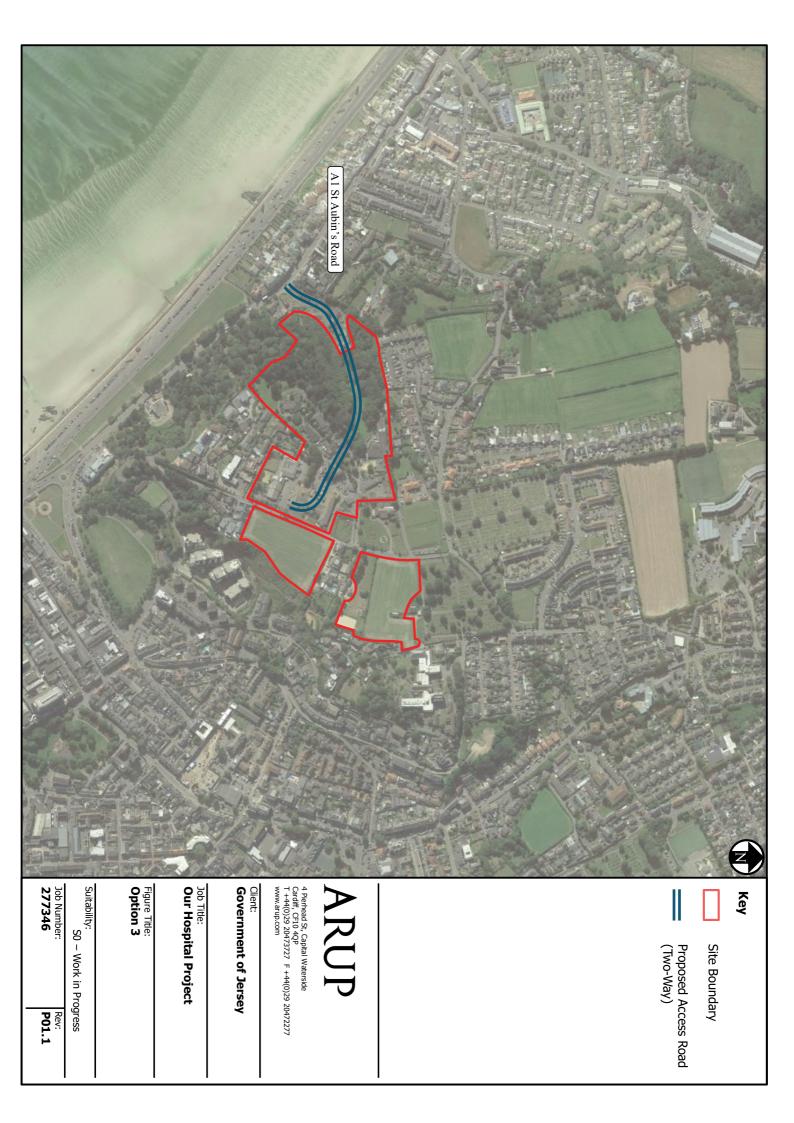
The review of supporting measures included parking strategies, mass transit and single mode schemes. Whilst most of these supporting measures will be explored further in the subsequent design stages, some have been discounted. This includes Park & Ride schemes as assessed in this report, although the concept will be further explored, and mass transit solutions such as cables cars and funicular railways as the substantial construction, operating and maintenance costs and are not affordable within the contract limit.

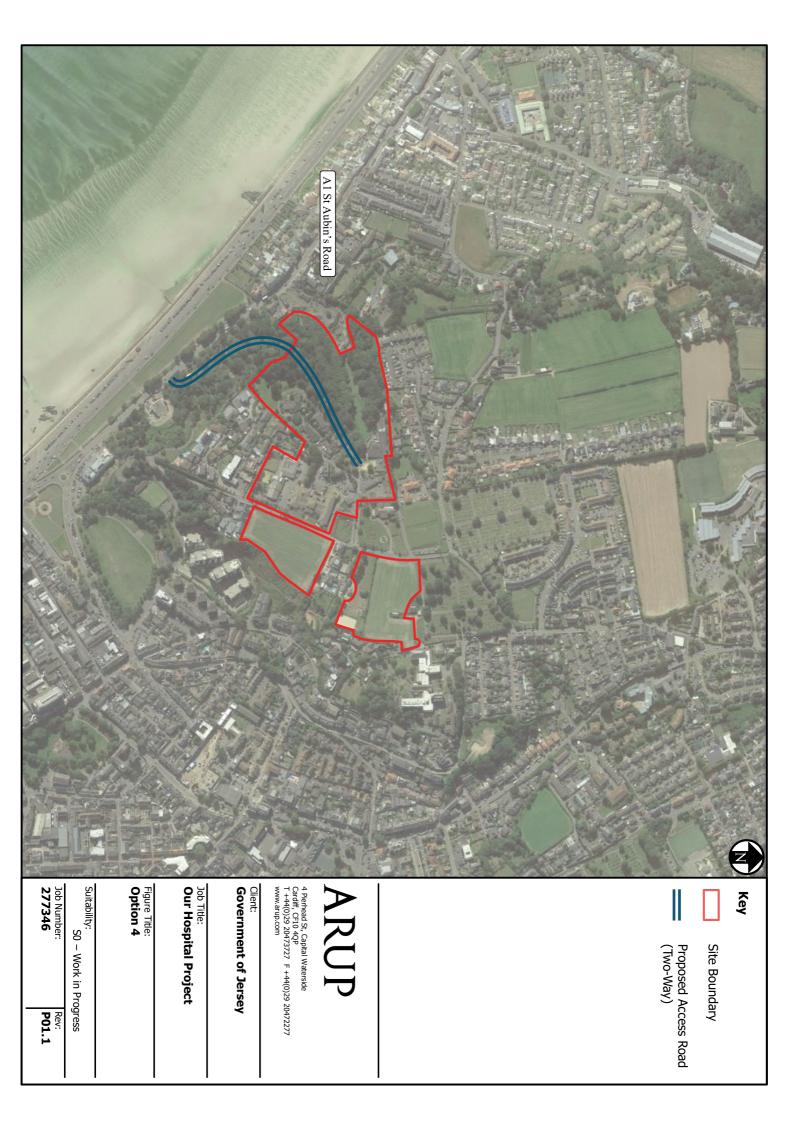
All potential access options have been investigated and it is concluded that Option 7 is the most appropriate option with regards to Planning and operational risk and deliverability. The recommended access option and a combination of supporting measures can meet the objectives of the project to deliver a new hospital for Jersey, maximise sustainable modes of travel and minimise the impact on homes, leisure facilities and the surrounding environment.

