

Response to Ramsgate Town Team [RTT]

Re-determination of the Application by RiverOak Strategic Partners Limited (“the Applicant”) for an Order granting Development Consent for the reopening and development of Manston Airport in Kent.

I would like to respond to the representation by the Ramsgate Town Team (RTT) which contains several errors and / or omissions.

1. RTT state that *“Progress is slow: in July 2019 the CCC described the Government’s policy actions as ‘falling well short’ of those required for net zero”*.

As indicated in my representation to Matters 1 to 4, the Government believes they are on track to meet Net Zero¹.

2. ANPS and R3 at Heathrow - RTC referred to the expansion at Heathrow *“If this happens, it will substantially reduce any potential demand for the Development at Manston”*.

Heathrow’s R3 will not be available to meet the need for many years².

3. Thanet District Council (TDC) Local Plan³ – RTT state *“The resulting policy (SP07) specifies that “the future use and development of Manston Airport and/or other policies affected by the outcome of the DCO process will be determined through the early review of the Plan””*.

This is merely in line with TDC Policy SP03 - Local Plan Review

“Within six months of the adoption of the Local Plan, the Council shall undertake and complete a review of the Plan with information published as part of an updated Local Development Scheme setting out a timetable for the completion of the review and any update as may be required”.

It is significant that RTT omitted the first part of SP07 which states that **“Manston Airport as identified on the Policies Map is safeguarded for airport related uses”**. They also seem to fail to grasp that the applicant owns the airport land.

4. TDC Local Plan – RTT refer to *“All major development schemes should promote a shift to the use of sustainable low emission transport to minimise the impact of vehicle emissions on air quality, development will be located where it is accessible to support the use of public transport, walking and cycling.”*

This is Policy SE05. The applicant will implement mitigation measures through its Carbon Minimisation Action Plan, that address all these points. ⁴

The development will be in line with TDC Policy SP43⁵ – Safe and Sustainable Travel:

“The Council will work with developers, transport service providers, and the local community to manage travel demand, by promoting and facilitating walking, cycling and use of public transport as safe and convenient means of transport. Development applications will be expected to take account of the need to

¹ Government press release – sixth carbon budget

² Heathrow CAA review of plans

³ Thanet District Council Local Plan 2020

⁴ [REP11 – 008]

⁵ Thanet District Council Local Plan 2020

promote safe and sustainable