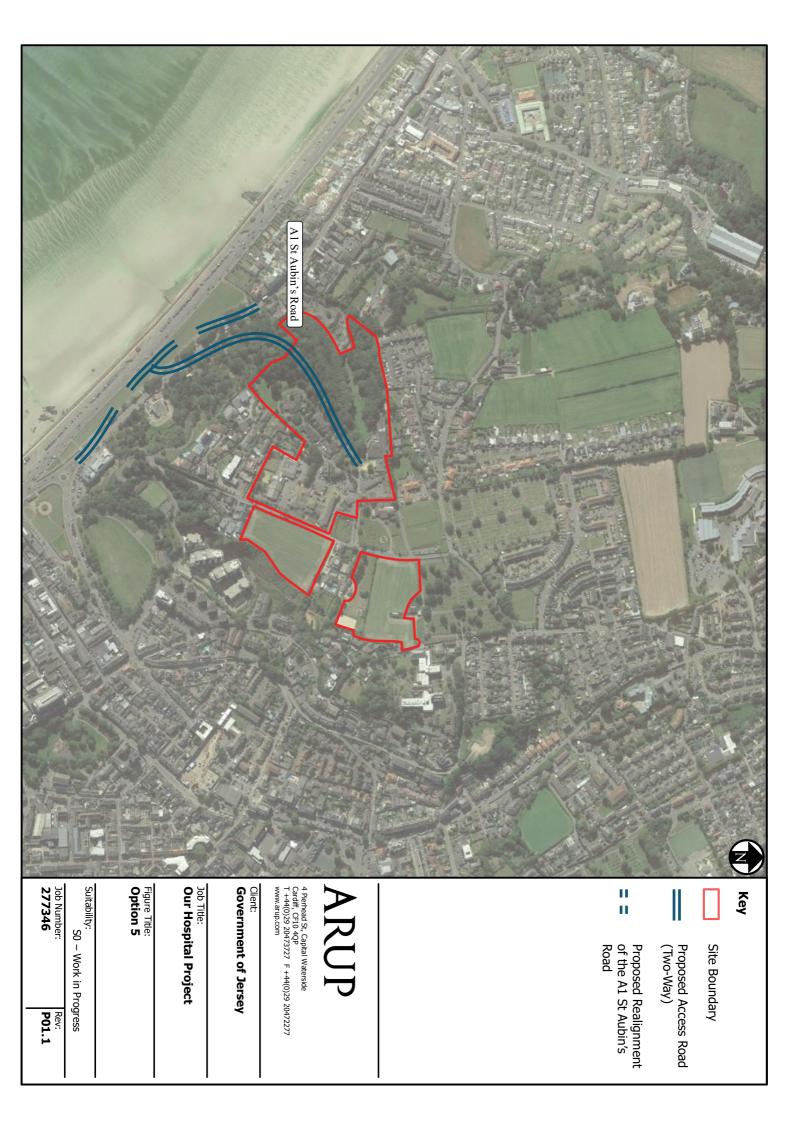
Figures

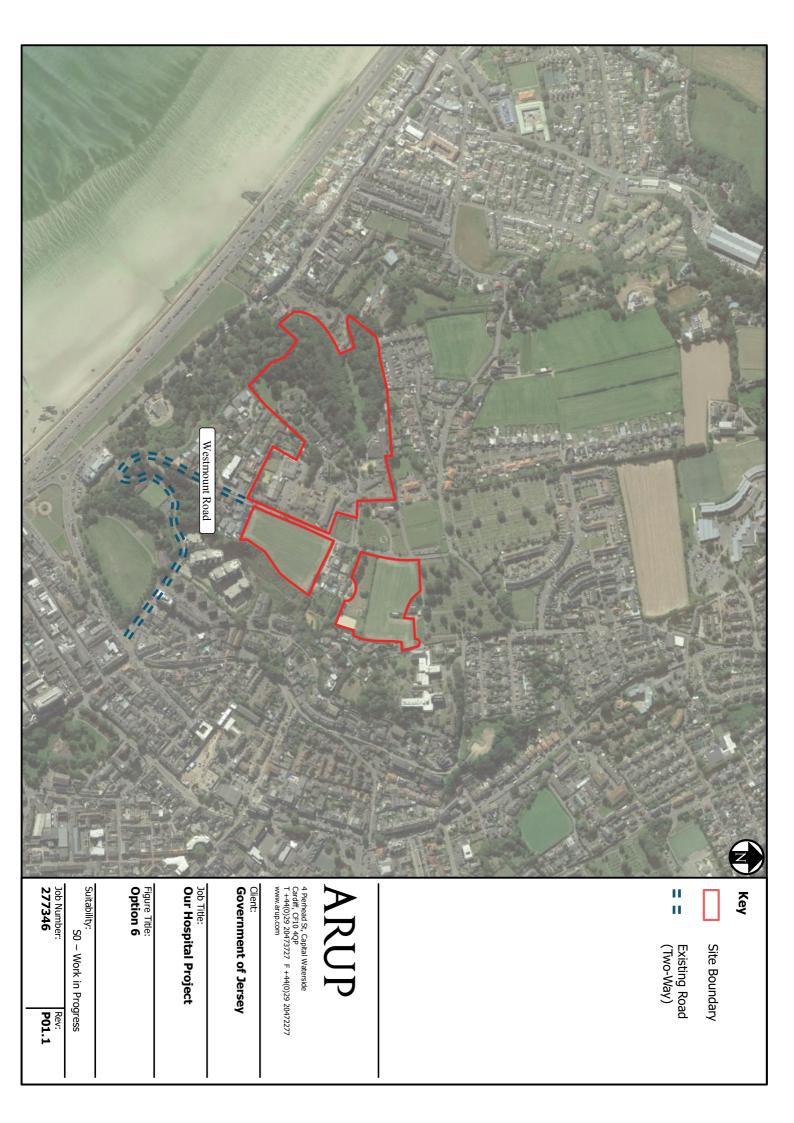


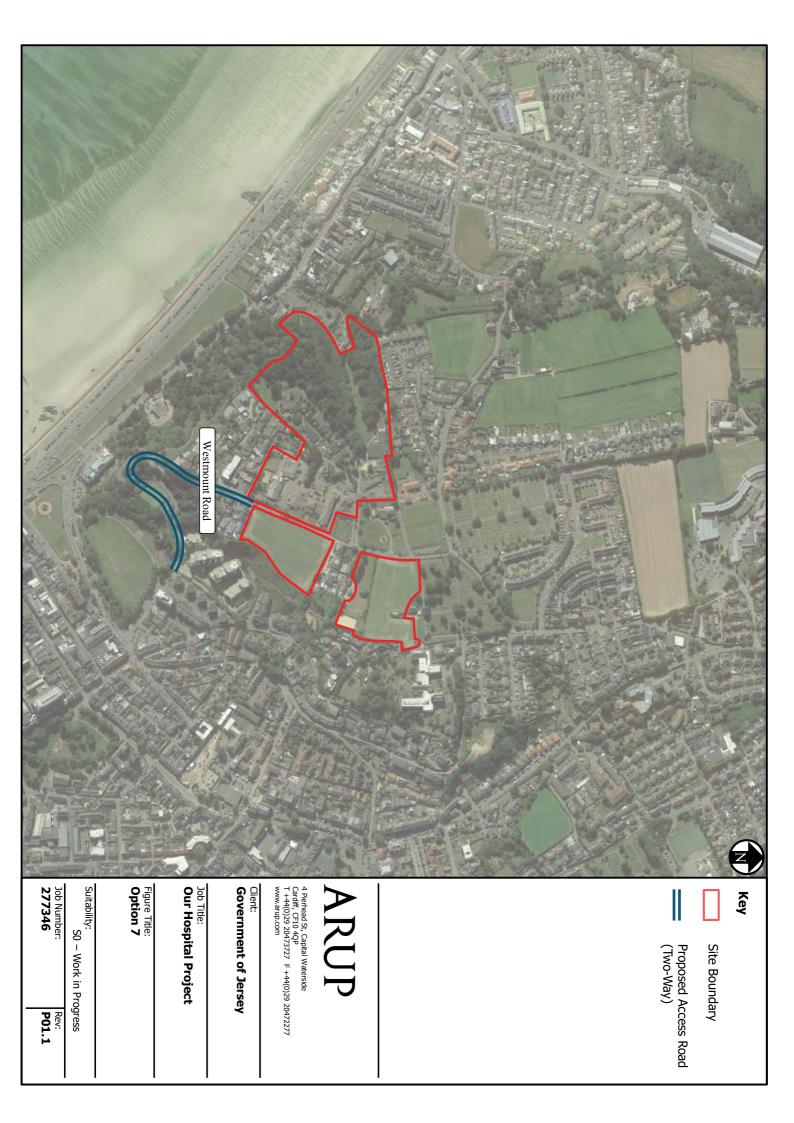


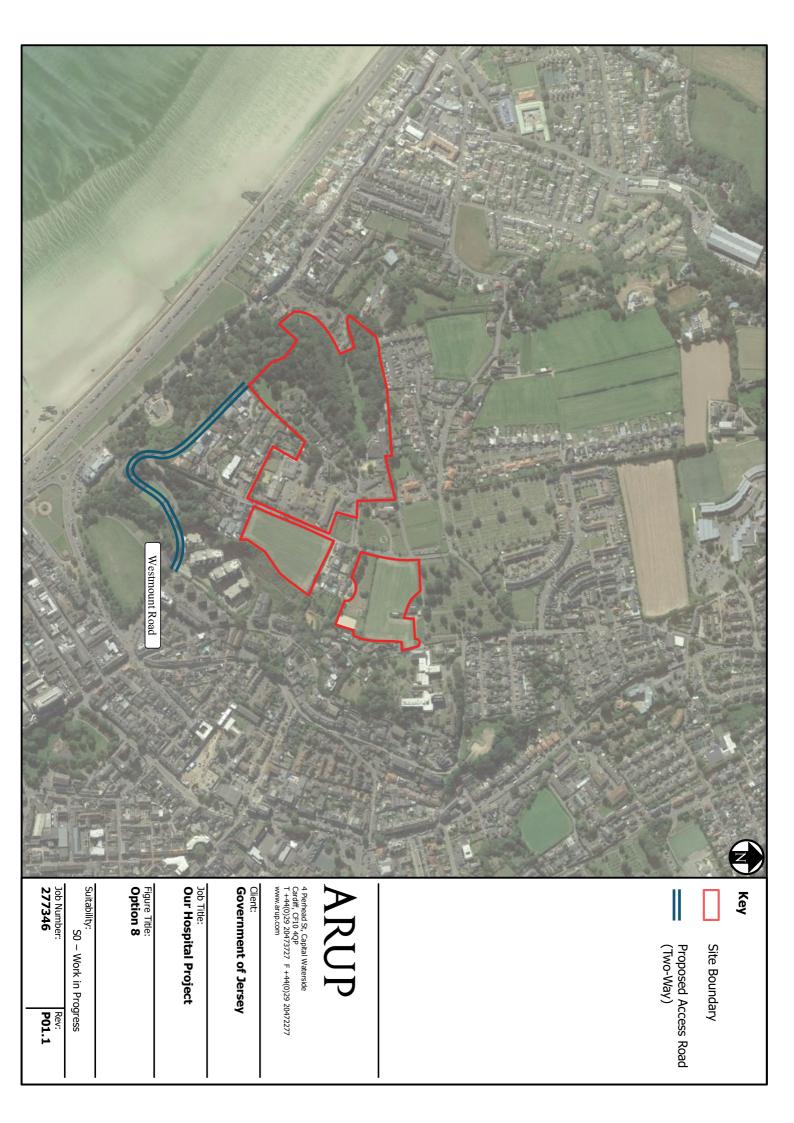


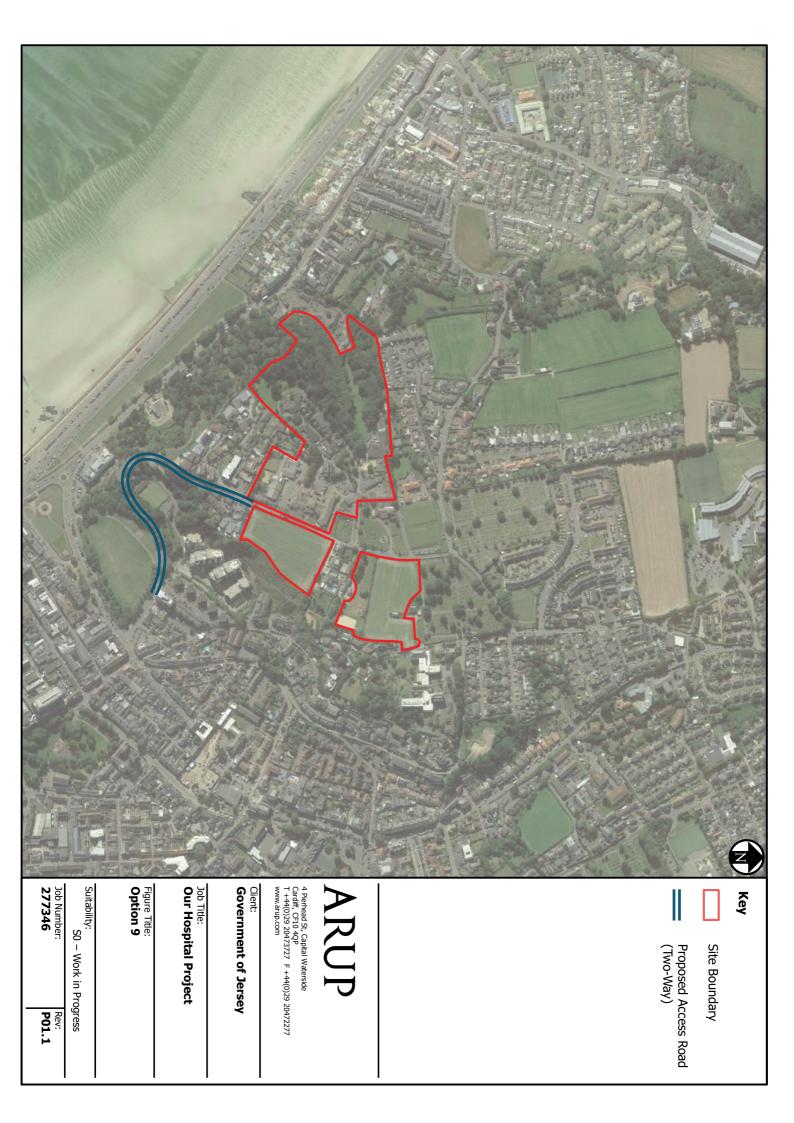


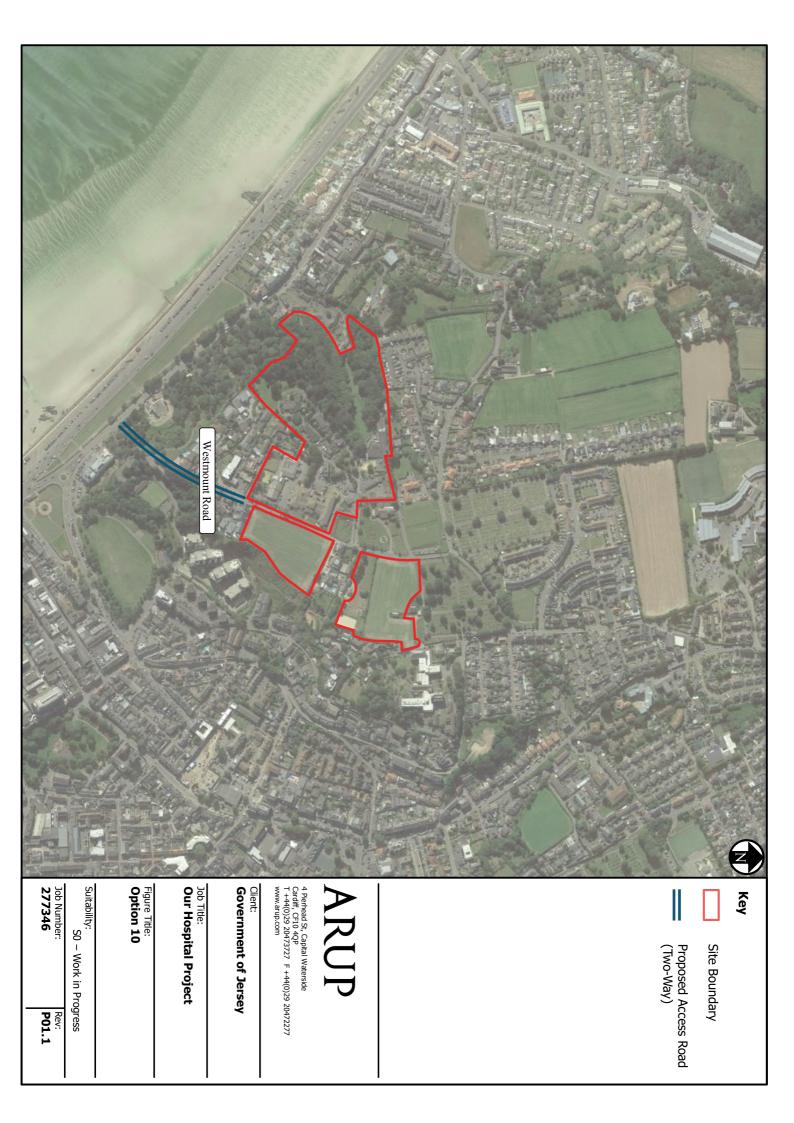


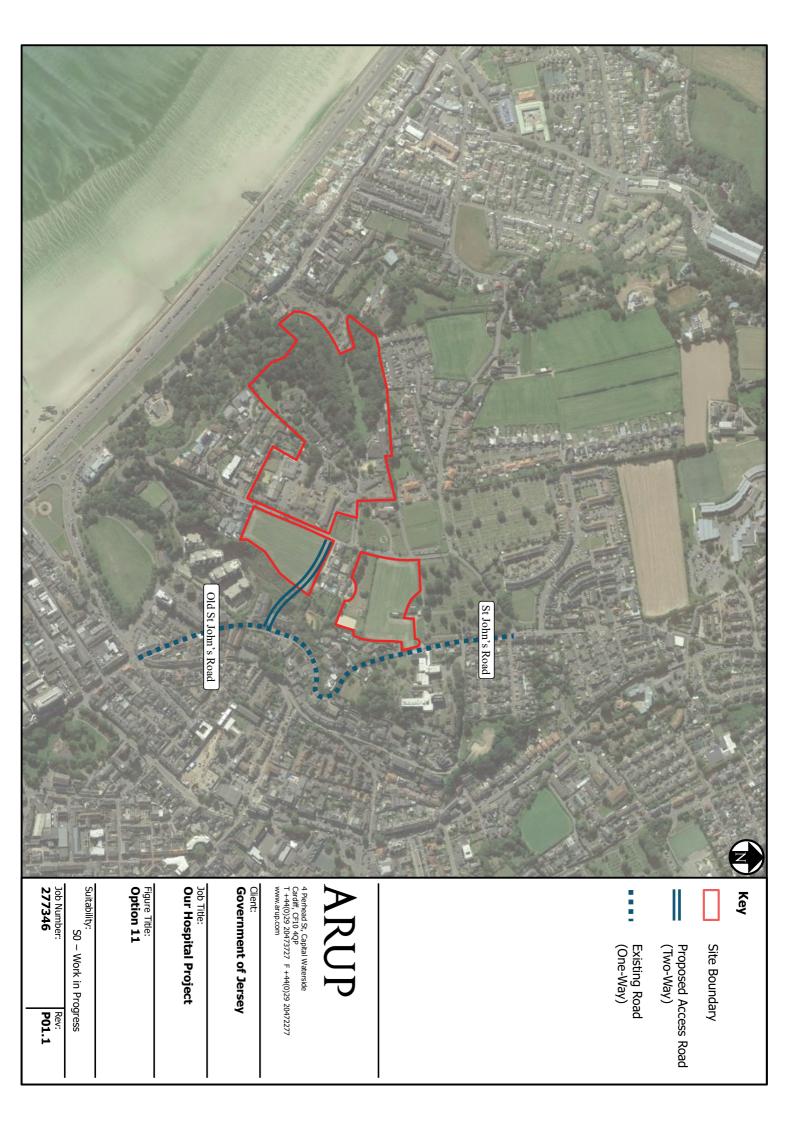


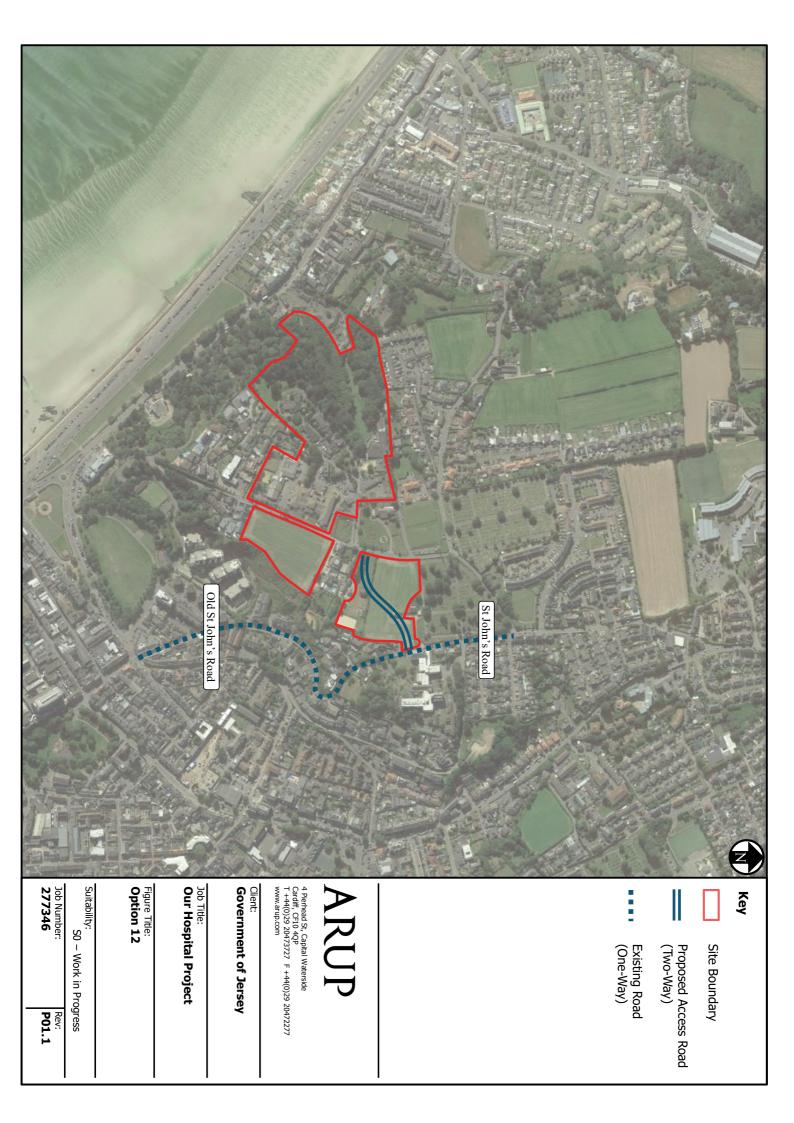


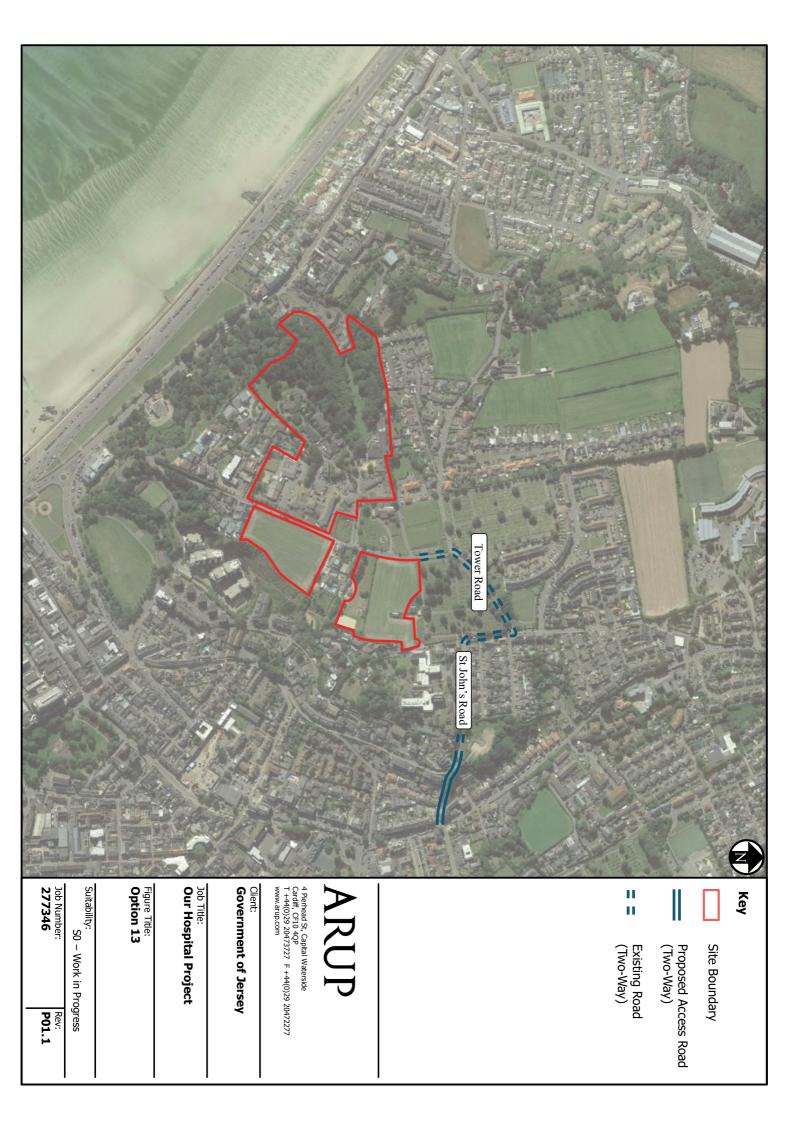


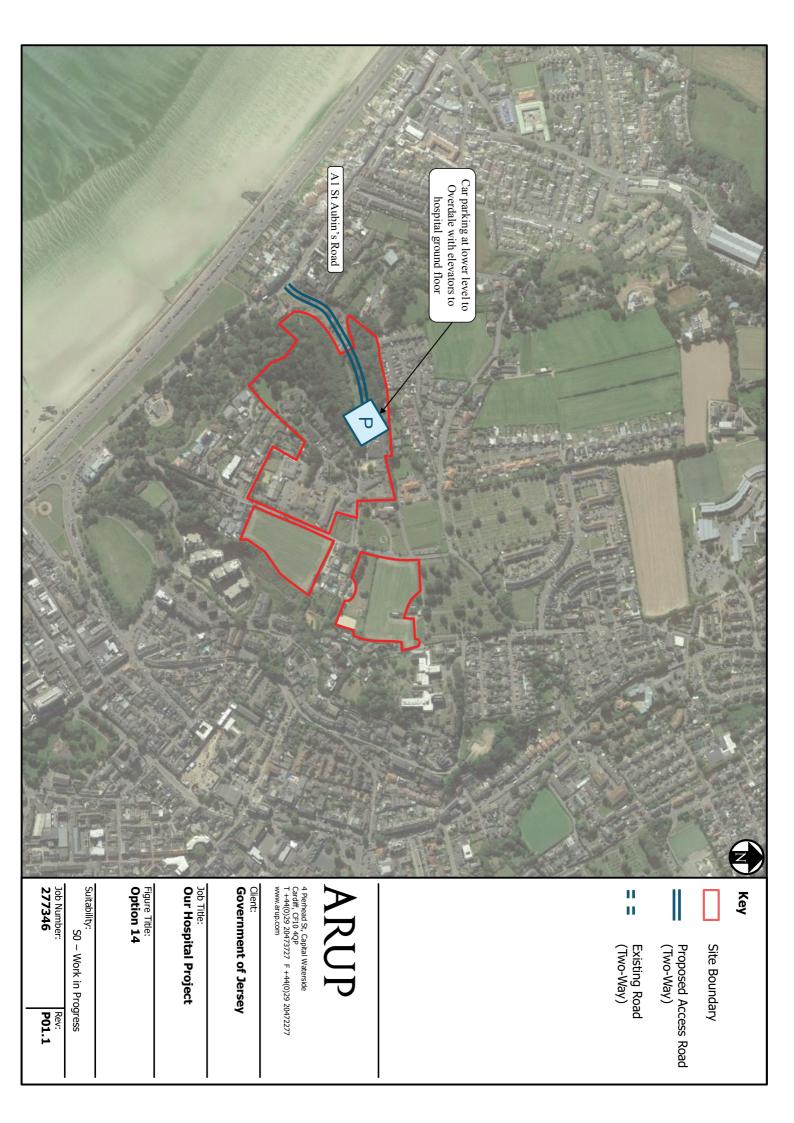


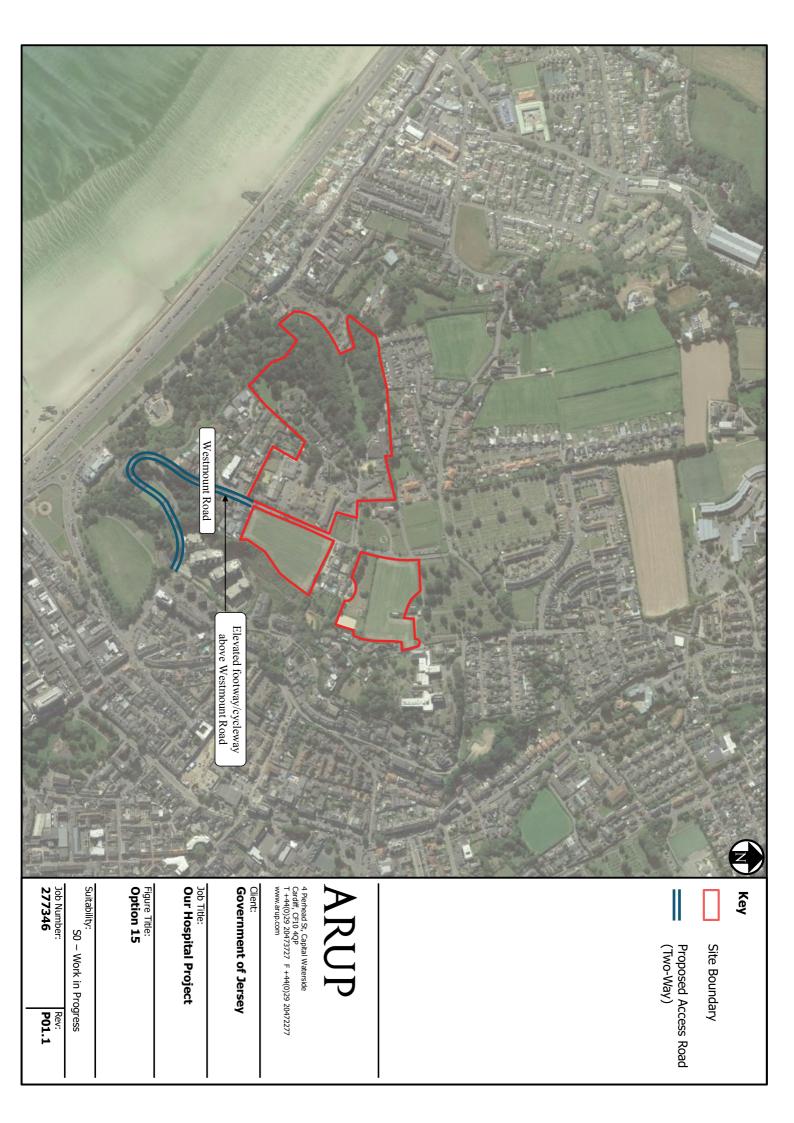


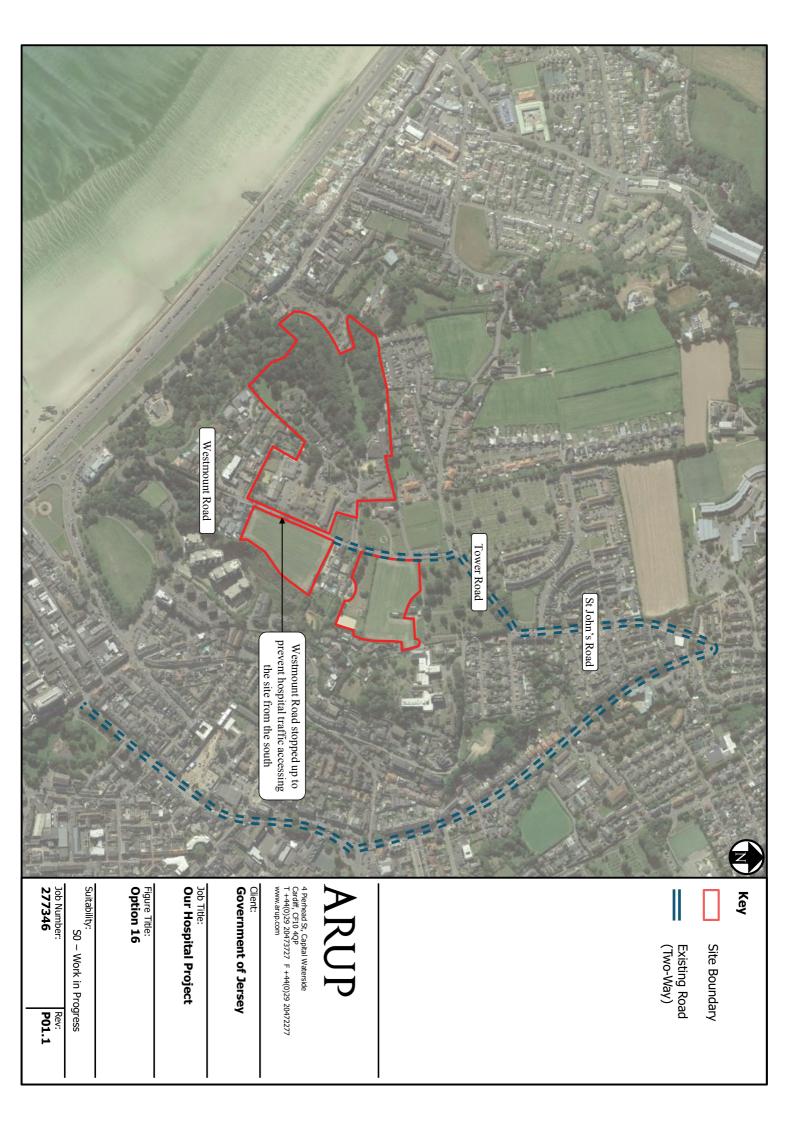


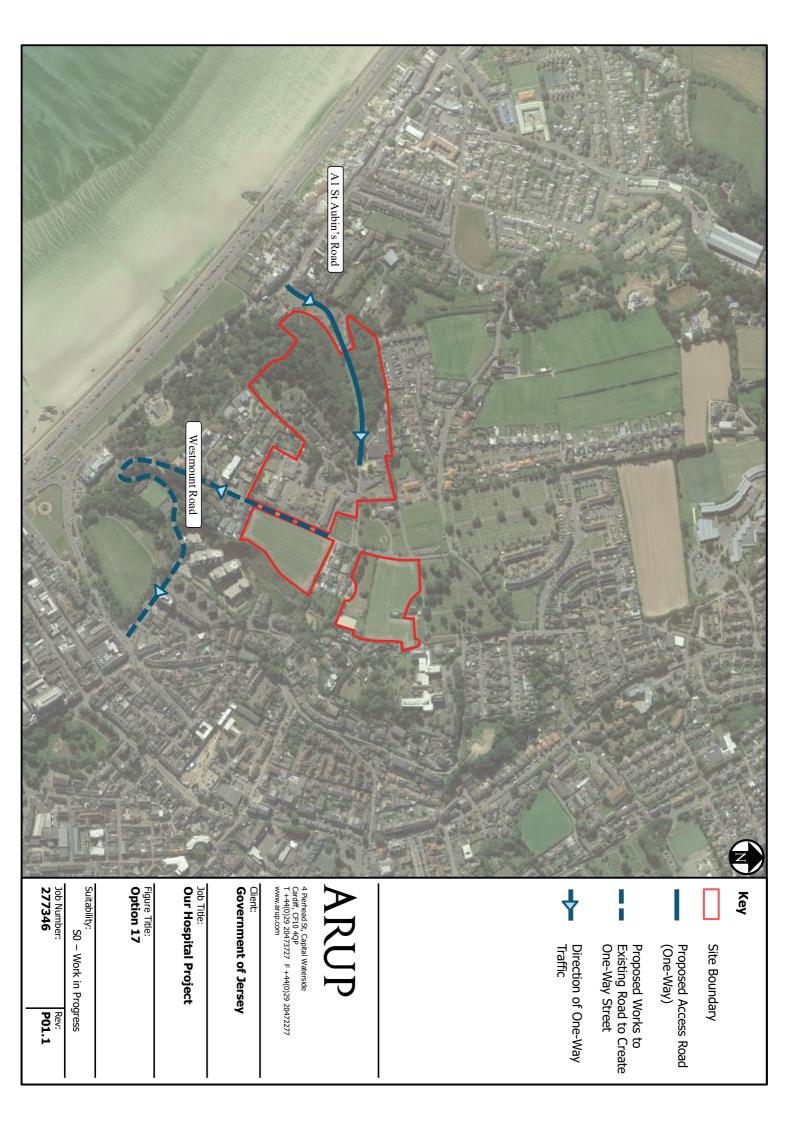


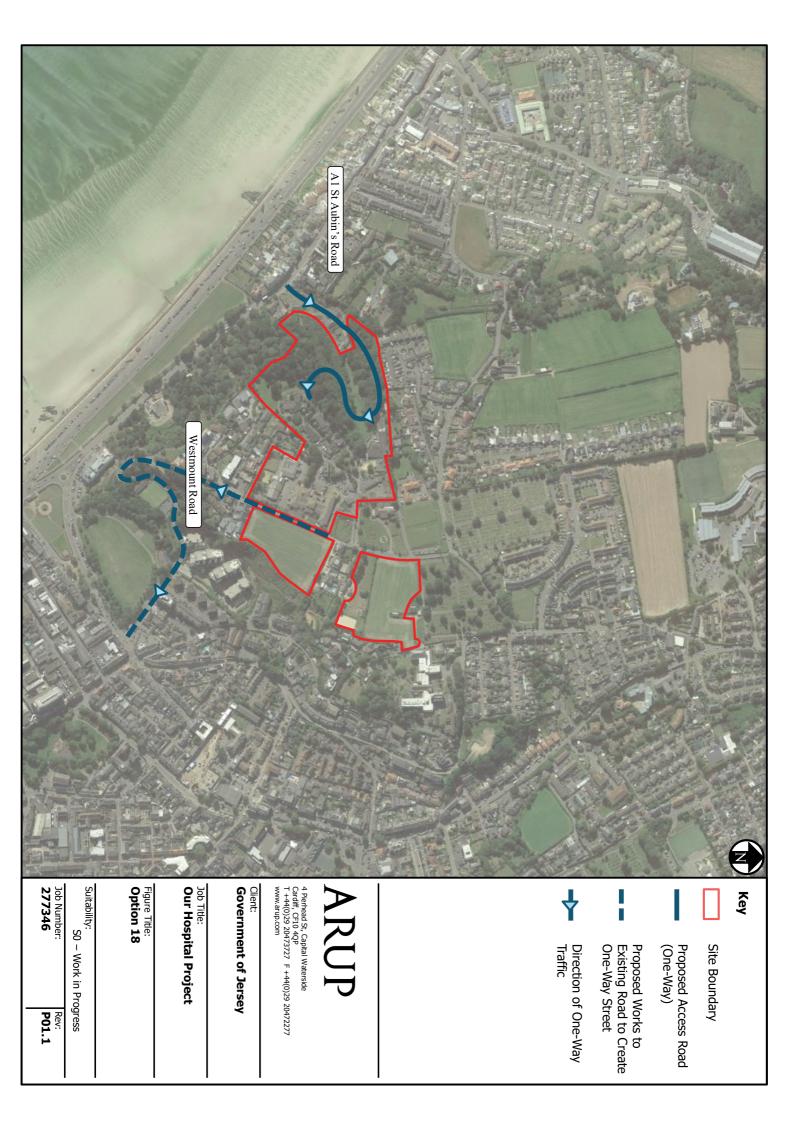


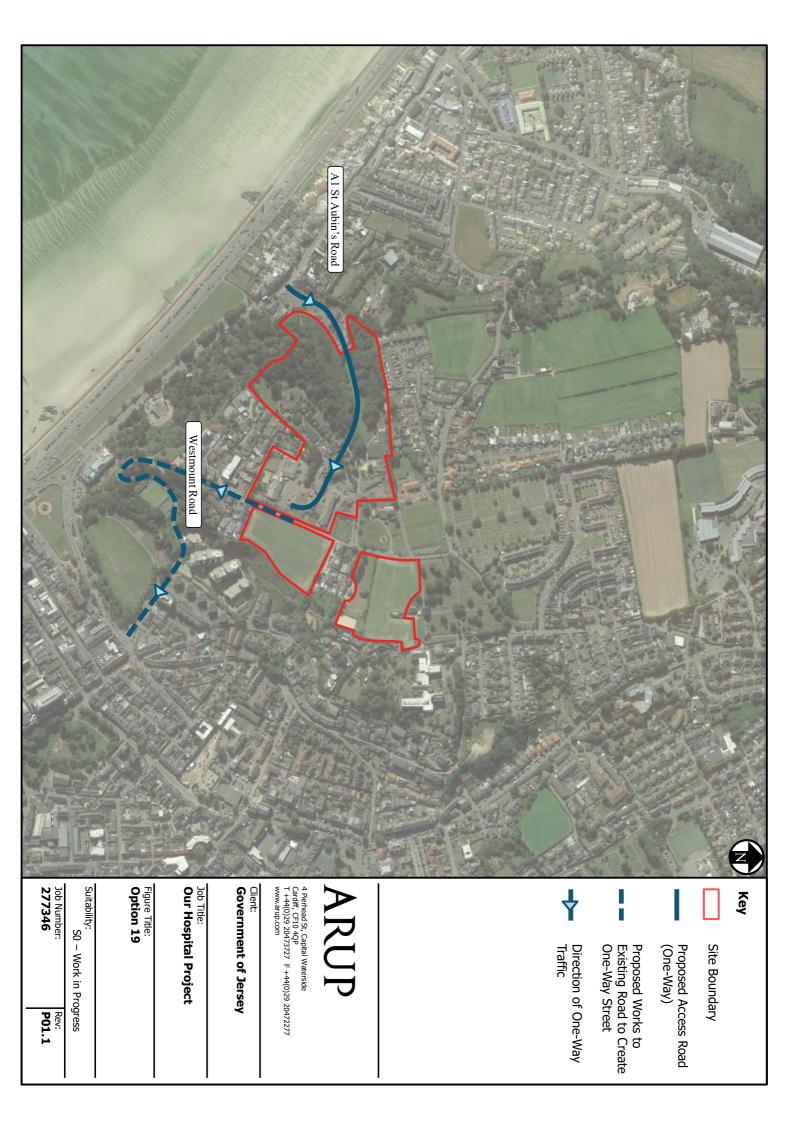


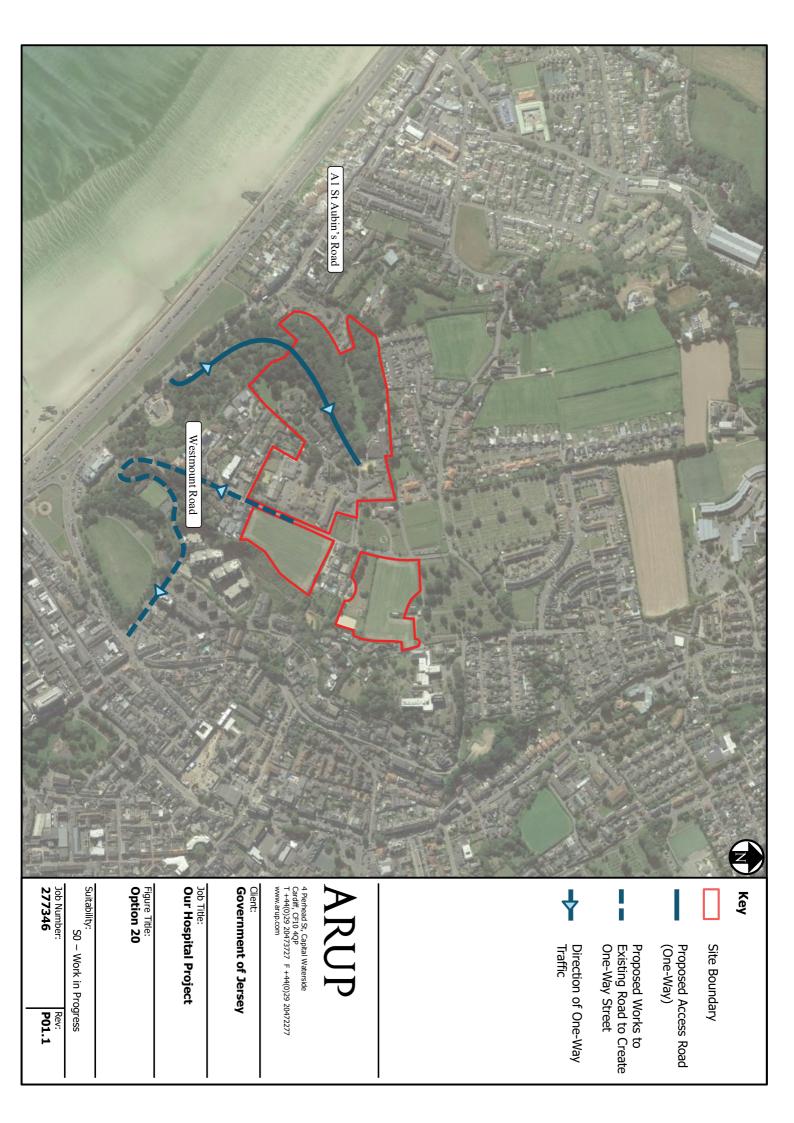


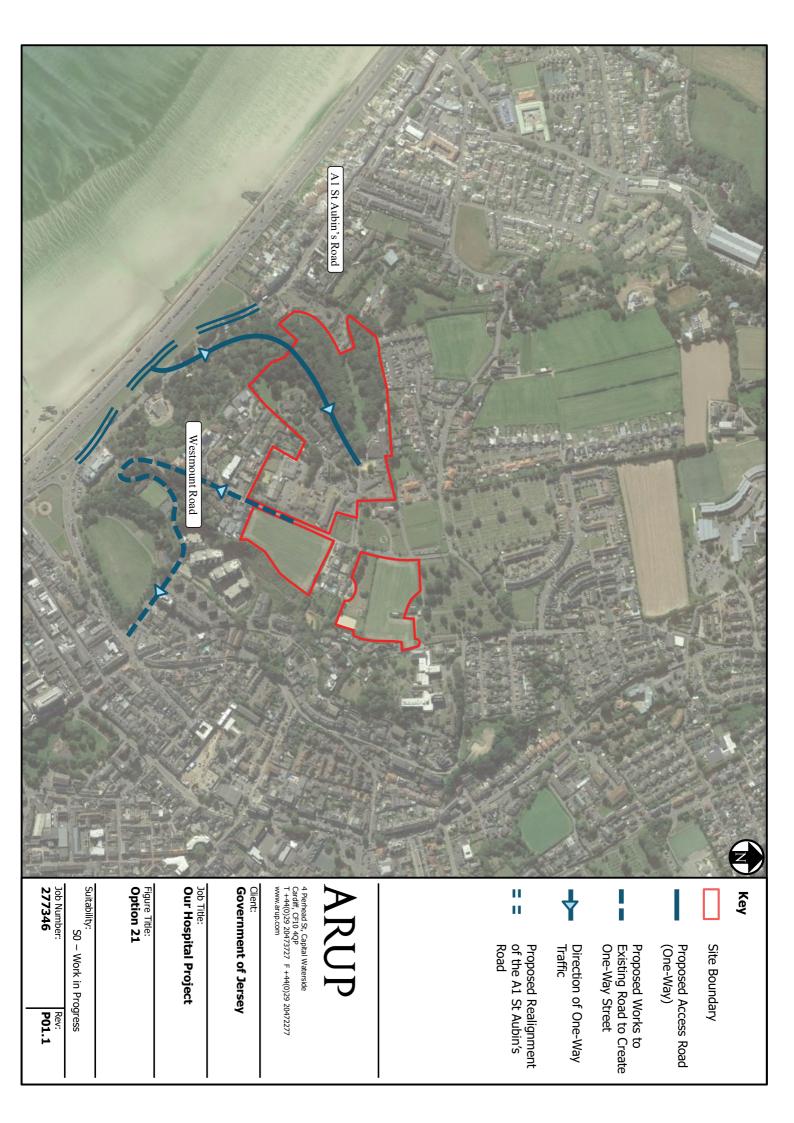


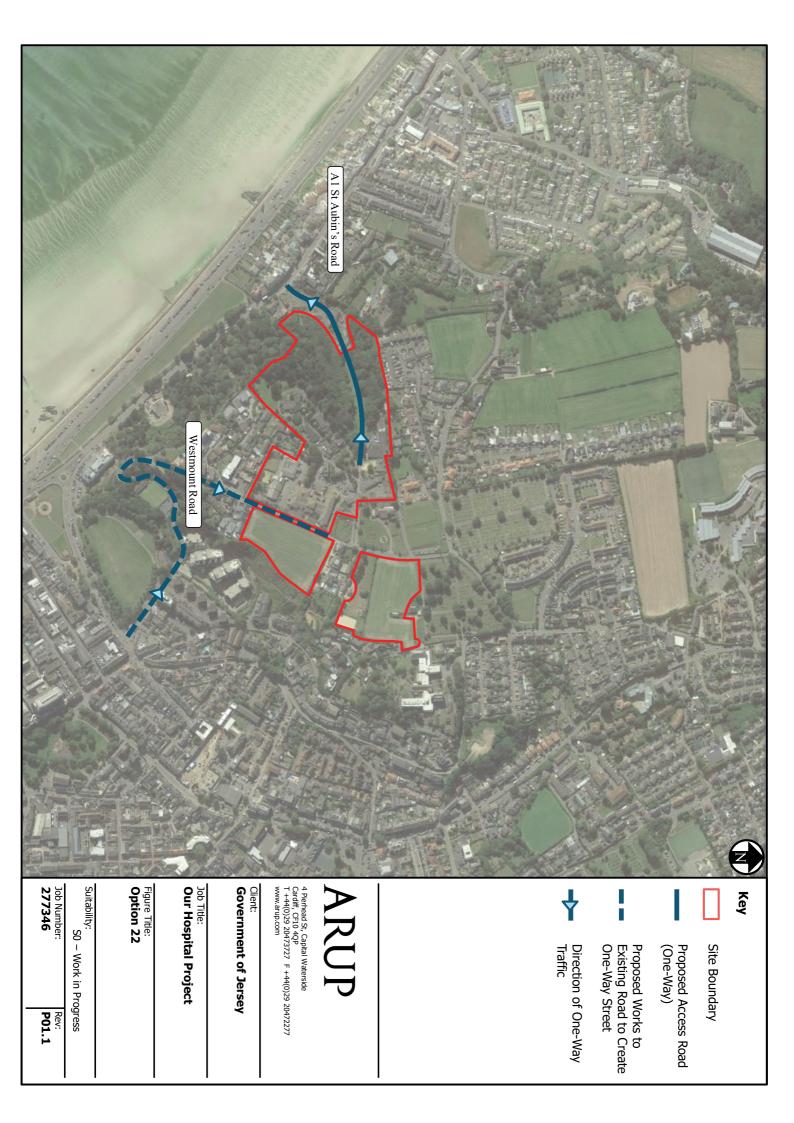


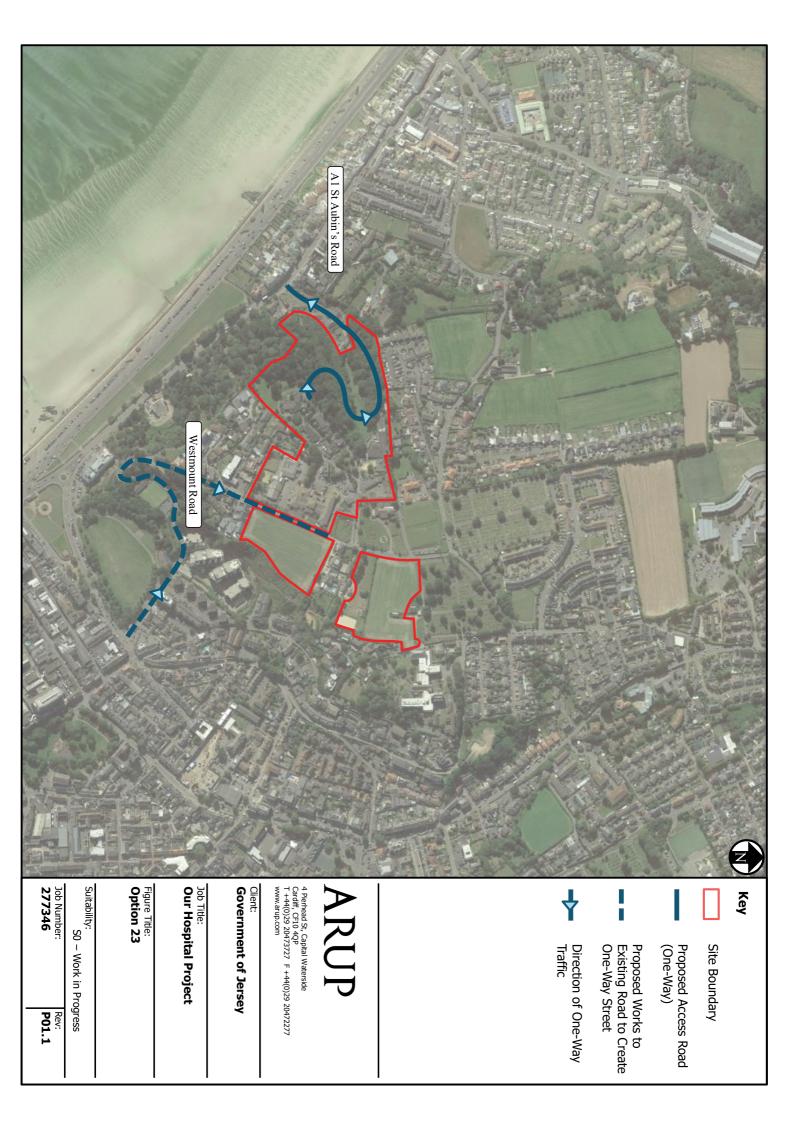


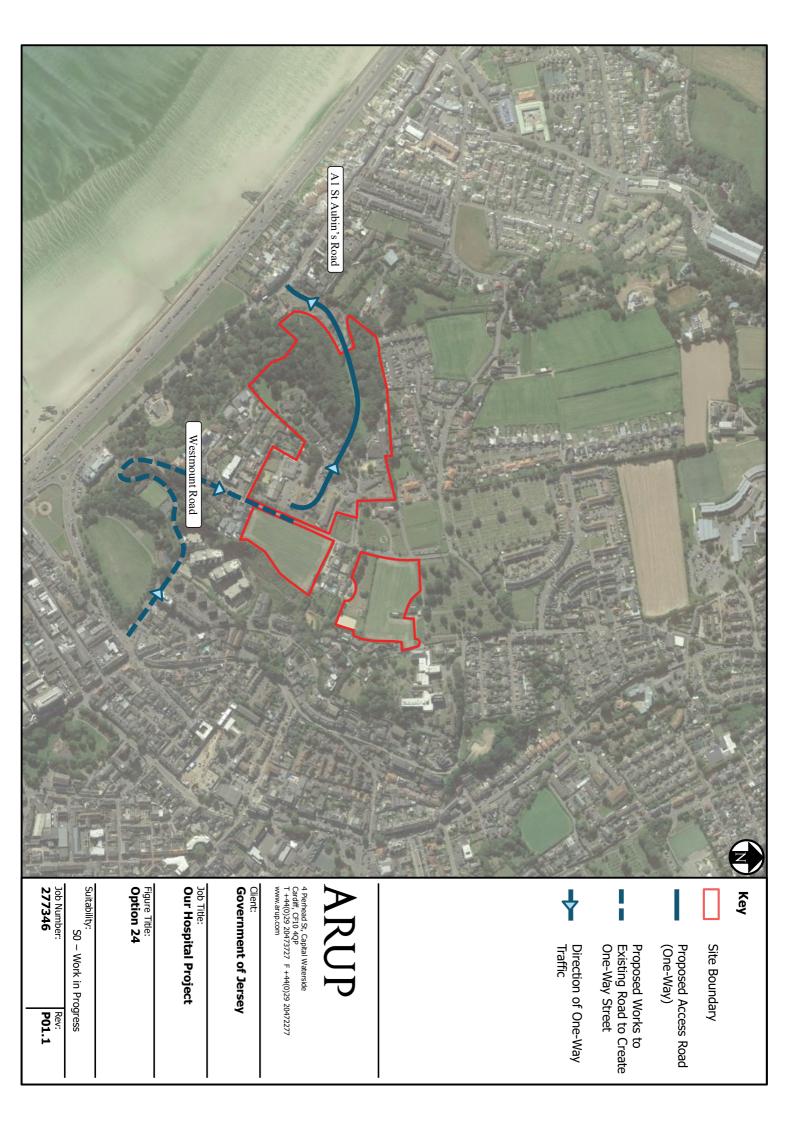


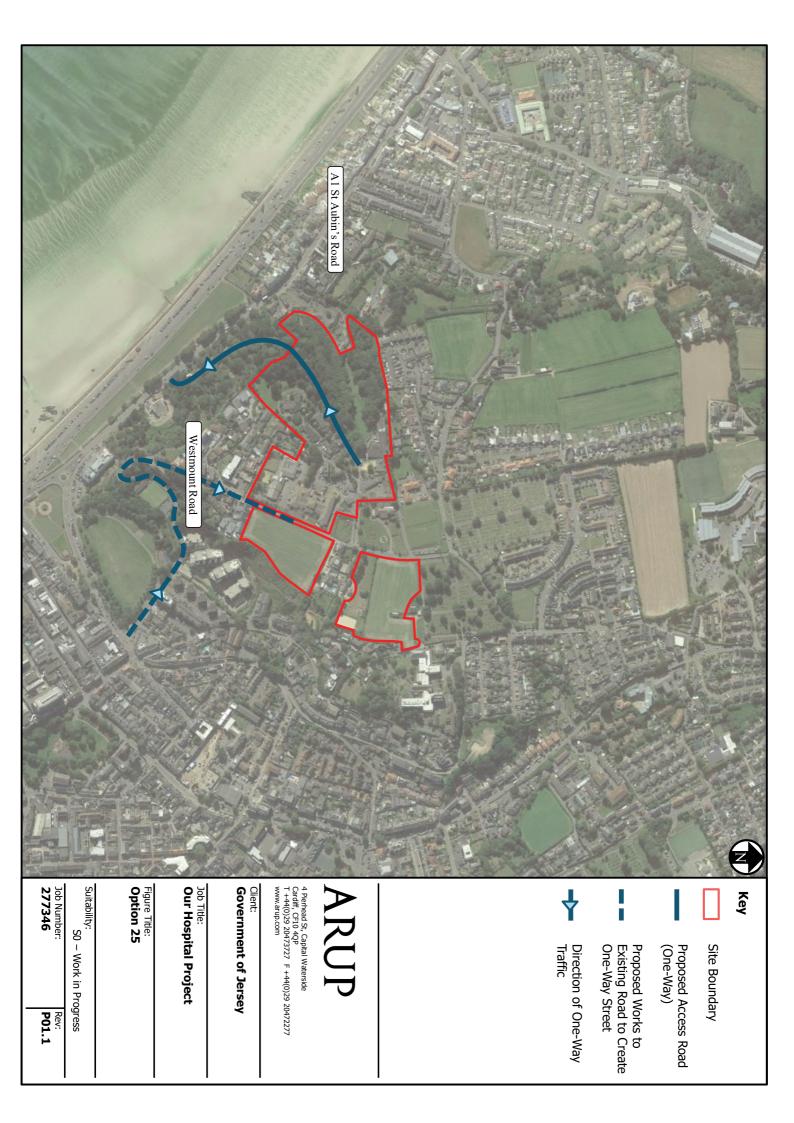


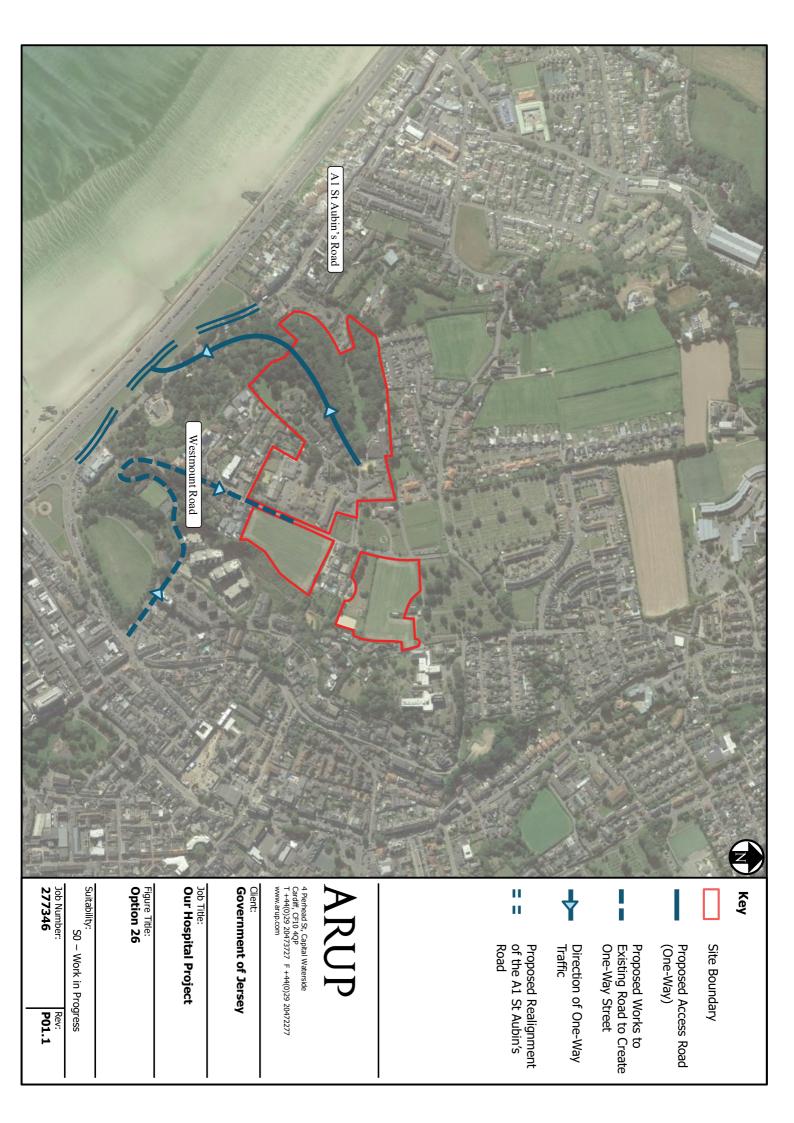


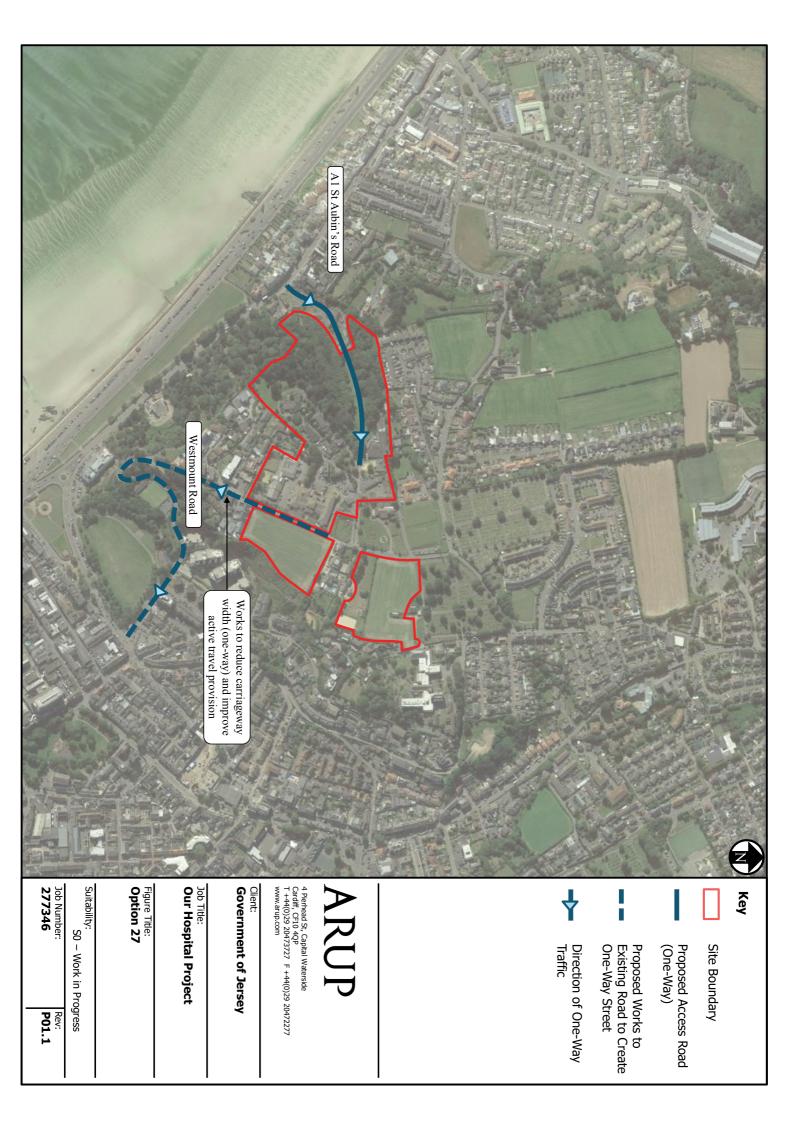


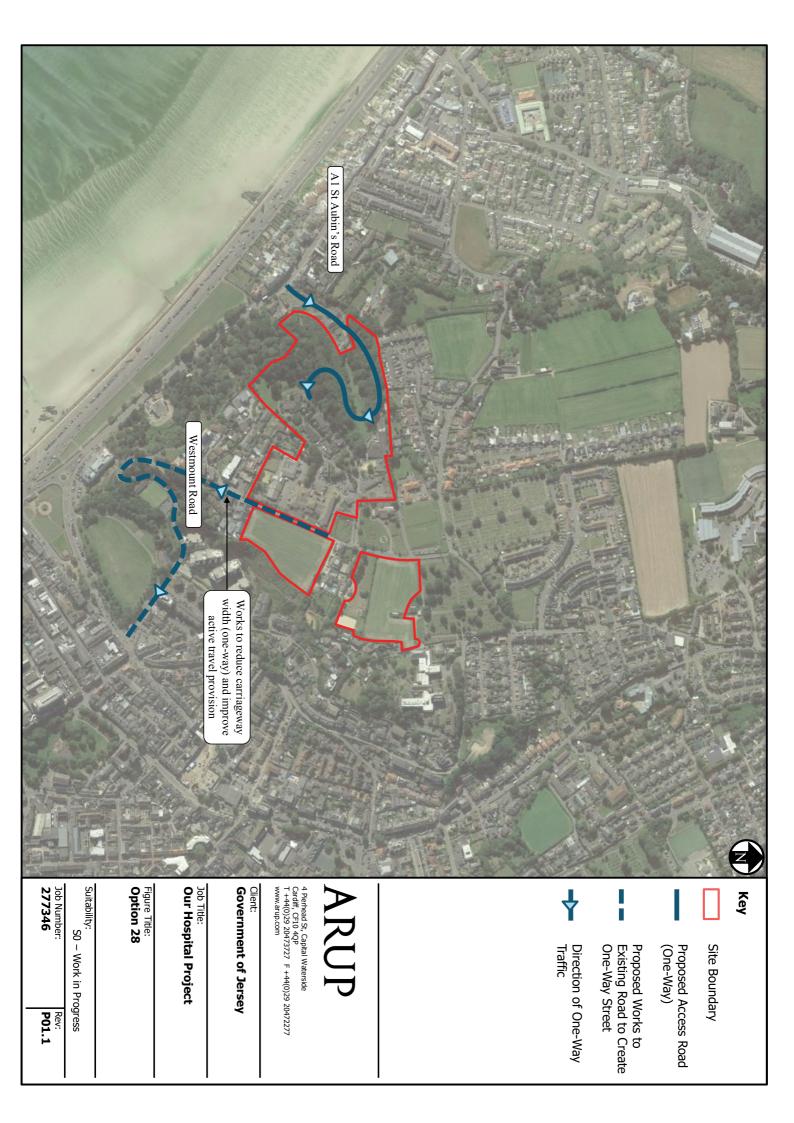


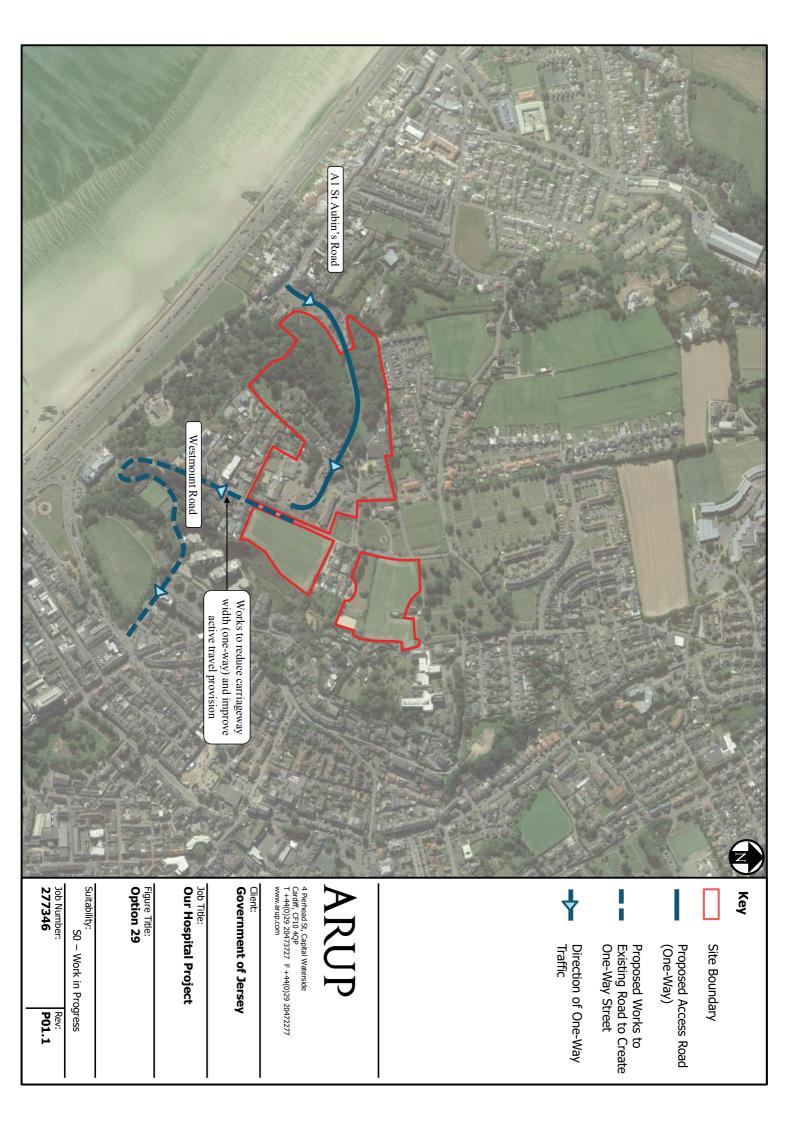


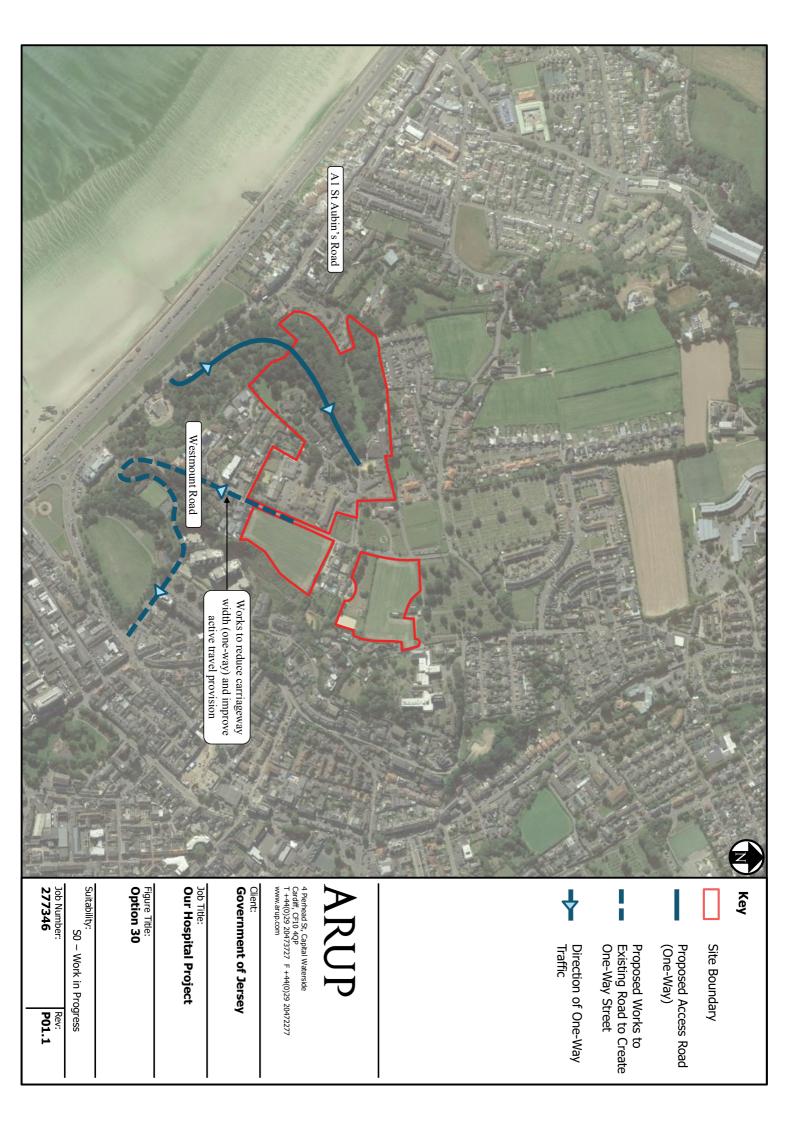


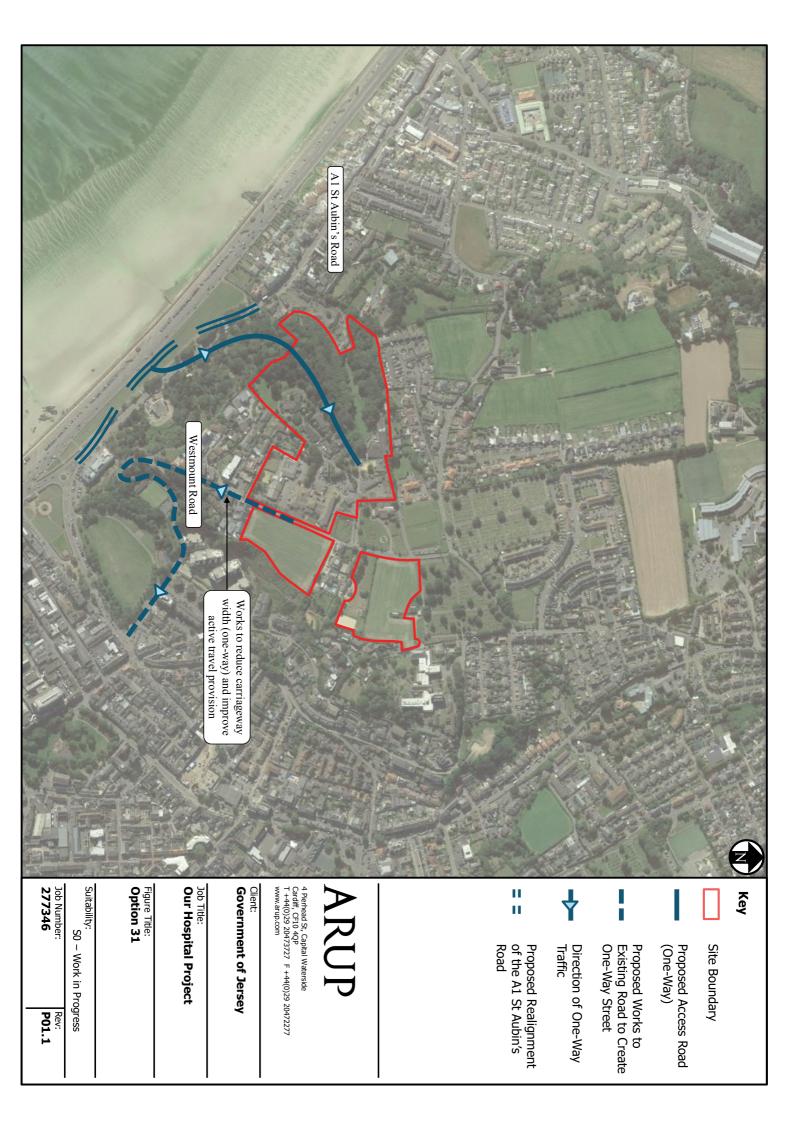


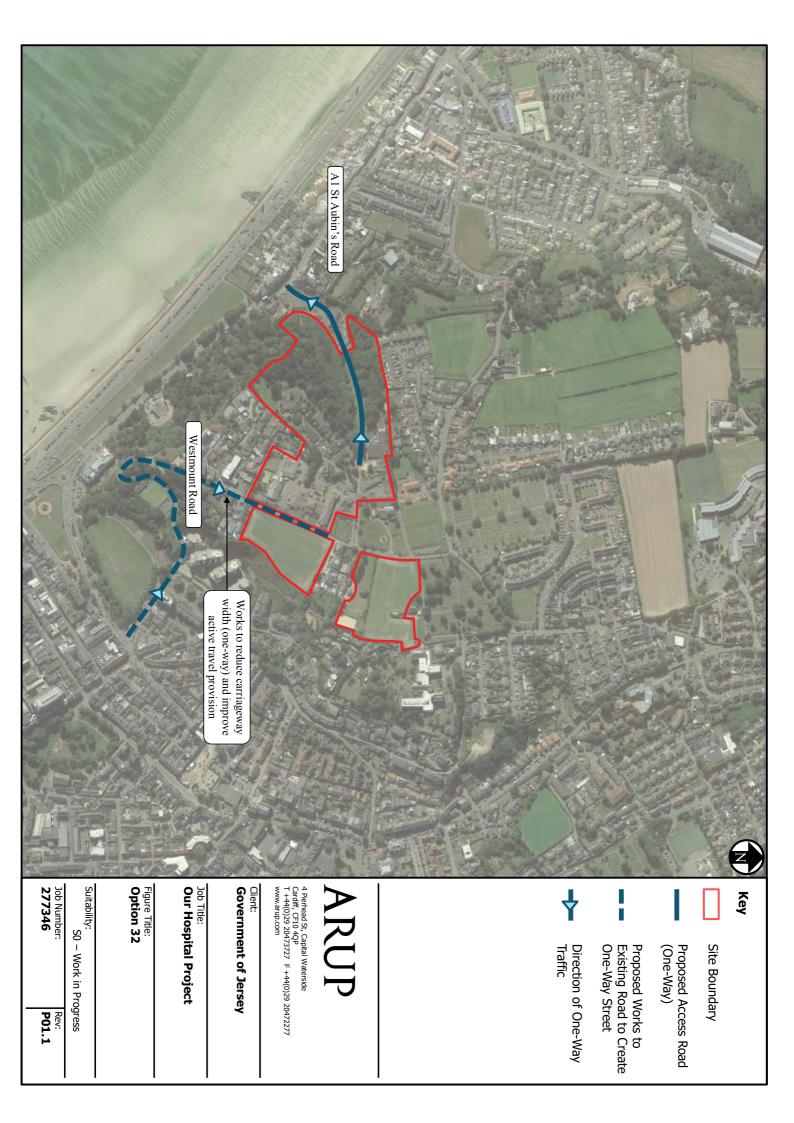


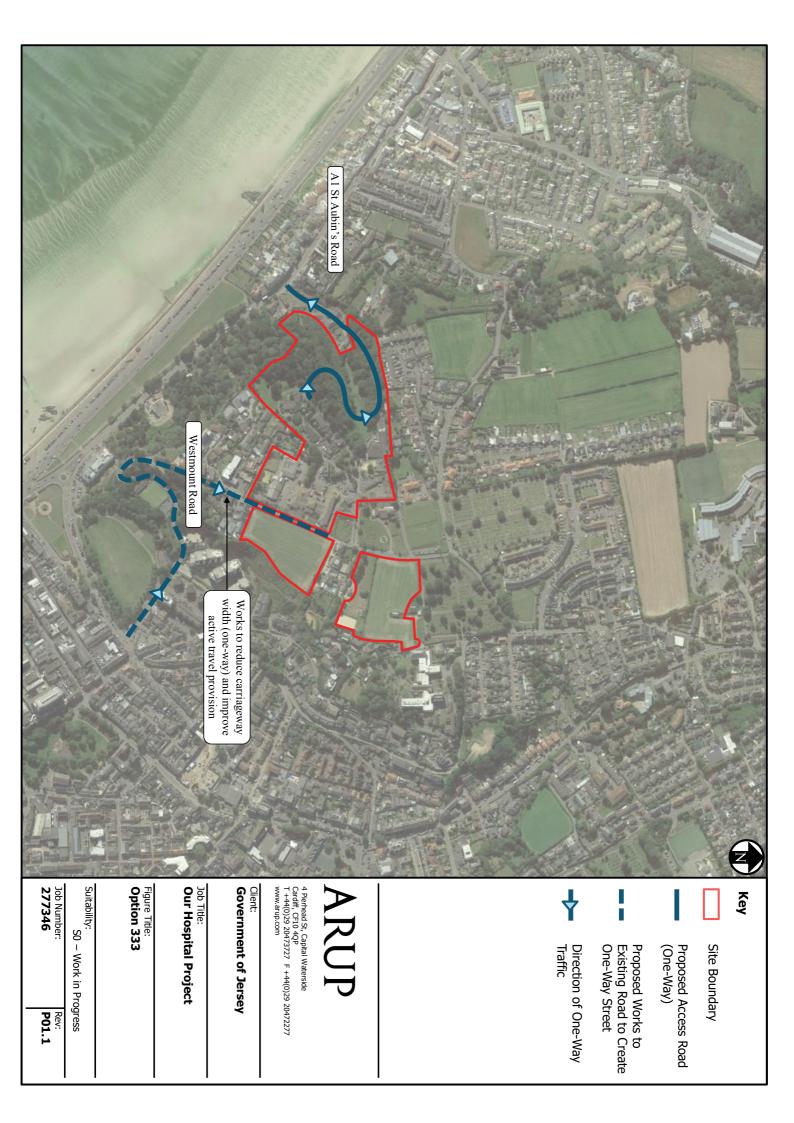


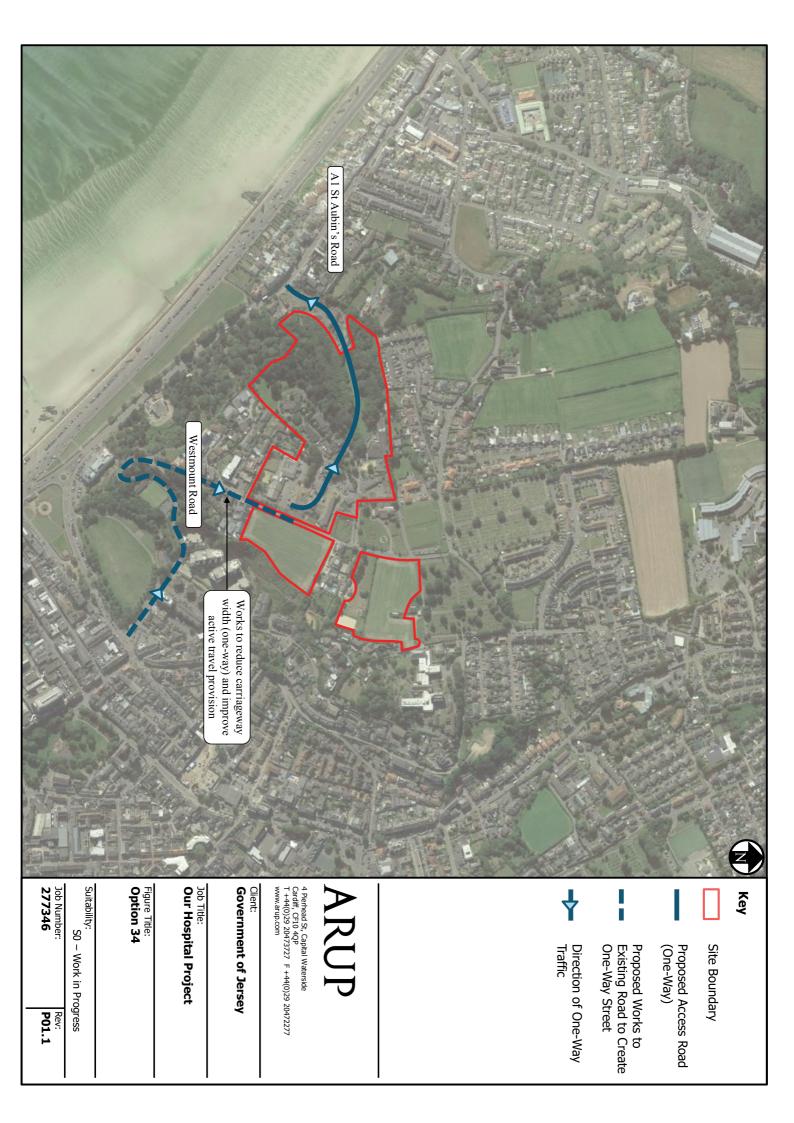


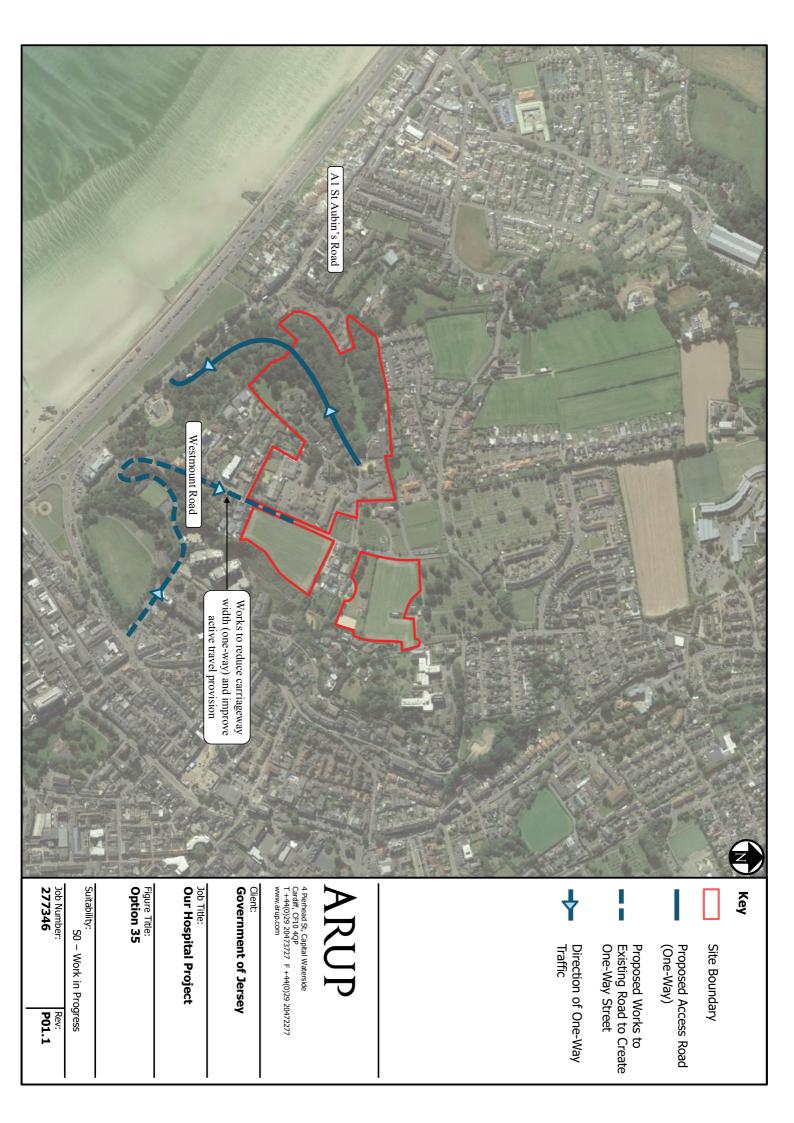


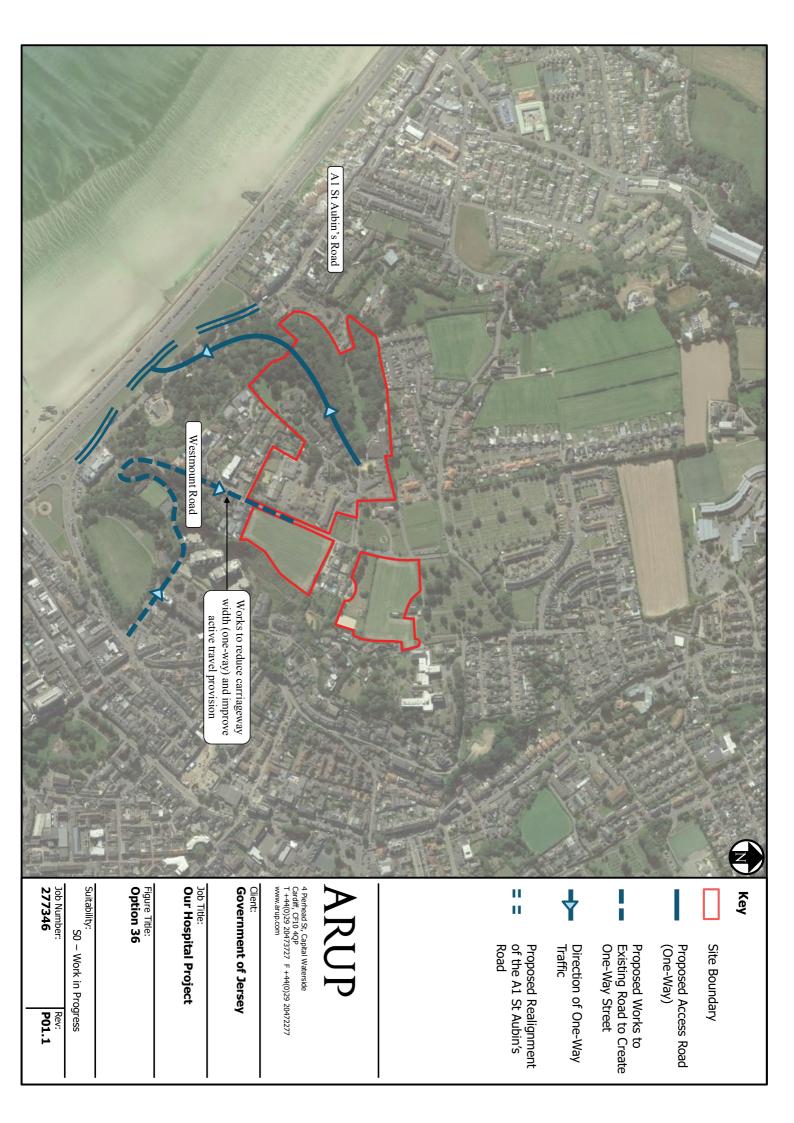


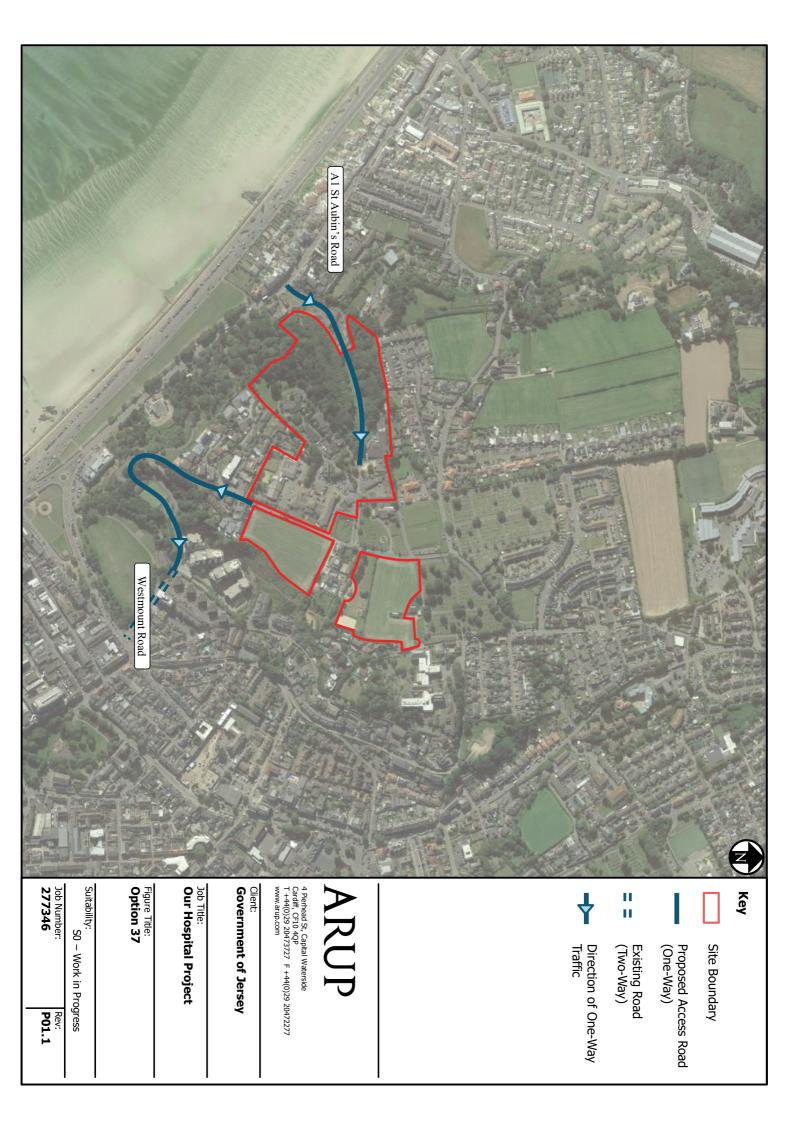


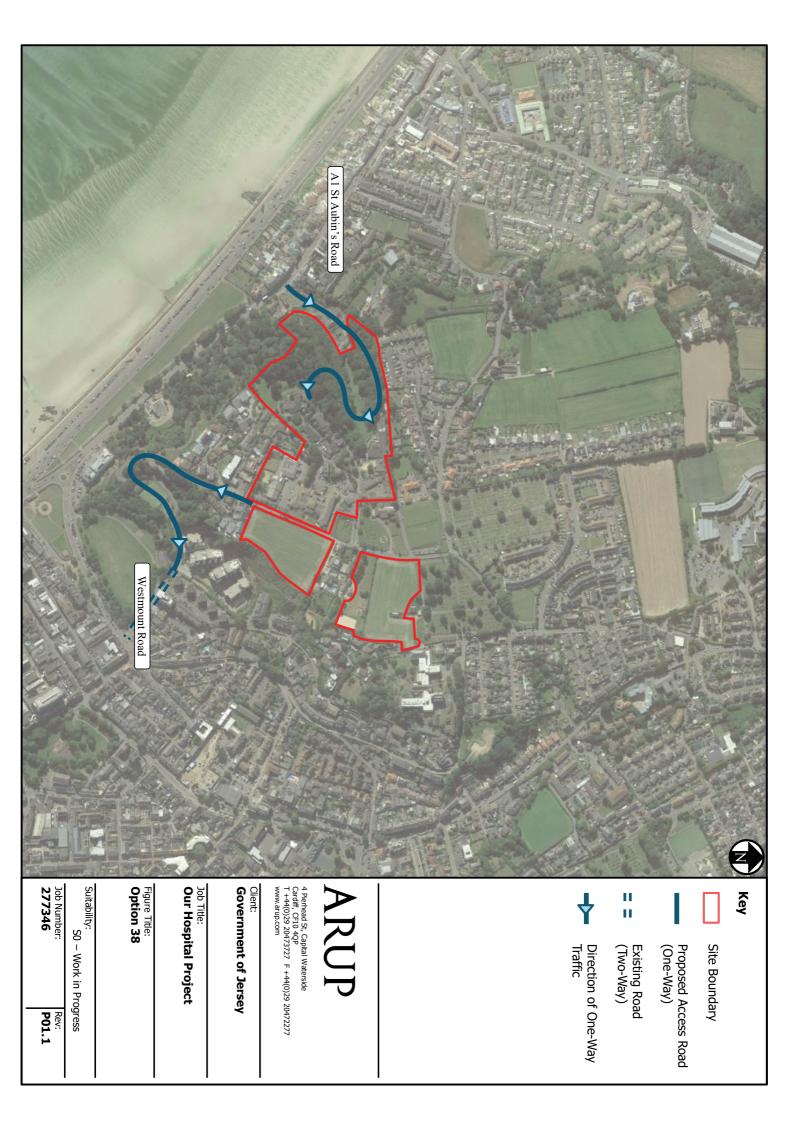


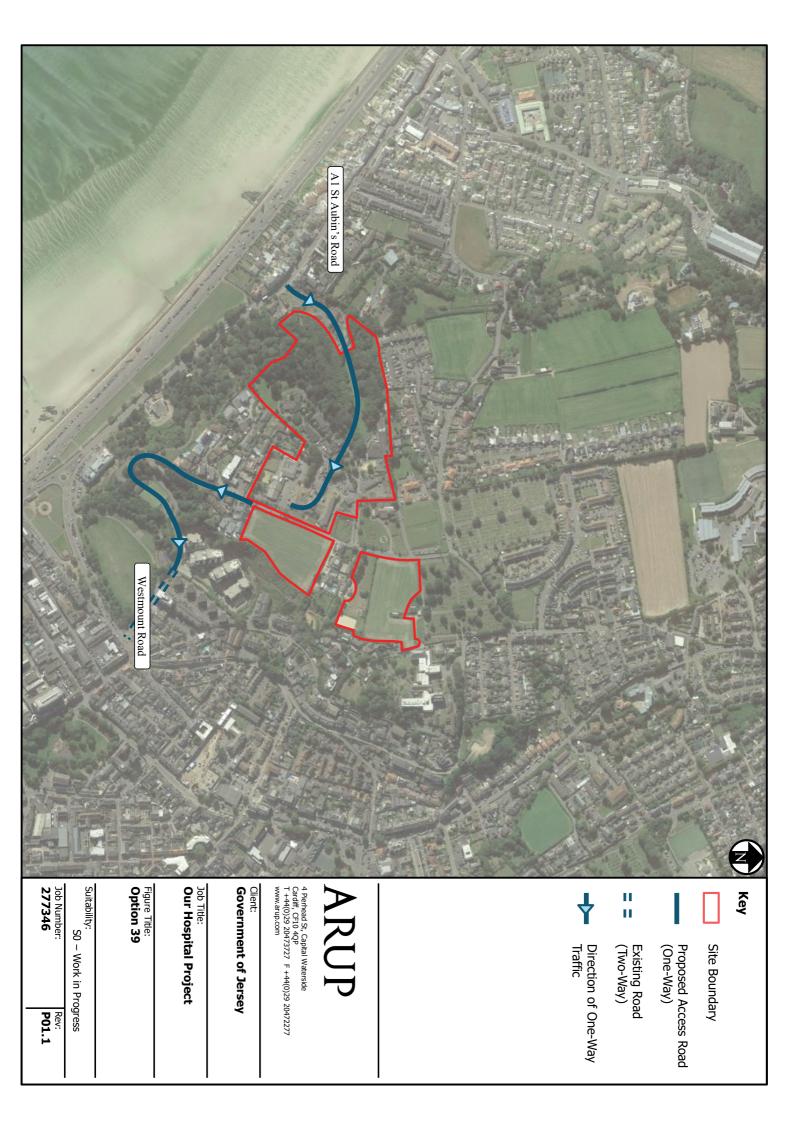


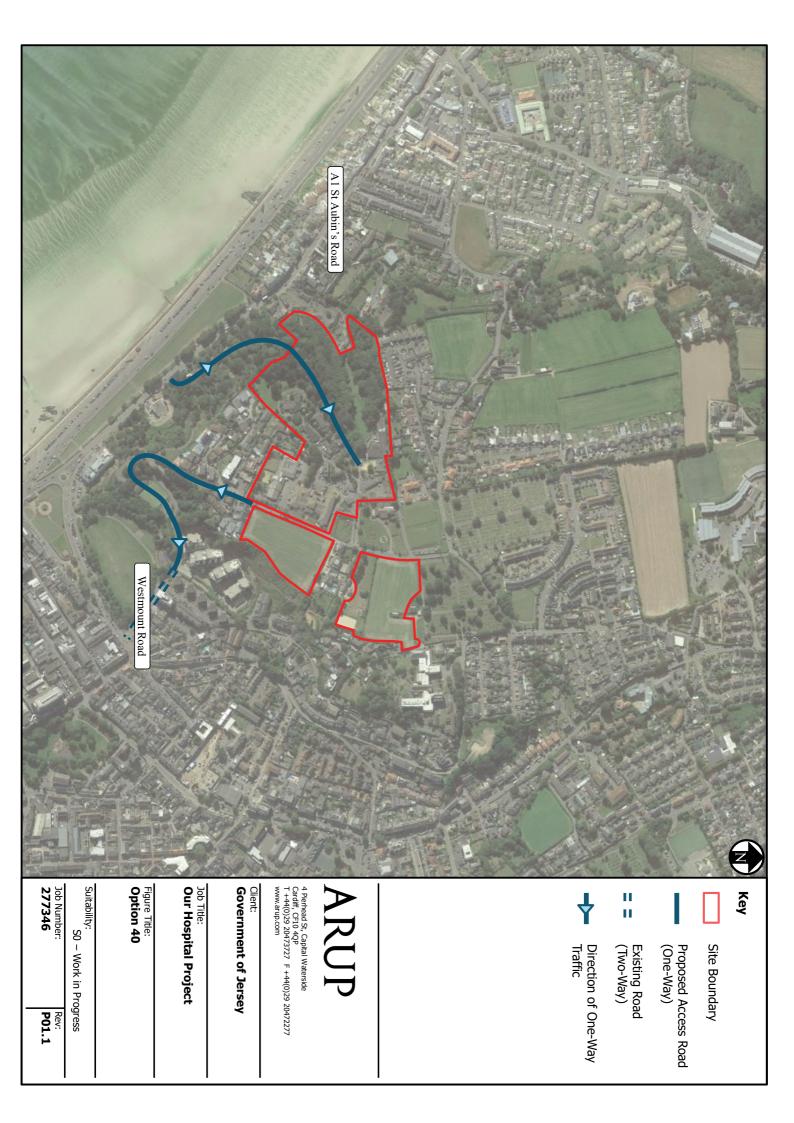


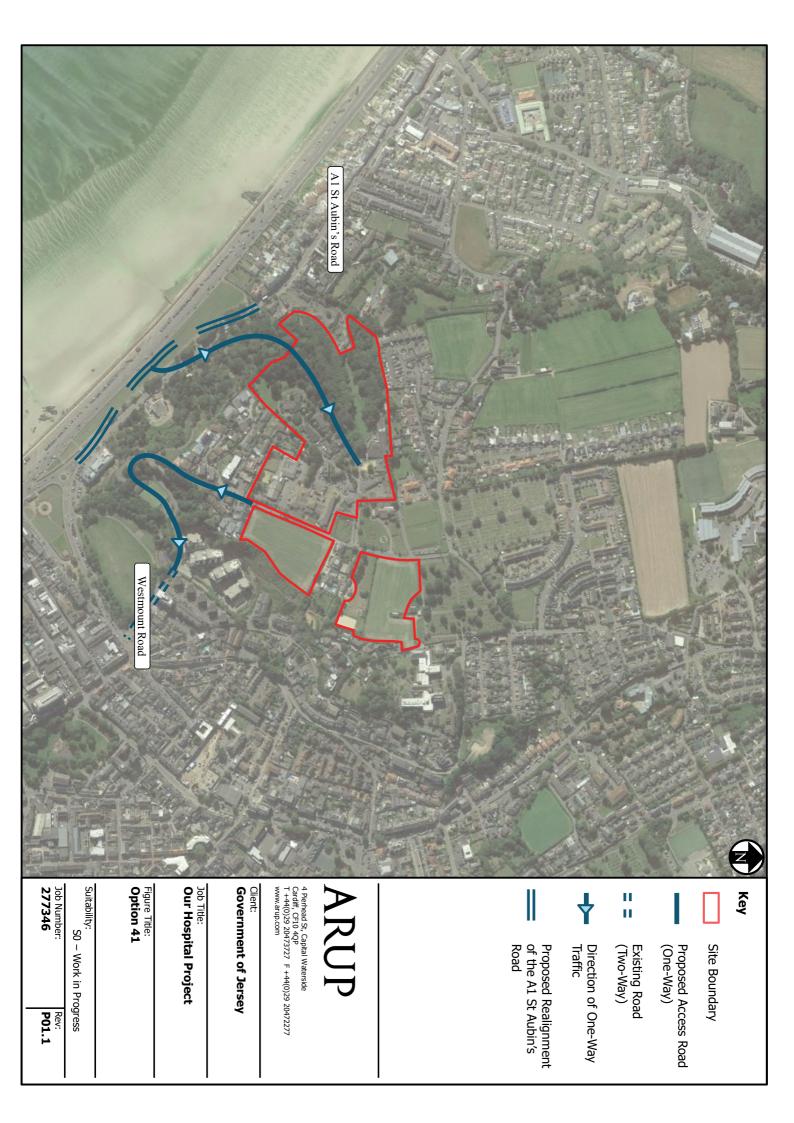


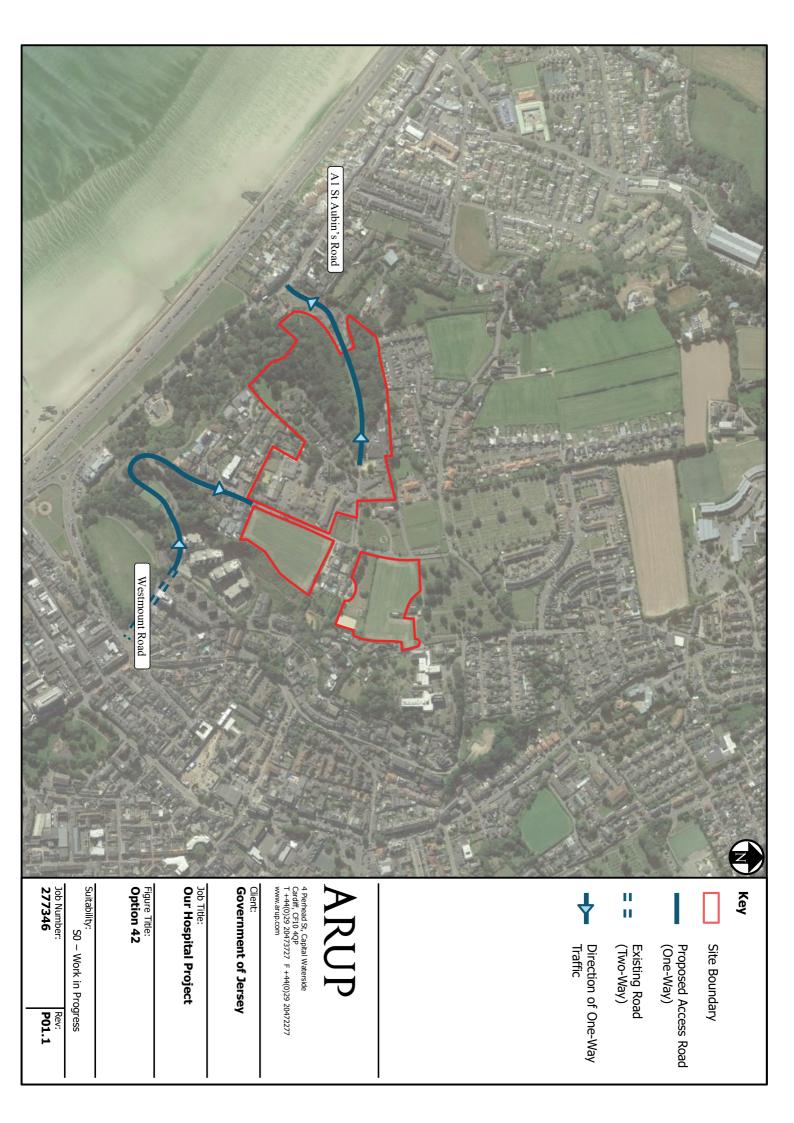


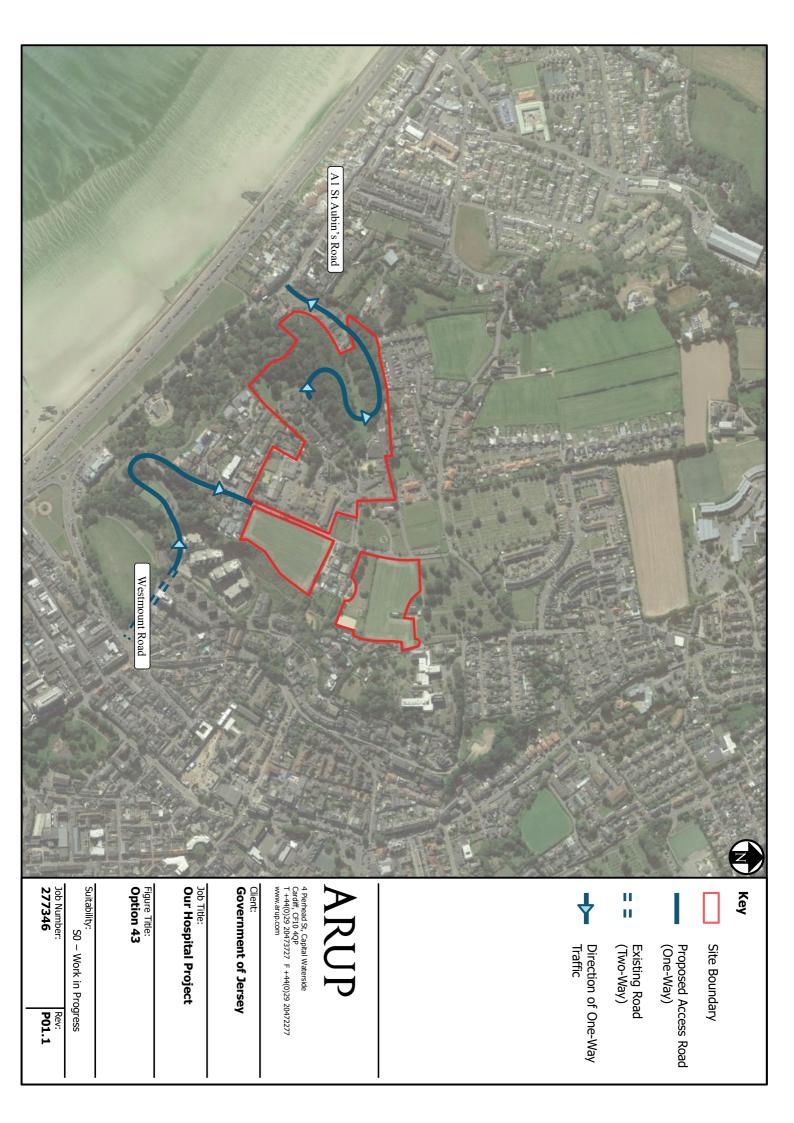


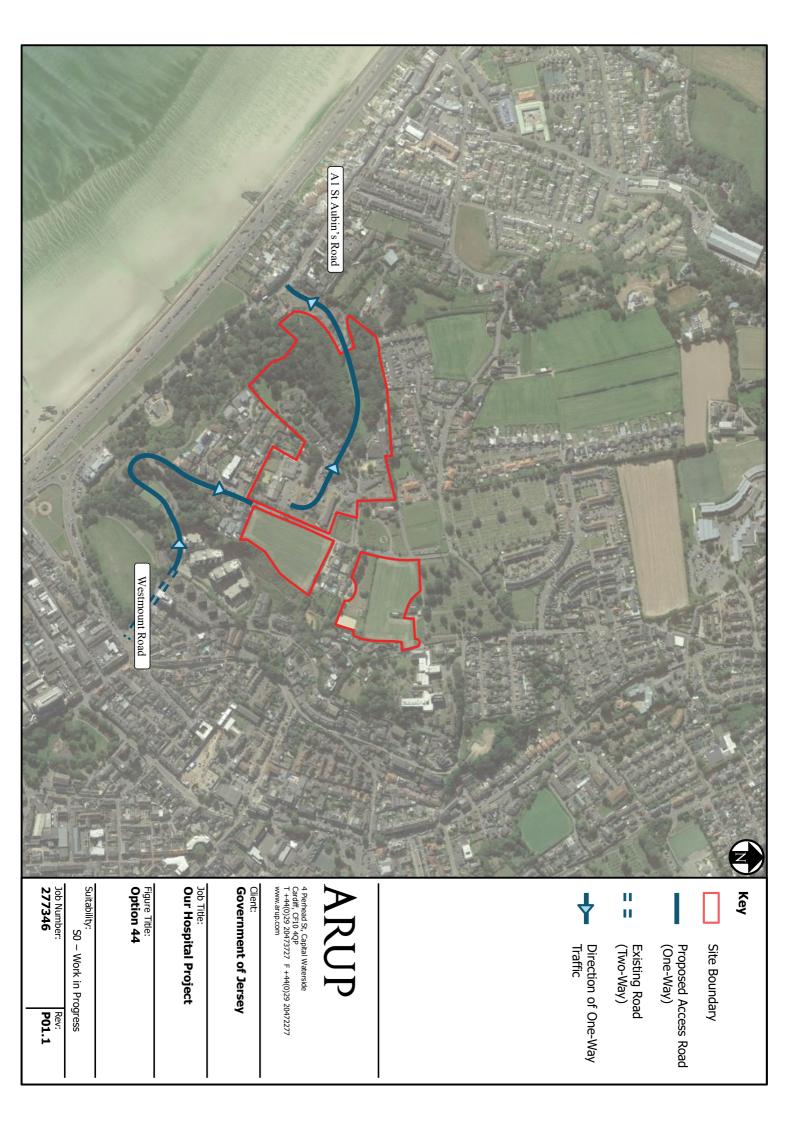


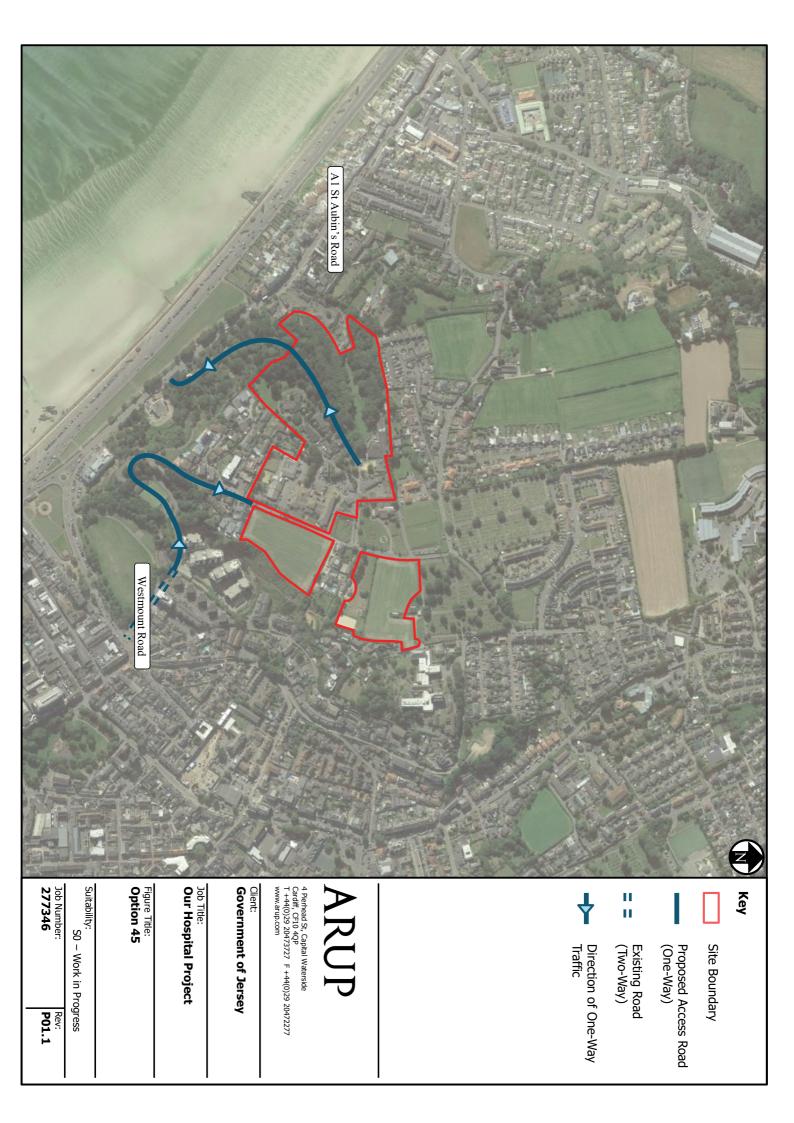


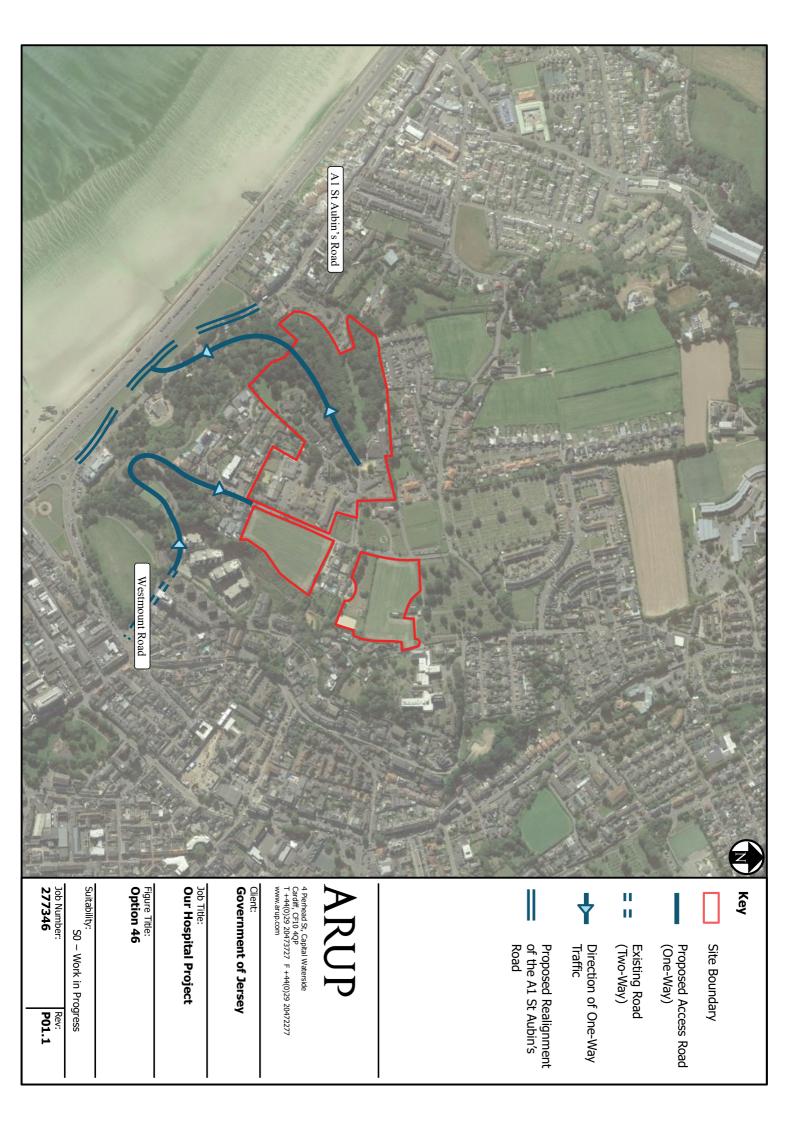


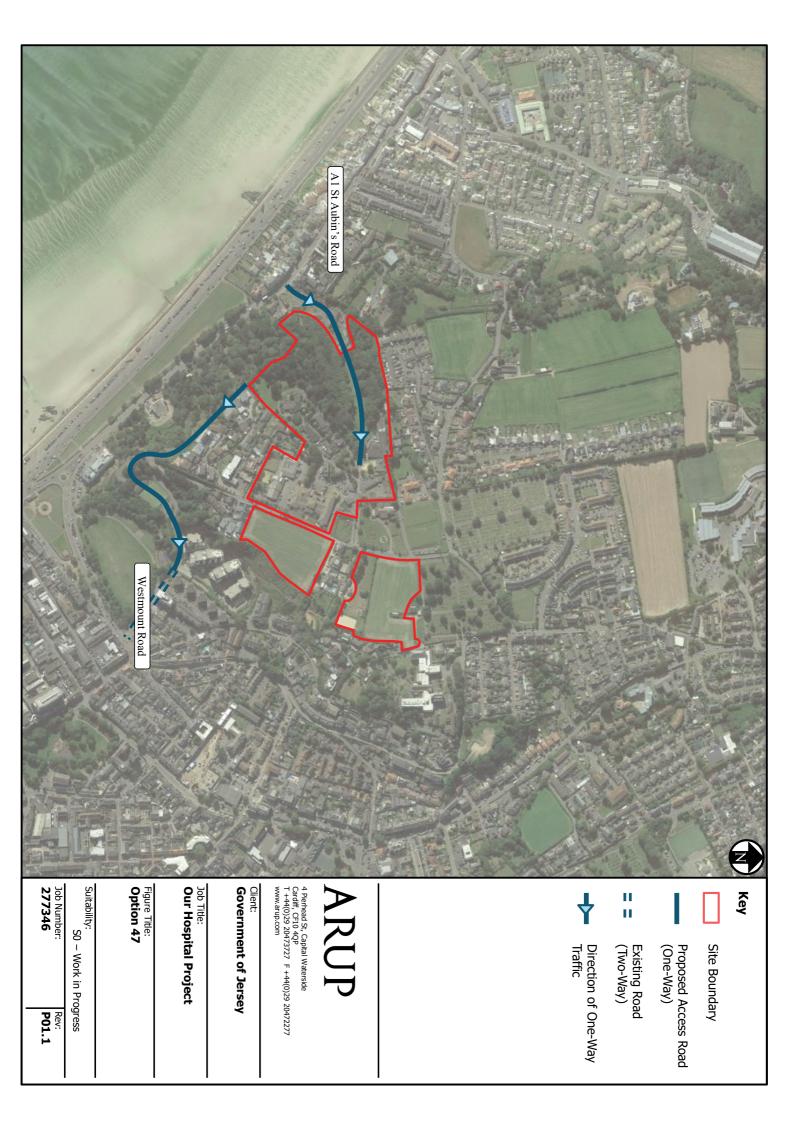


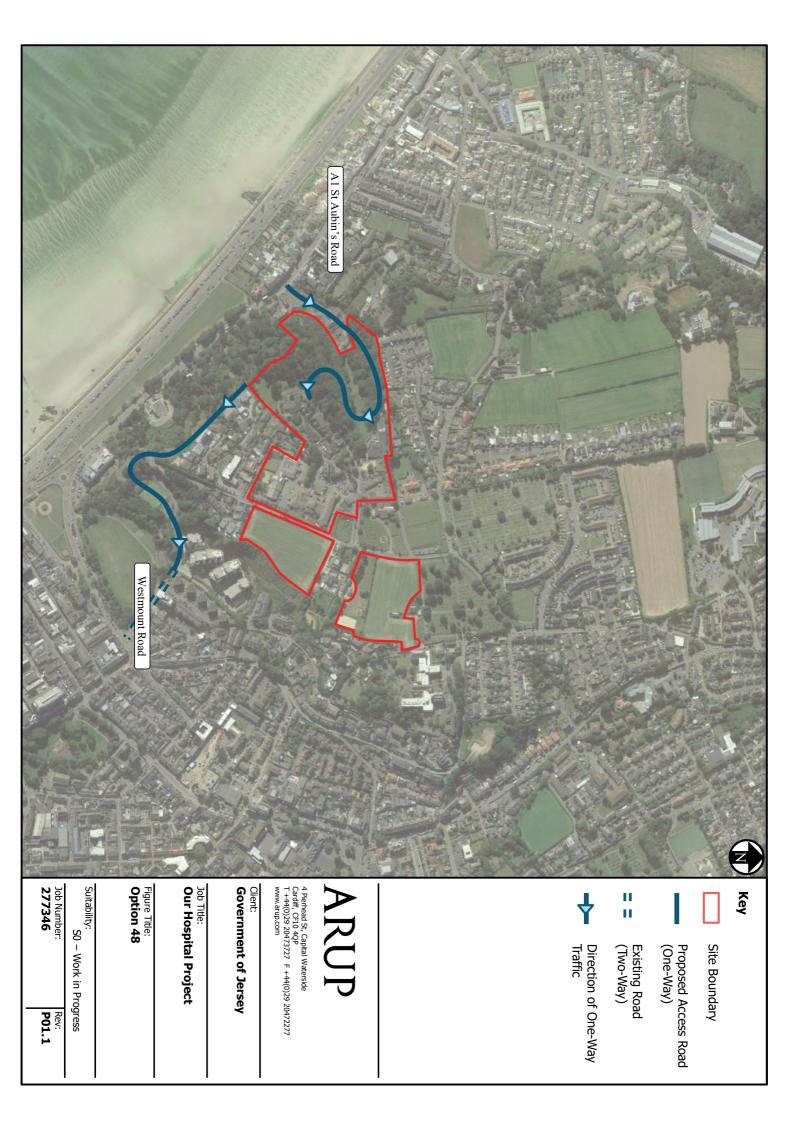


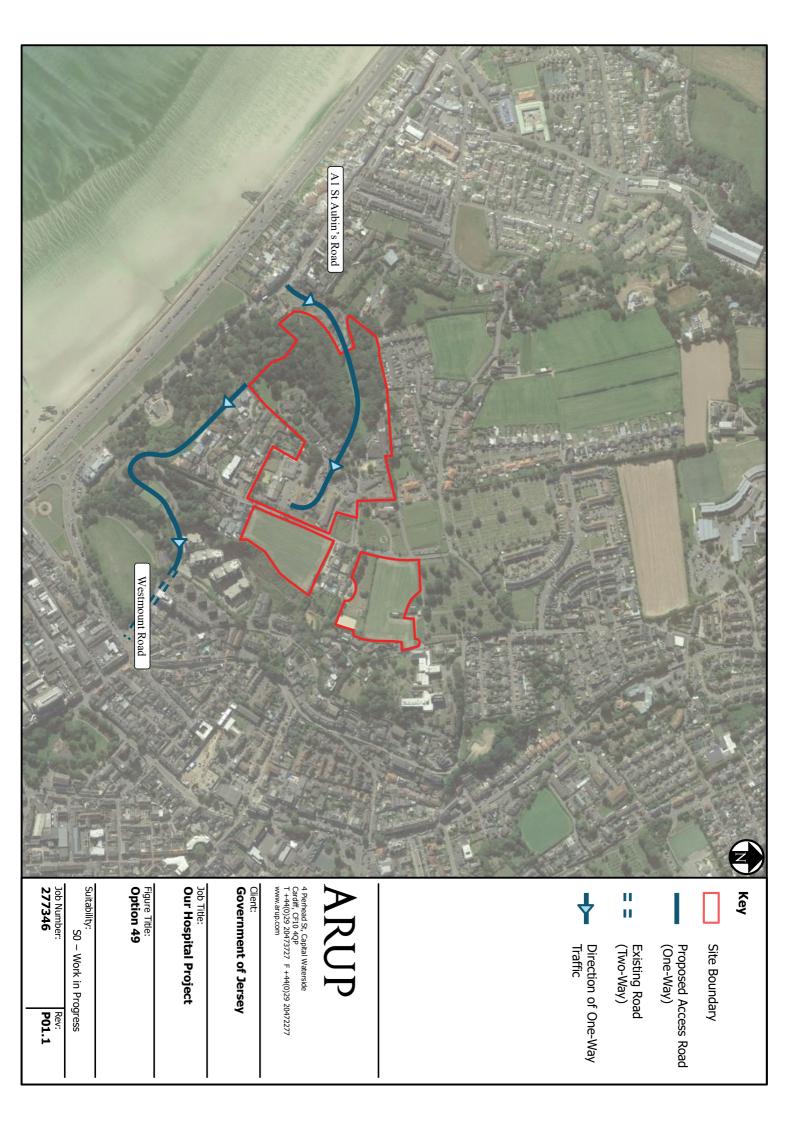


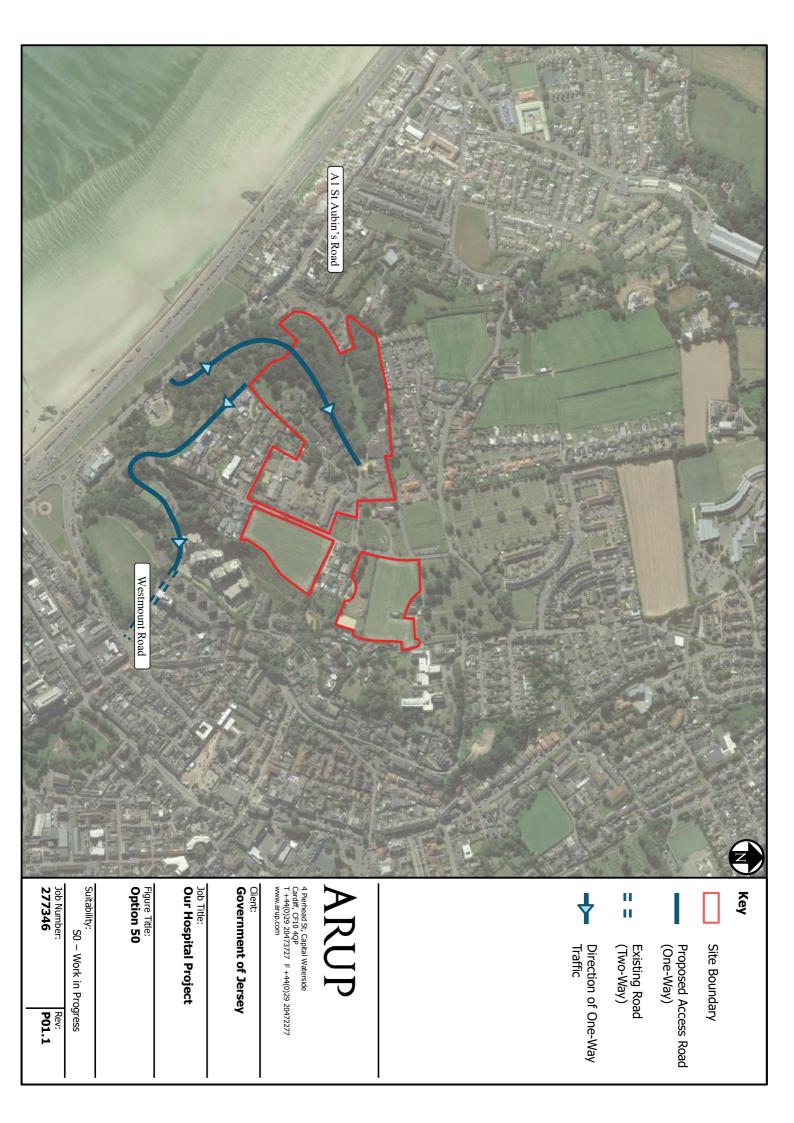


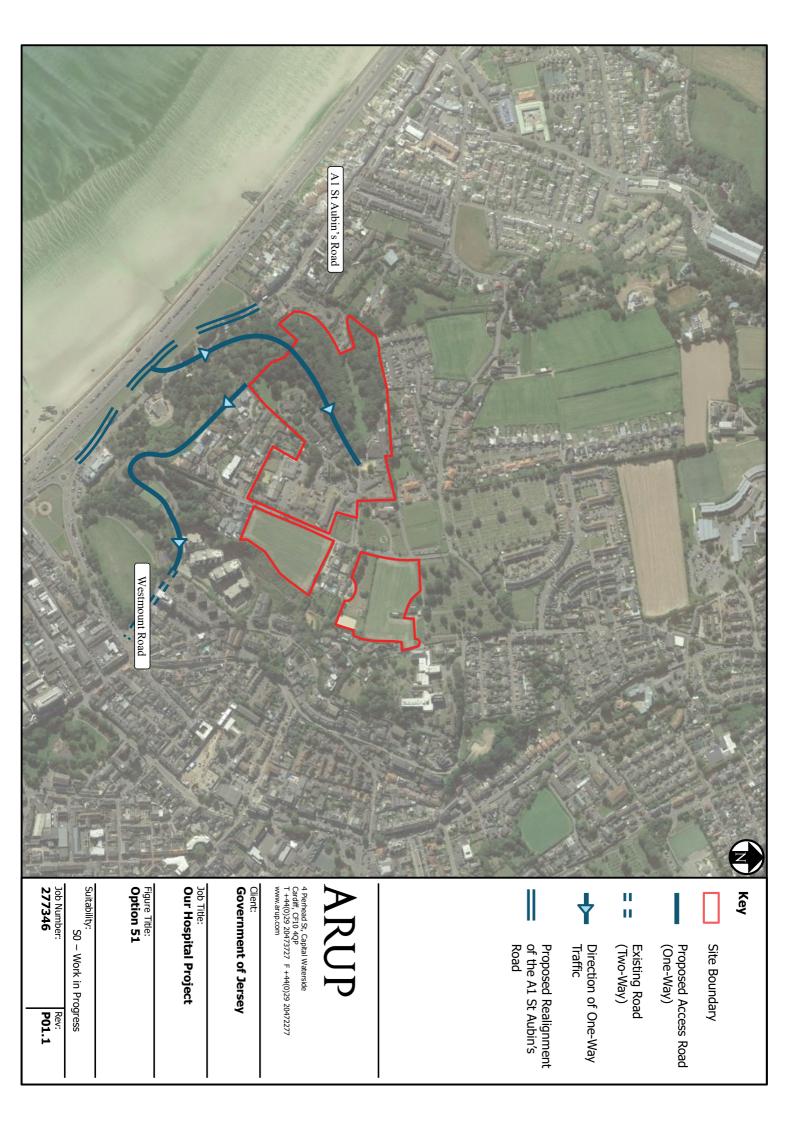


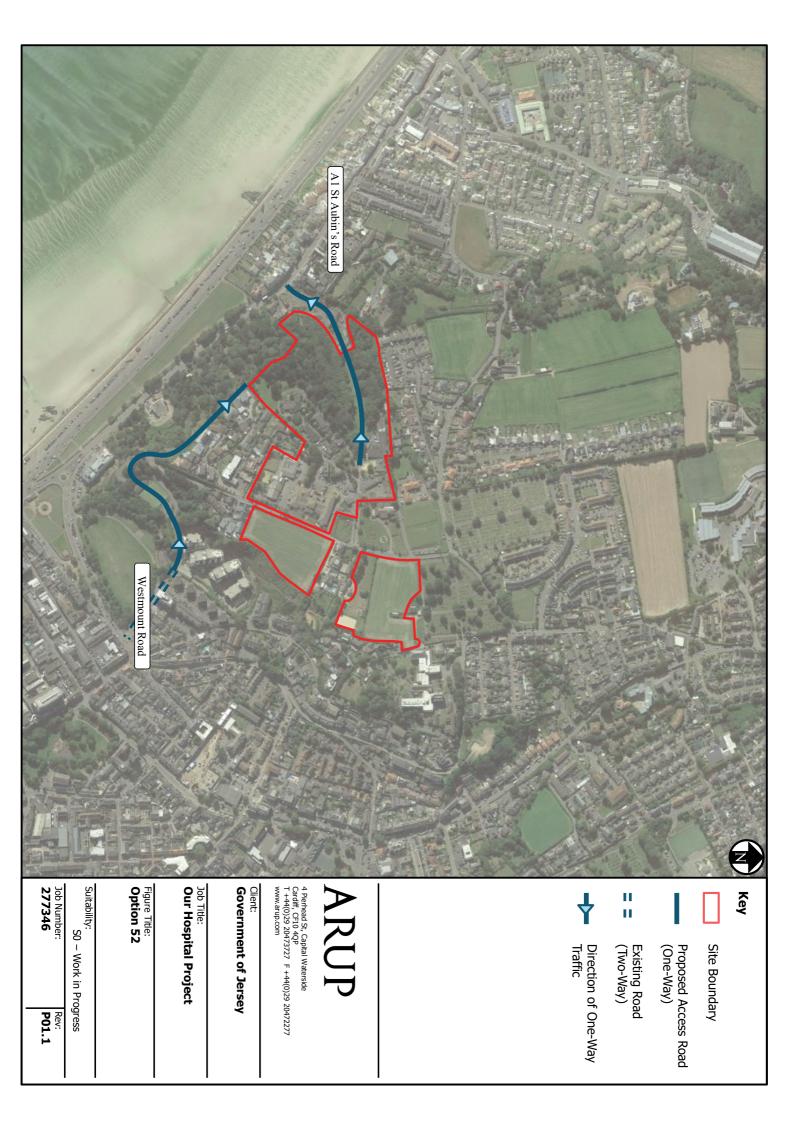


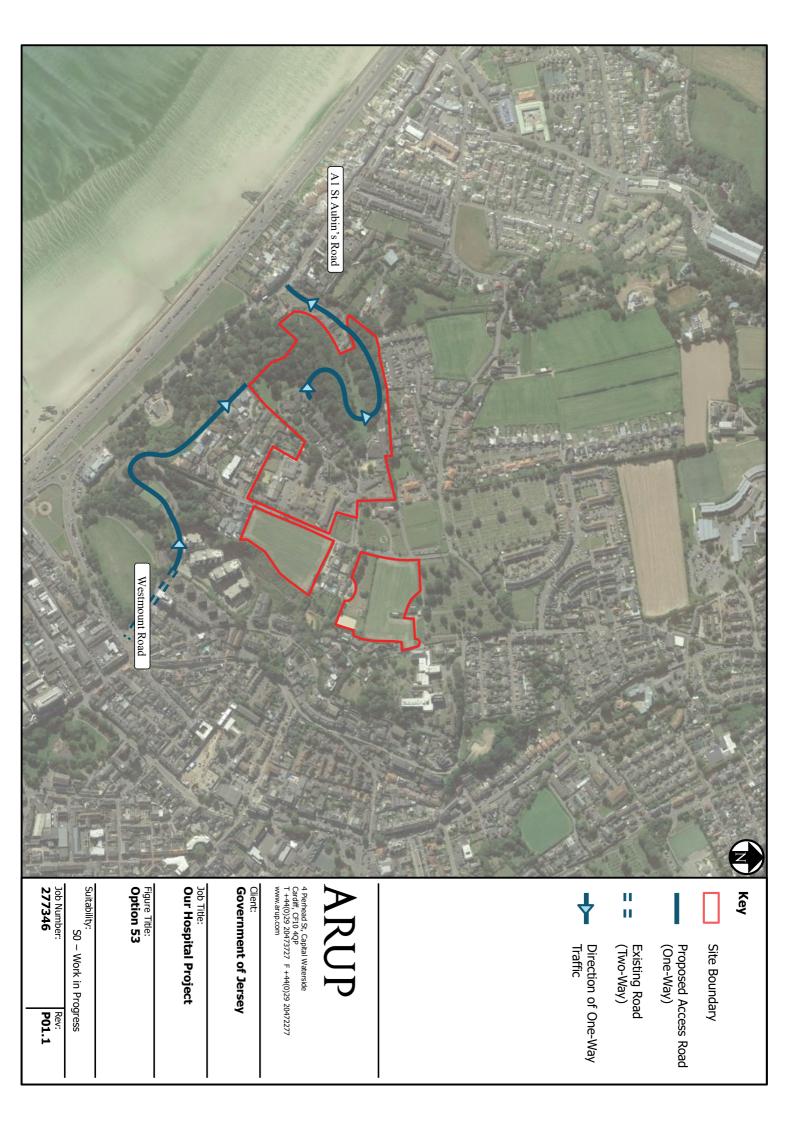


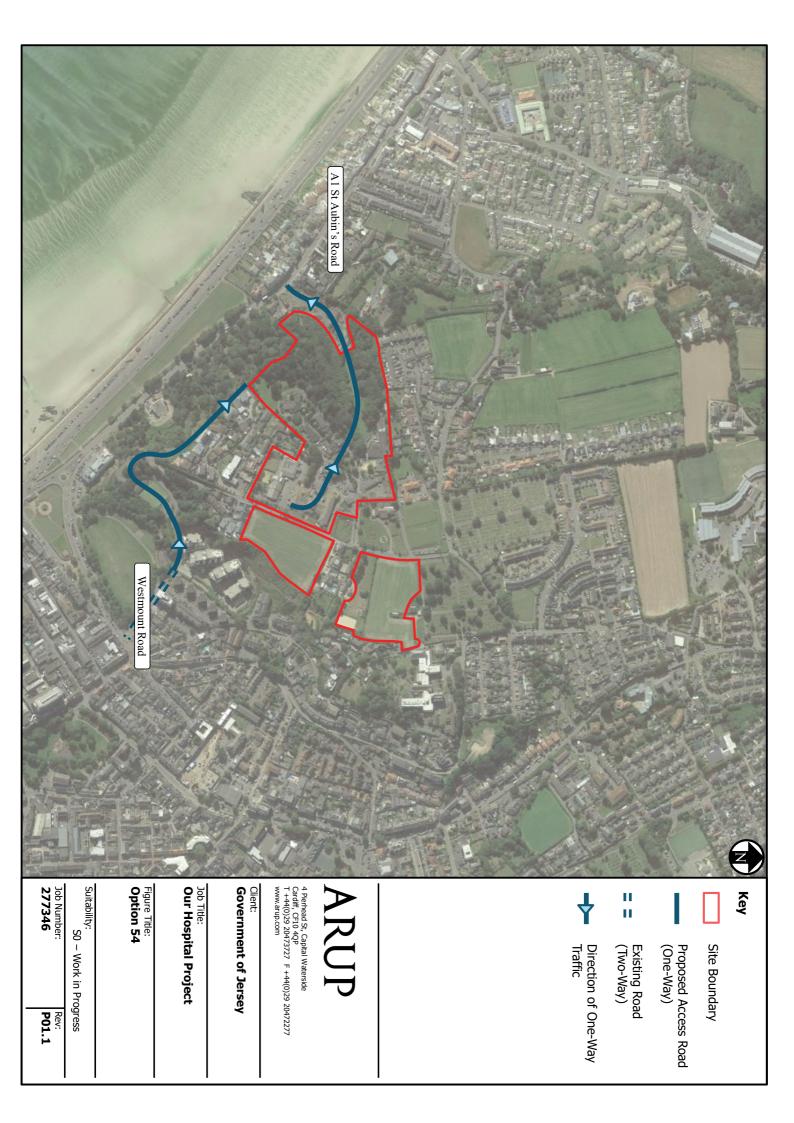


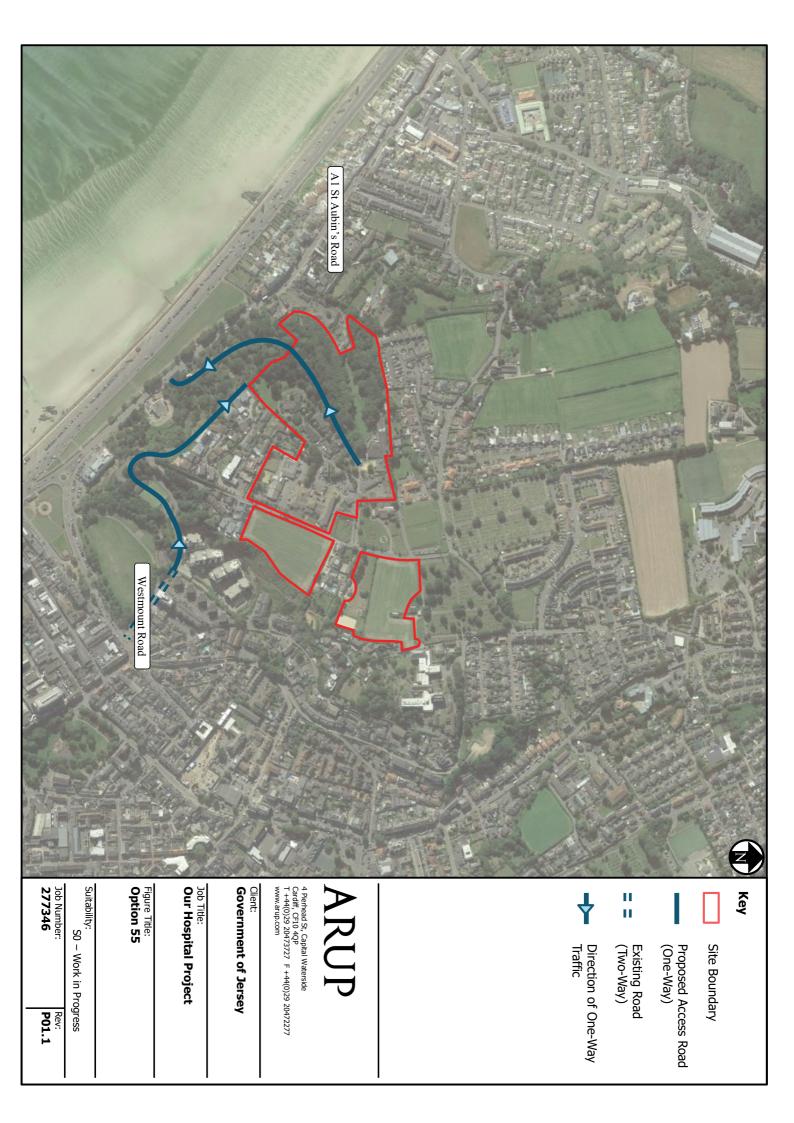


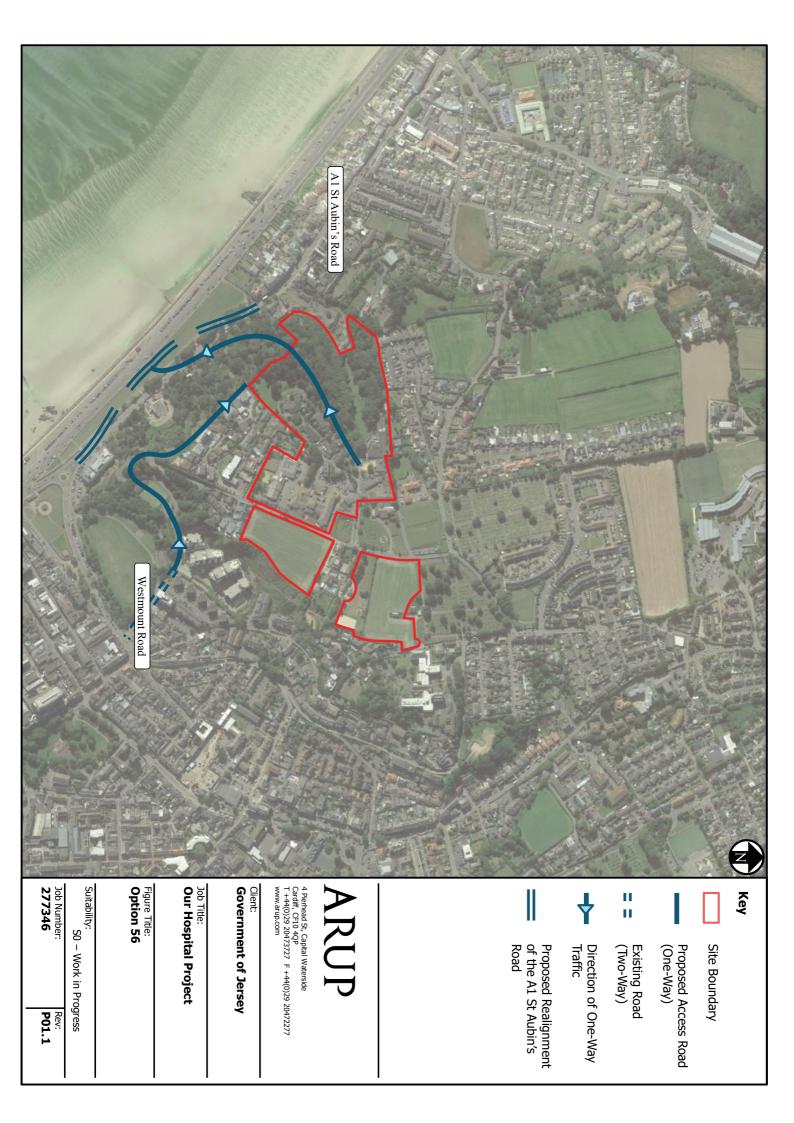


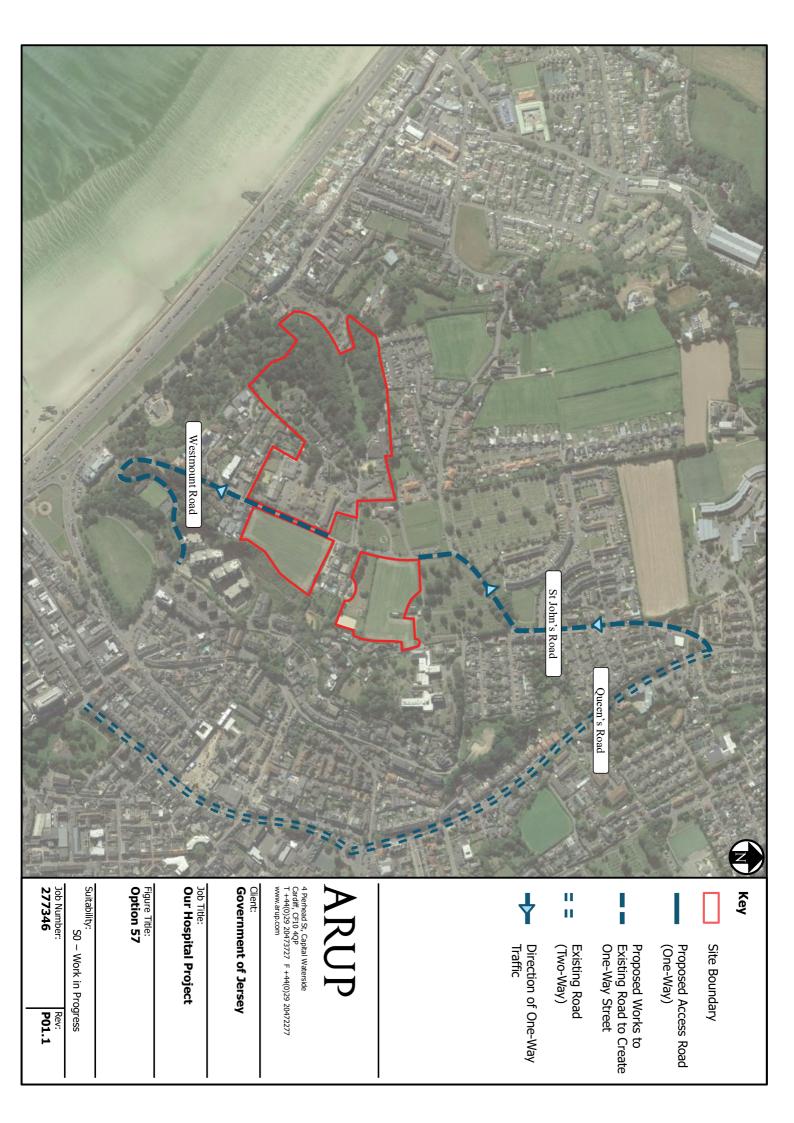


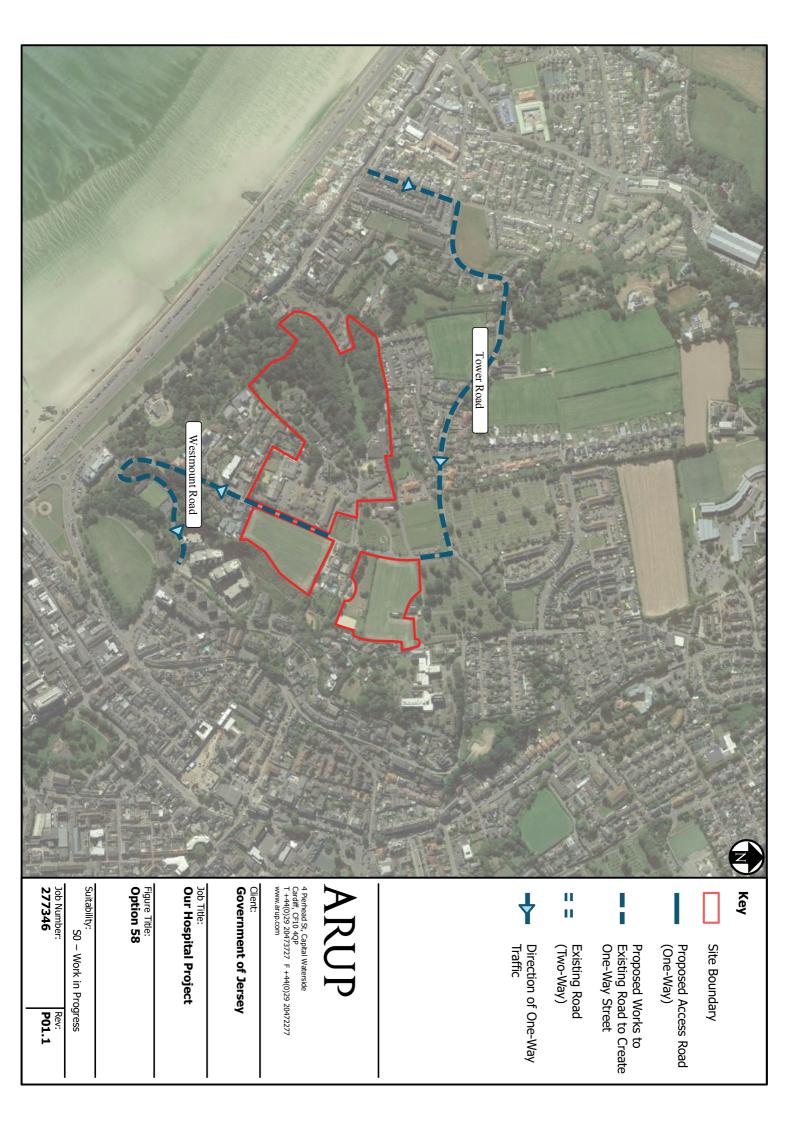


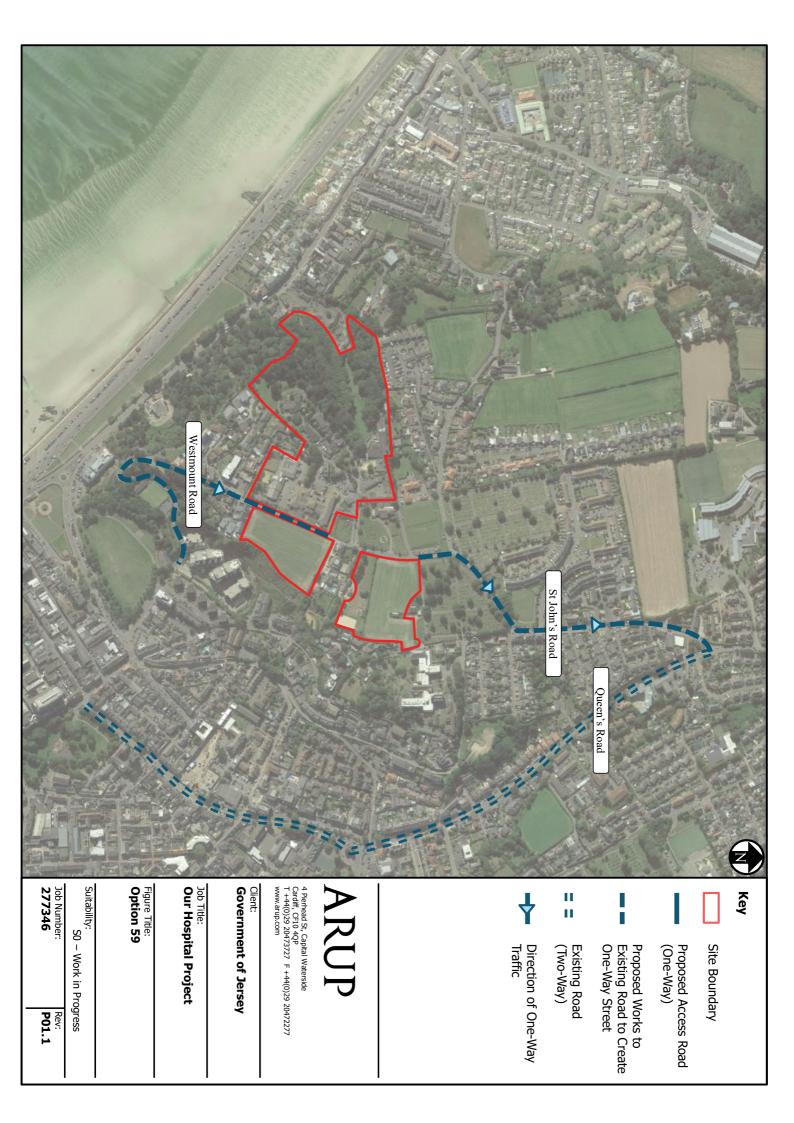


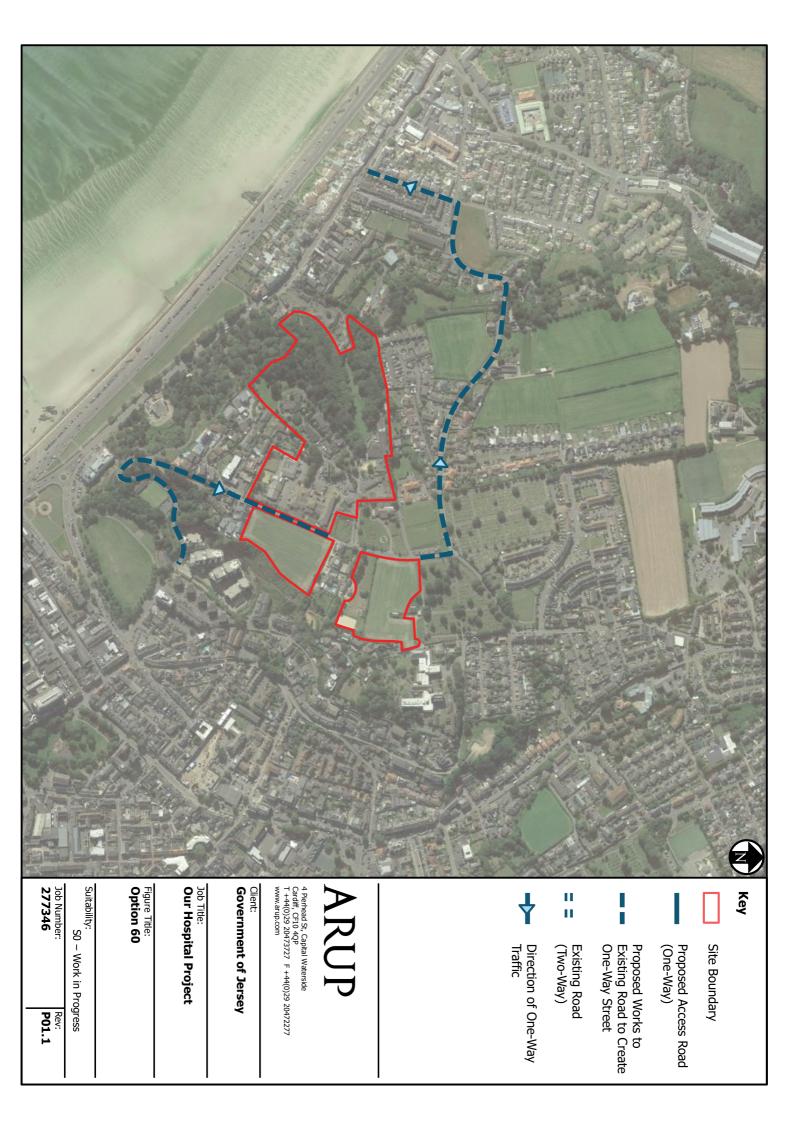


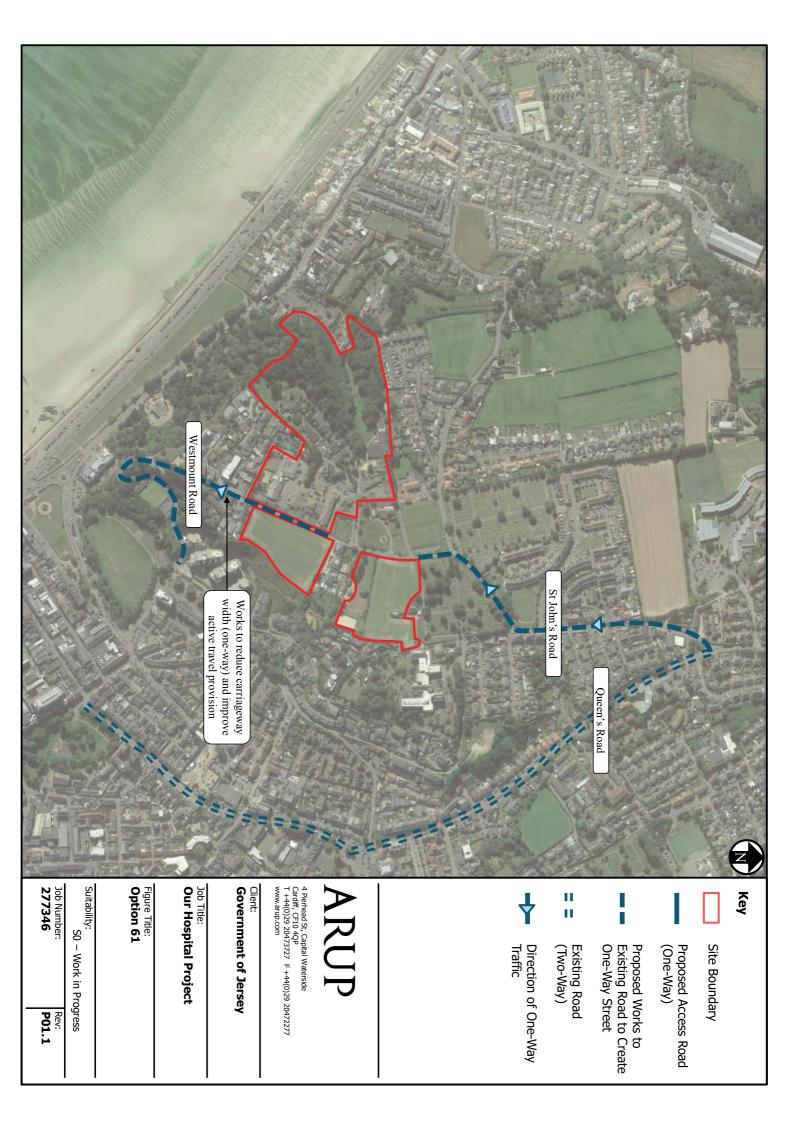


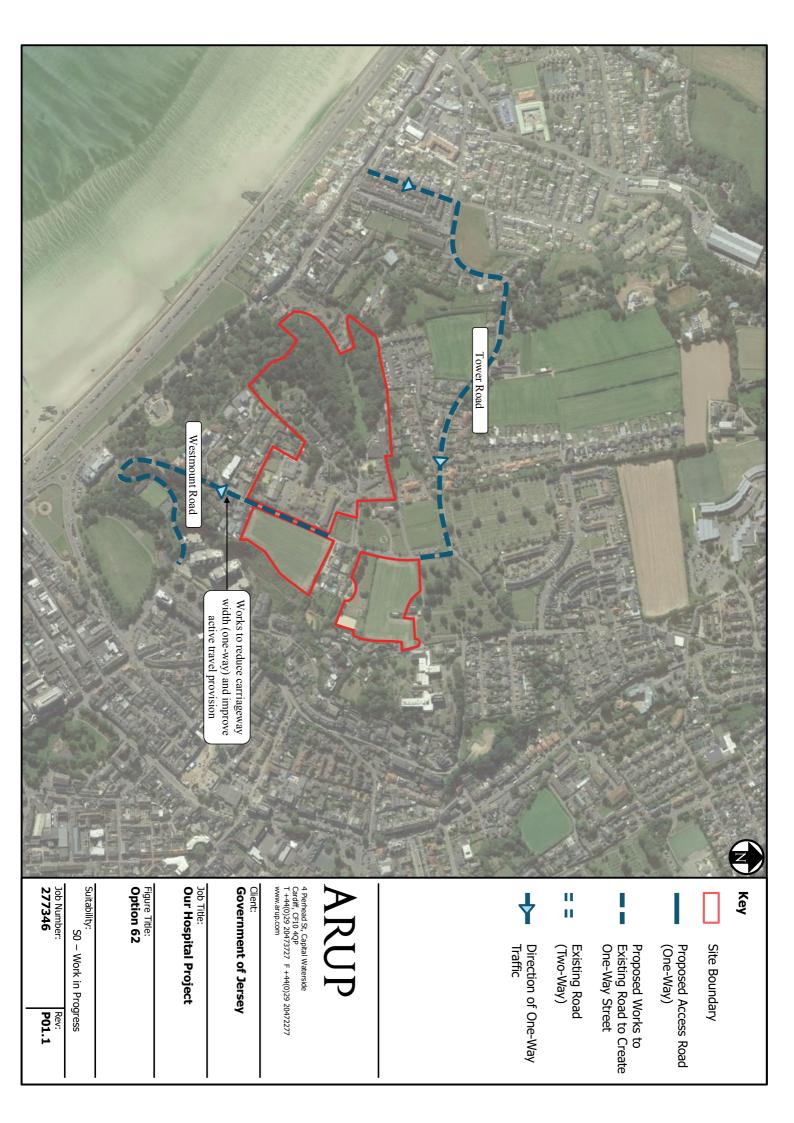


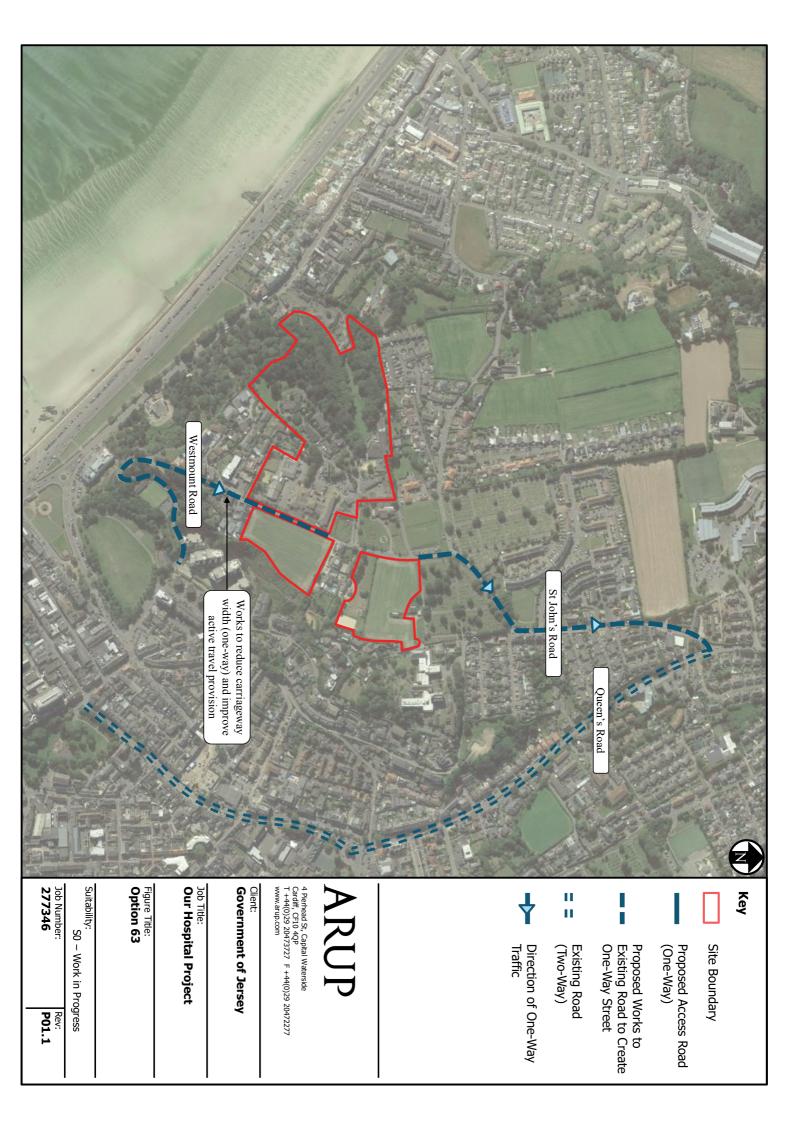


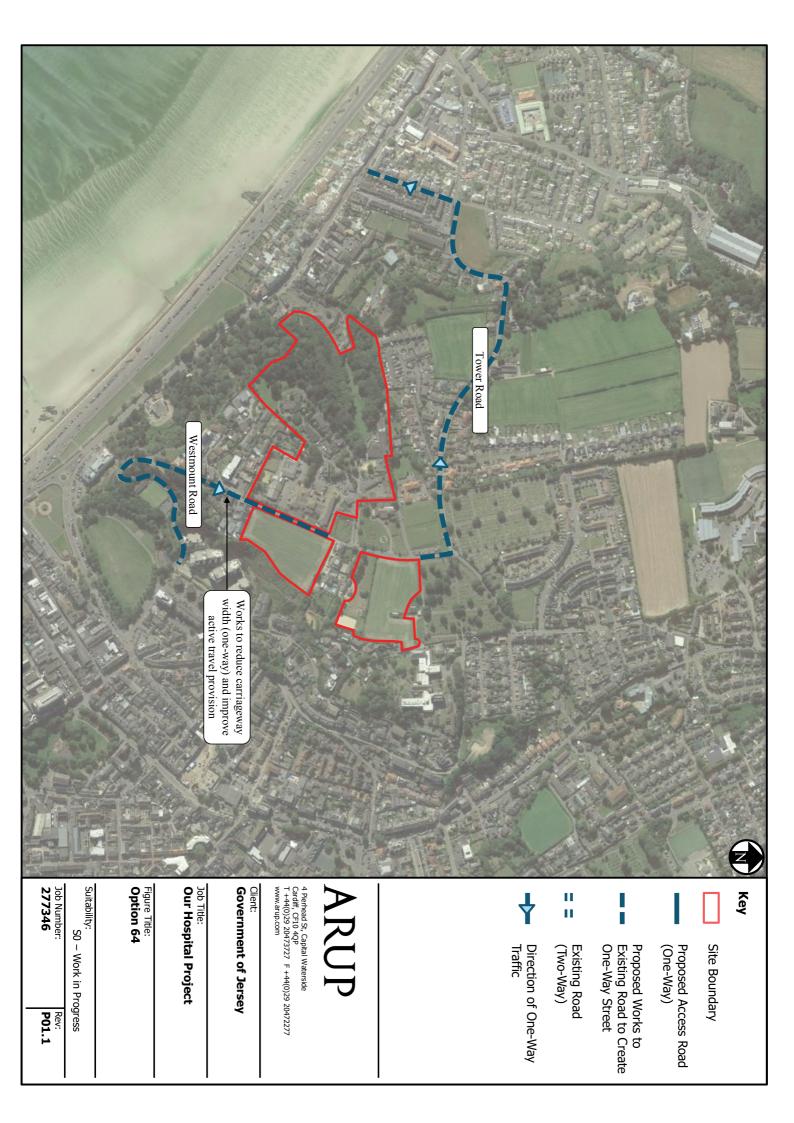


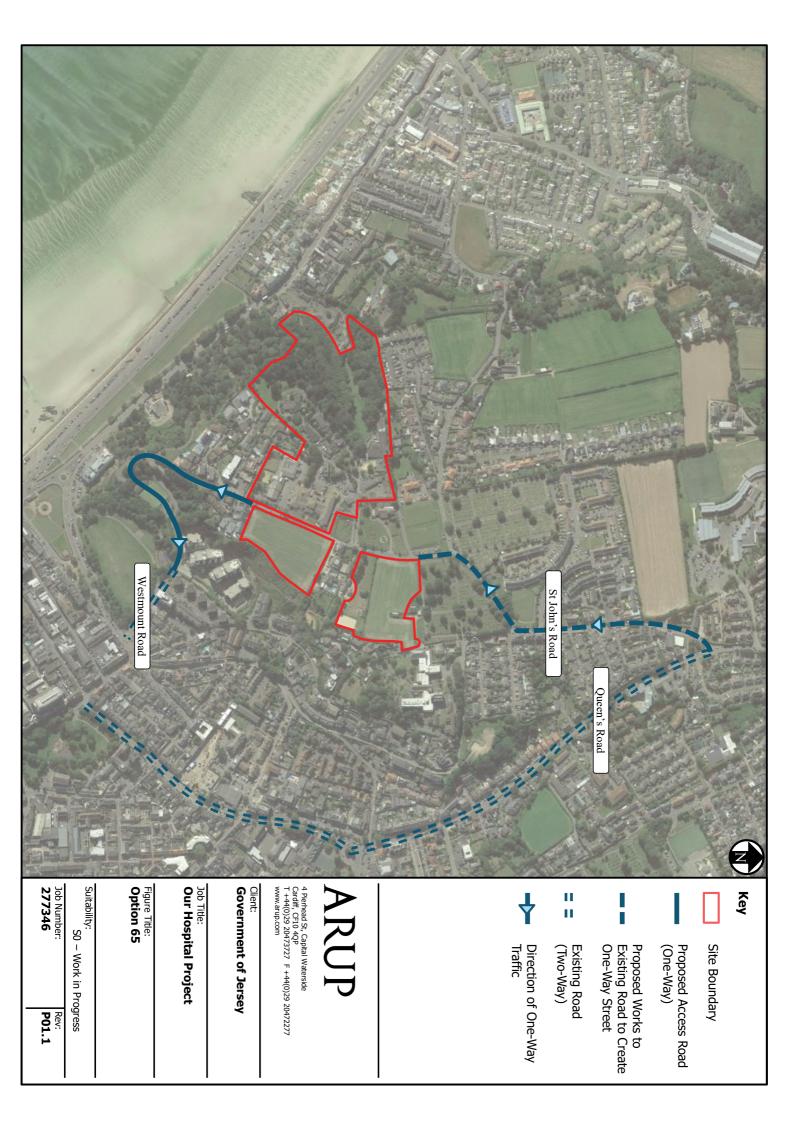


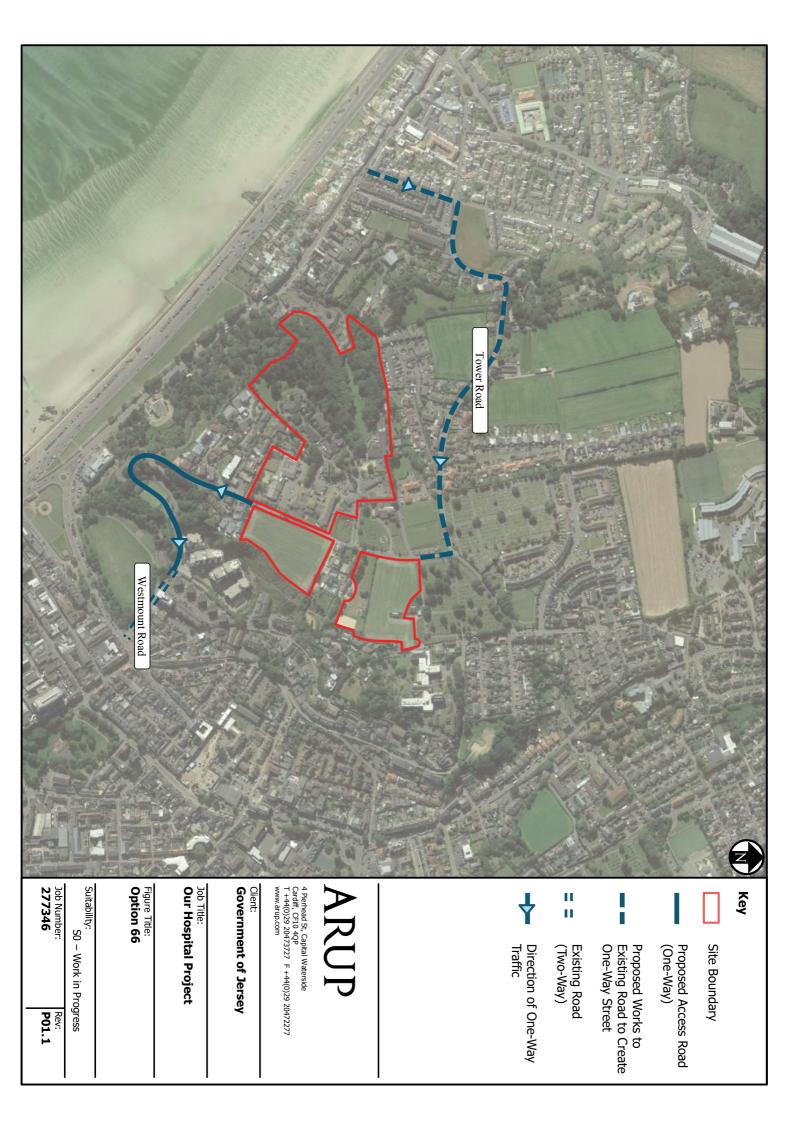


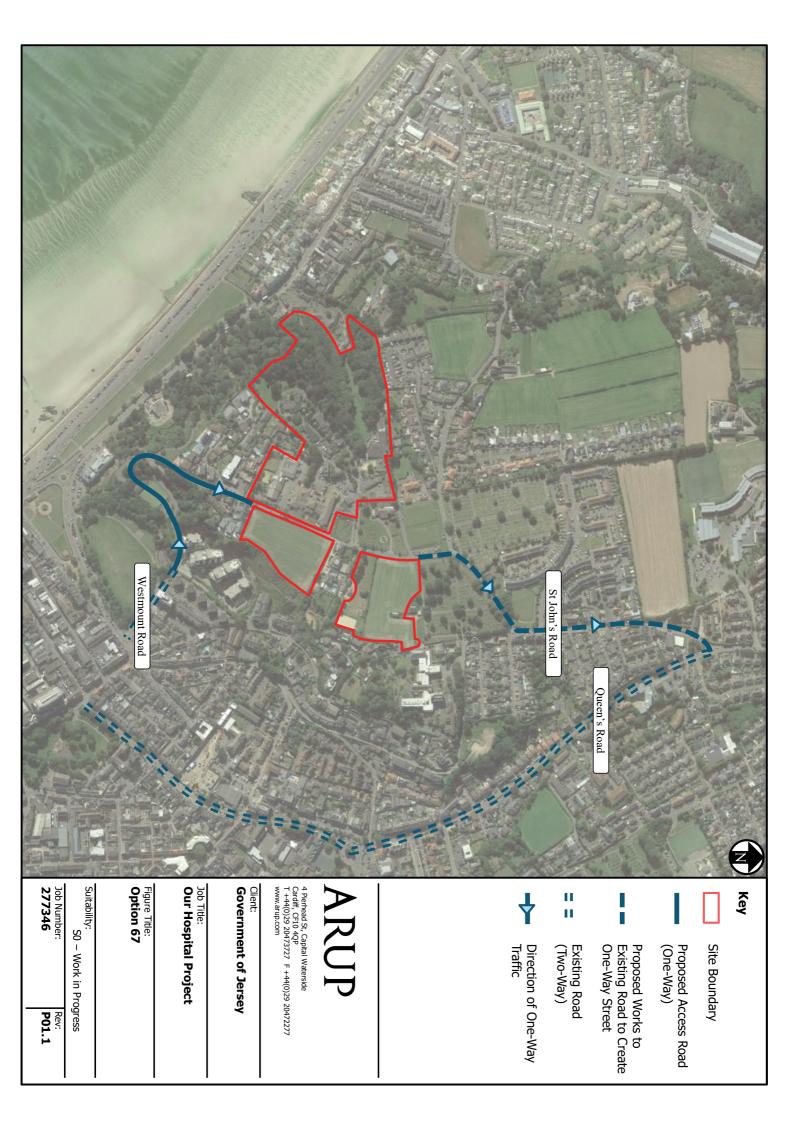


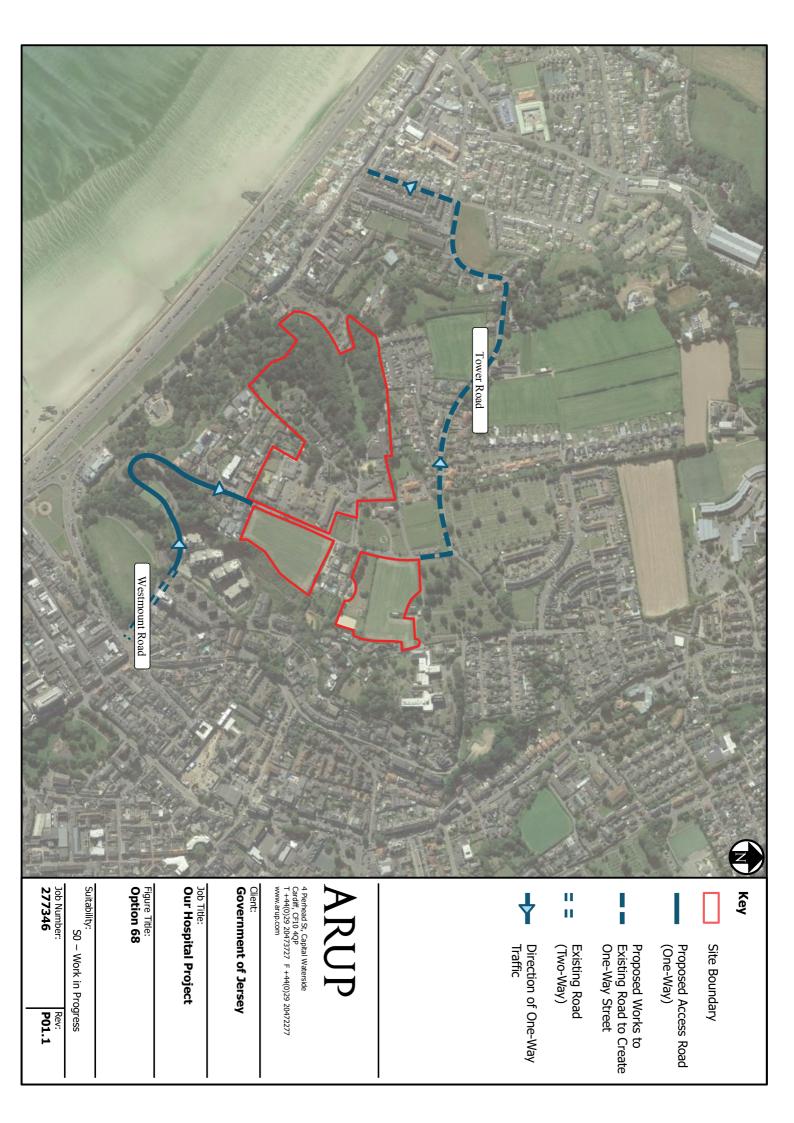


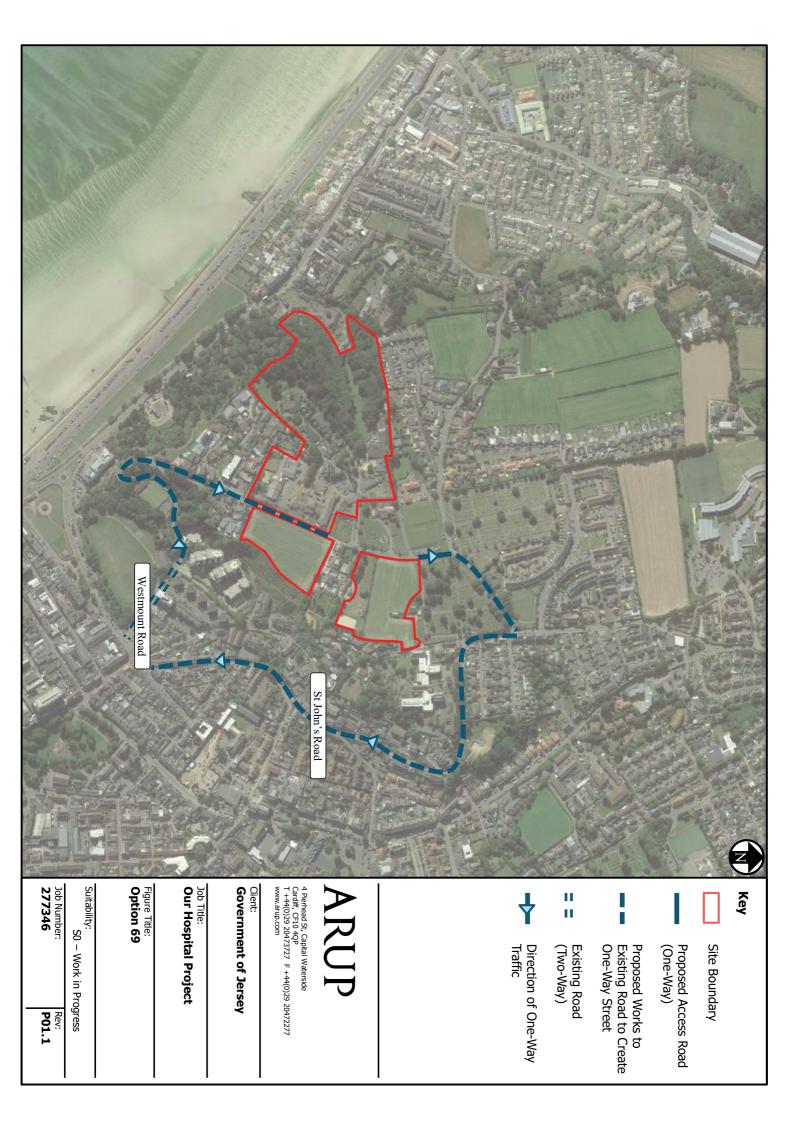


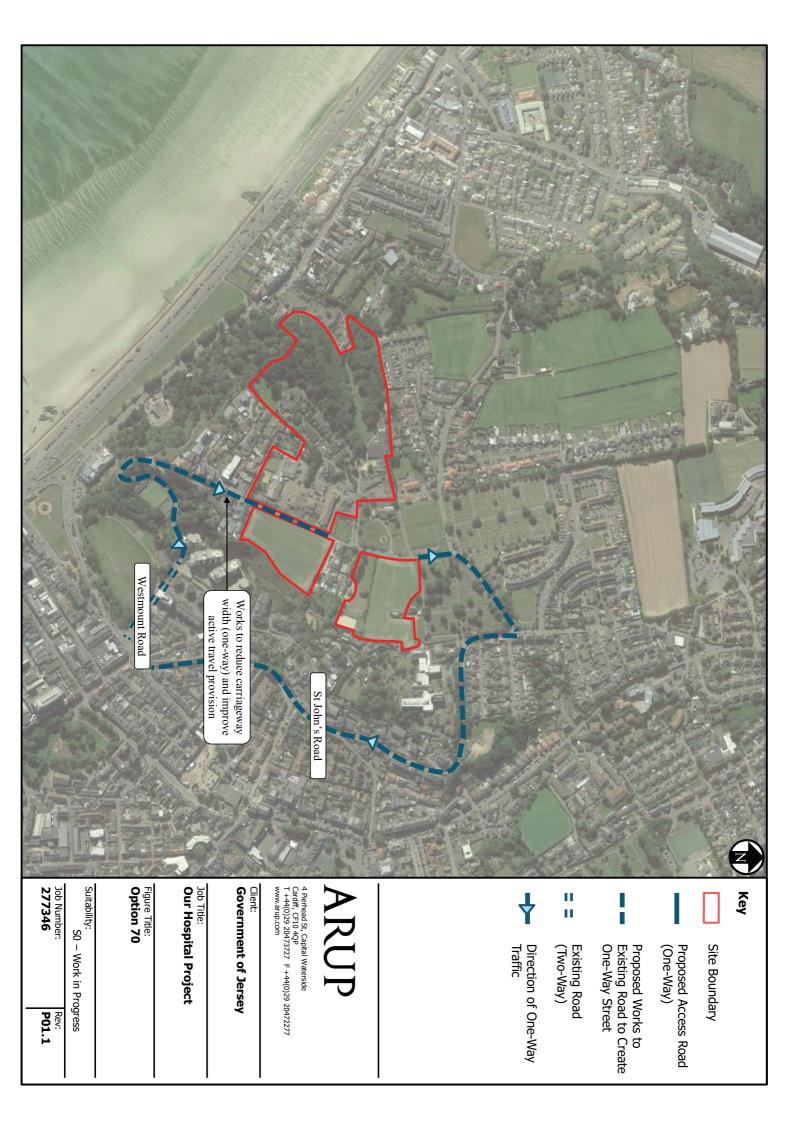


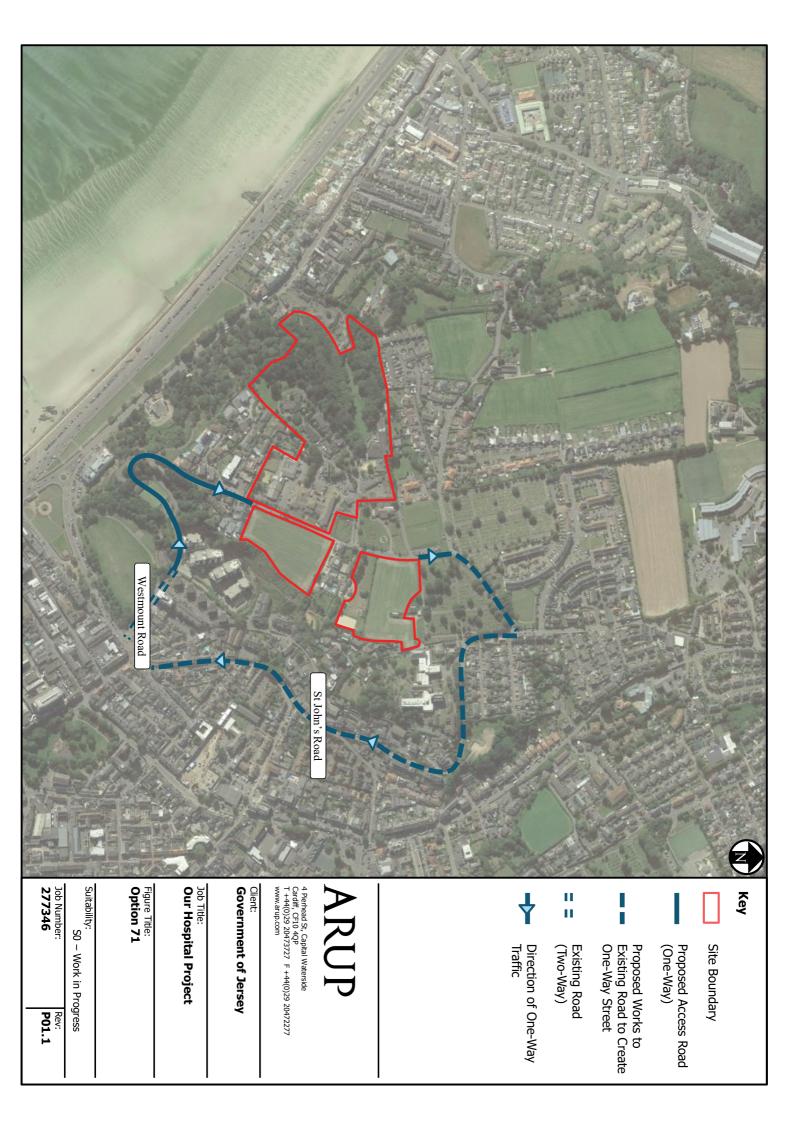




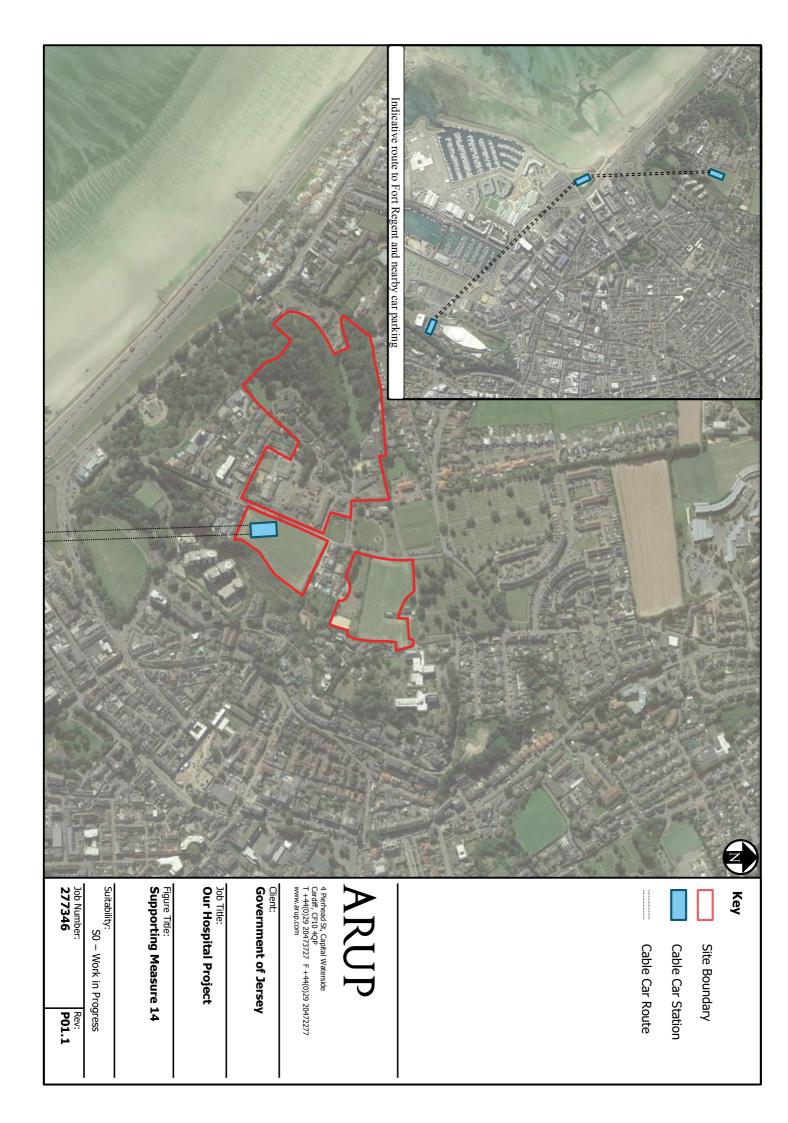






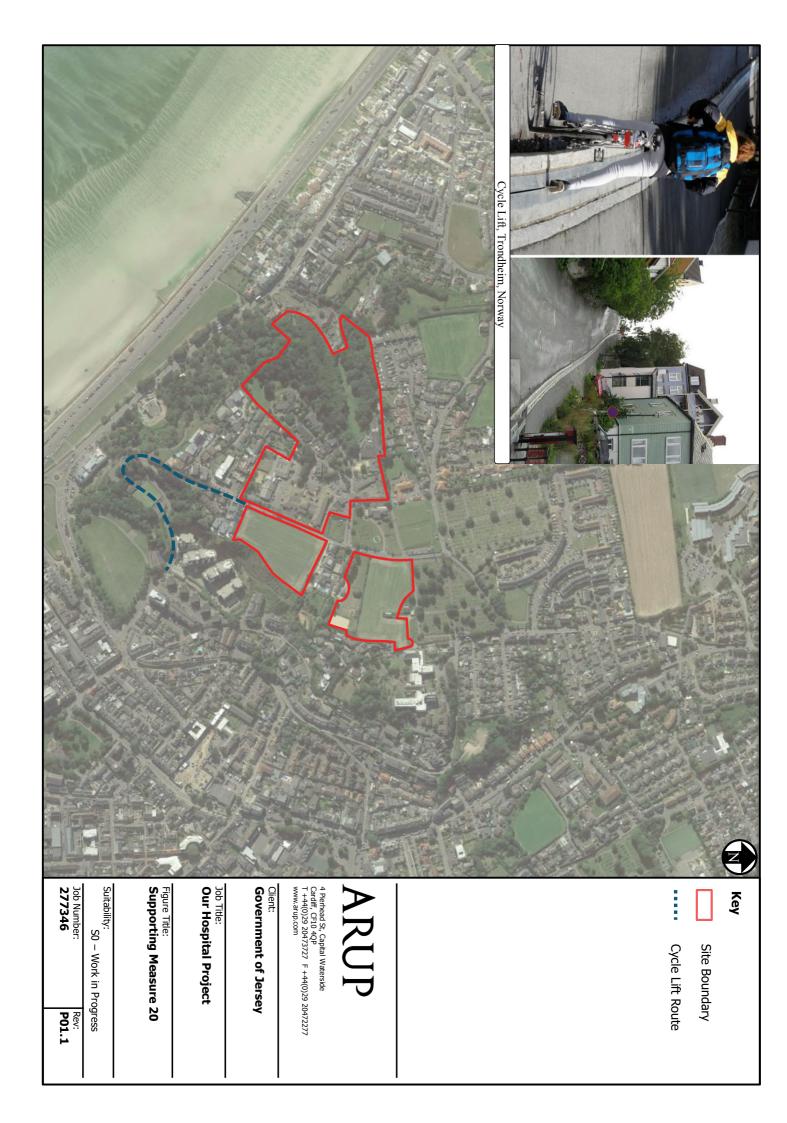
















Appendix A Access Option Appraisal

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Appendix B Appraisal of Supporting Measures

|   |                   | Supp 1 Su | Supp 2 | Supp 3 S | Supp 4 Sup | Supp 5 Supp 6 | 6 Supp 7 | Supp 8  | Supp 9    | Supp 10 | Supp 11 | Supp 12 | Supp 13 | Supp 14 | Supp 15 | Supp 16 Su  | Supp 17 Sup | Supp 18 Supp 19 | 19 Supp 20 | 20 Supp 21 | Supp   | 22 Supp 23 | Supp 24   | Supp 25 | Supp 26 | Supp 27 |
|---|-------------------|-----------|--------|----------|------------|---------------|----------|---------|-----------|---------|---------|---------|---------|---------|---------|-------------|-------------|-----------------|------------|------------|--------|------------|-----------|---------|---------|---------|
| Programme complete by March 22  | Yes or No         | Yes       | Yes    | Yes      | Yes        | Yes           | Yes      | Yes Yes | s Yes     | Yes         | No          | Yes             | Yes '      | Yes 1      | Yes    | Yes Ye     | Yes Yes   | s Yes   | Yes     | Yes     |
| Number of conflictpoints/interfaces for pedestrians and vehicle (journey safety and security) | Number            | n/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n'a     | n/a     | n/a     | n/a     | n'a     | n'a     | n'a         | n/a         | n/a             | n/a        | n/a        | n'a    | n'a n/     | n/a n/a   | a n/a   | n/a     | n'a     |
| Blue light resilience guaranteed  | Yes or No         | n/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n/a     | n/a         | n/a         | n/a             | n/a        | n/a        | n/a    | n'a n'     | n/a n/a   | a n/a   | n/a     | n'a     |
| Is there journey time certainty for staff and patients  | Yes or No         | No        | %      | No.      | No         | No            | No       | No N    | 0<br>N    | Yes     | Yes     | Yes     | No      | No.     | No      | No          | No          | No              | No         | %          | No.    | No N       | No No     | o No    | 9X      | %       |
| Number of schools affected (Impact on journey to school safety)                               | Number            | n/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | w/u     | u/a     | u/a     | w/u     | n'a     | n/a     | n'a         | æ/u         | n/a             | n/a        | u/a        | n/a    | n/a n/a    | n/a n/a   | a n/a   | n/a     | n'a     |
| Daily predicted impact from in-use carbon (sustainability)                                    | Ranked            |           |        |          |            |               |          |         |           |         |         |         |         |         |         |             |             |                 |            |            |        |            |           |         |         |         |
| Impact on Overdale Masterplan for the new hospital  | Yes or No         | οN        | No     | No       | No         | No            | No       | No No   | 0 No      | No      | No      | No      | Yes     | Yes     | Yes     | Yes         | No          | No              | Yes 7      | Yes 1      | No     | Yes Ye     | Yes Yes   | s Yes   | Yes     | Yes     |
| Number of houses/apartments displaced   | Number            | 0         | 0      | 0        | 0          | 0             | 0        | 0       | 0 0       | 0       | 0       | 0       | 5       | 15      | 5       | 14          | 0           | 0               | 0          | 0          | 0      | 0          | 0 0       | 0       | 0       | 0       |
| is the option attractive to OHP medical staff   | Yes or No         | No        | No.    | %        | No         | No            | n/a      | n/a n/a | a n'a     | No      | n/a     | Yes     | No      | %       | No.     | No          | No          | No              | No         | No         | Sk.    | No N       | No No     | oN No   | %       | Ŷ       |
| Is the option affordable within the contract limit  | Yes or No         | No        | No     | No.      | No         | No            | No       | No N    | 0 No      | No      | No      | Yes     | No      | No.     | No      | No          | No          | No              | No         | No         | No     | No N       | No No     | 0N 0    | %       | %       |
| Ongoing Maintenance Costs (Amual)   | EAPPROX           | 5000      | 5000   | 5000     | 5000       | 5000          | 5000     | 5000 50 | 5000 5000 | 0       | 0       | 2000    | 50000   | 100000  | 80000   | 80000       | 50000       | 1000            | 1000 5     | 5000 1     | 1000   | 1000 0     | 0 0       | 2500    | 5000    | 2500    |
| Ongoing Operating Cost (Annual)   | EAPPROX           | 5000      | 5000   | 5000     | 5000       | 5000          | 5000     | 5000 50 | 5000 5000 | 0       | 0       | 1000    | 10000   | 150000  | 125000  | 100000      | 50000       | 500             | 500        | 200 10     | 10000  | 10000 20   | 2000 2000 | 0 5000  | 5000    | 2500    |
| Is the option resilient to adverse weather and high seas                                      | Yes or No         | Yes       | Yes    | Yes      | Yes        | Yes           | Yes      | Yes Yes | s Yes     | Ycs     | Yes     | Yes     | Yes     | Yes     | Yes     | Yes         | Yes         | Yes             | Yes '      | Yes        | Yes .  | Yes Ye     | Yes Yes   | s Yes   | Yes     | Ycs     |
| Number of trees affected  | Canopy (M2)       | u/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a'n a     | e/u     | u/a     | n/a     | 2580    | 1760    | 6450    | 640         | u/a         | n/a             | n/a 1      | 5 0801     | 540    | 585 n/     | n/a n/a   | n/a     | e,u     | n'a     |
| Number of Listed Buildings and Places impacted  | Number            | n/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | e/u e     | n/a     | u/a     | n/a     | -       | 0       | -       | 0           | u/a         | n/a             | n/a        | 2          | 0      | /u 0       | n/a n/a   | n/a     | n/a     | n'a     |
| Can the visual impact be adequately mitigated (Landscape and Visual Impact)                   | Low, Medium, High | u/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n'a     | n/a     | n/a     | High    | High    | High    | High        | n/a         | n/a             | n/a L      | Low F      | High I | High n/    | n/a n/a   | a n/a   | n/a     | n/a     |
| Does it perform against the policies of the current Island Plan (Plaming Risk)                | Yes or No         | n/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | No      | No      | No      | No          | n/a         | n/a             | n/a        | No N       | No 1   | No n/      | n/a n/a   | a n/a   | n/a     | n'a     |
| What is the percentage of users that would use this option                                    | %                 | 9/659     | 6.8%   | *0%      | 35%        | 35%           | 4%       | 4% 26%  | % 26%     | 35%     | 30%     | 65%     | 30%     | 6.9%    | 25%     | 10%         | 40%         | 15%             | 1.5%       | 5% 1       | 10%    | 10% 23     | 2% 1%     | 63%     | 5%      | 100%    |
| Robustness to uncertainty such as pandemic  | Yes or No         | No        | No.    | No       | No         | No            | No       | No No   | 0 No      | No      | No      | Yes     | No      | No.     | No      | No          | No          | No              | No         | No.        | No     | No N       | No No     | No No   | %       | %       |
| Number of residences impacted - this is estates not just fronting houses                      | Number            | n/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | 176     | 35      | 36      | 21          | n/a         | n/a             | n/a        | 2          | 0      | 0 n/       | n/a n/a   | a n/a   | n/a     | n'a     |
| Number of junctions impacted/created by this option   | Number            | n/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n/a     | n/a         | n/a         | n/a             | n/a        | n/a        | n/a    | n'a n'     | n/a n/a   | a n/a   | n/a     | n'a     |
| Does this option create a conflict between junctions  | Yes or No         | u/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a         | n/a         | n/a             | n/a        | n/a        | n'a    | n/a n/     | n/a n/a   | n/a     | n/a     | n/a     |
| is the gradient more than 1:10 (motor vehicles)   | Yes or No         | u/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a         | n/a         | n/a             | n/a        | n'a        | n'a    | n/a n/     | n/a n/a   | a n/a   | n/a     | n/a     |
| Is the road able to accommodate 16.5m heavy goods vehicle (Construction)                      | Yes or No         | n/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n'a         | n/a         | n/a             | n/a        | n/a        | n'a    | n'a n/     | n/a n/a   | a n/a   | n/a     | n'a     |
| Is the road able to accommodate a 12m rigid truck (Operation)                                 | Yes or No         | n/a       | n/a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n'a         | n/a         | n/a             | n/a        | n/a        | n'a    | n/a n/     | n/a n/a   | a n/a   | n/a     | n/a     |
| Is the gradient more than 1:10 (active travel)  | Yes or No         | n/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a         | n/a         | n/a             | n/a        | n'a        | n'a    | n'a n'     | n/a n/a   | a n/a   | n/a     | n'a     |
| Is the gradient more than 1:12 (active travel)  | Yes or No         | n/a       | n'a    | n'a      | n/a        | n/a           | n/a      | n/a n/a | a n'a     | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a         | n/a         | n/a             | n/a        | n'a        | n/a    | n'a n'     | n/a n/a   | a n/a   | n/a     | n'a     |
| Total overall Property Take in m2   | m2                | 15000     | 15000  | 15000    | 15000      | 15000         | 15000    | 15000   | 15000     | 15000   | 0       | 0       | 0 2000  | 0 30000 | 0 34000 | 20000       | 20000       | 1000            | 5000       | 2000       | 19000  | 20000      | 5000      | 5000    | 5000    | 0       |
| Area of habitat affected  | m2                | n/a n/a   | r      | n'a n.   | a n/a      | n/a           | n/a      | n'a     | n/a       | n/a     | n/a     | n/a     | 2580    | 0 1760  | 0 6450  | 640 n/s     | a n/a       | n/a             |            | 1080       | 540    | 585 n/a    | n/a       | n/a     | n'a     | n'a     |
| Number of existing traffic hot spots worsened or created                                      | Number            | n/a n/a   | r      | n'a n.   | n/a n/a    | n/a           | n/a      | n'a     | nía       | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a n/.     | a n/a       | n/a             | nía        | n'a        | n/a    | n/a        | n/a       | n/a     | n'a     | n'a     |
| Number of kisure facilities affected by increase in traffic movements                         | Number            | n/a n/a   | r      | n'a n.   | a n/a      | n/a           | n/a      | n'a     | nía       | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a n/a     | a n/a       | n/a             | nía        | n'a        | n/a    | n/a        | n/a       | n/a     | n'a     | n'a     |
| short journey direct shuttle bus option available   | Yes or No         | n/a n/a   |        | n'a n    | 'a n/a     | n/a           | n/a      | n'a     | n'a       | n/a     | n/a     | n/a     | n/a     | n'a     | n'a     | n/a n/a     | a n/a       | n/a             | n'a        | n'a        | n/a    | n/a        | n/a       | n/a     | n'a     | n'a     |
| Are you able to cycle along the desire line   | Yes or No         | n/a n/a   |        | n'a n    | 'a n/a     | n/a           | n/a      | n'a     | u/a       | n/a     | n/a     | n/a     | n/a     | e,u     | n'a     | n/a n/i     | a)n (a      | Yes             | Yes        | n'a        | n/a    | n/a        | n/a       | n/a     | n'a     | n'a     |
| Does it use tried and tested on island technology   | Yes or No         | No No     | ~      | N 07     | o No       | No            | No       | No      | No.       | No      | Yes     | Yes     | Yes     | Yes     | No      | No Ne       | Yes         | Yes             | No.        | No         | No     | No         | No        | No      | No      | Yes     |
| Vibration of existing receptors - no of receptors within 50m                                  | Number            | n/a n/a   | T      | n'a n    | 'a n/a     | n/a           | n/a      | n'a     | n'a       | n/a     | n/a     | n/a     | 559     | 9 145   | 5 189   | 92 n/s      | a n/a       | n/a             |            | 169 n/a    |        | 42 n/a     | n/a       | n/a     | n'a     | n'a     |
| Noise in existing receptors - no of receptors within 50m                                      | Number            | n/a n/a   | r      | n'a n.   | a n/a      | n/a           | n/a      | n'a     | nía       | n/a     | n/a     | n/a     | 5.59    | 9 145   | 5 189   | 92 n/s      | a n/a       | n/a             |            | 169 n'a    |        | 42 n/a     | n/a       | n/a     | n'a     | n'a     |
| Air Quality for existing receptors - no of receptors within 200m                              | Number            | n/a n/a   | H      | n'a n    | 'a n/a     | n/a           | n/a      | n'a     | n'a       | n/a     | n/a     | n/a     | 2142    | 2 957   | 7 1162  | 2 841 n/a   | n/a         | n/a             |            | 7.59 n'a   |        | 664 n/a    | n/a       | n/a     | n'a     | n'a     |
| Benefits provided beyond facilitating access to OHP   | Number            | n/a n/a   |        | n'a n    | a n/a      | n/a           | n/a      | n'a     | n/a       | n/a     | n/a     | n/a     | Tourism | Tourism | Tourism | Tourism n/s | a n/a       | n/a             | n'a        | n'a        | n/a    | n/a        | n/a       | n/a     | n'a     | n'a     |
|   |                   |           |        |          |            |               |          |         |           |         |         |         |         |         |         |             |             |                 |            |            |        |            |           |         |         |         |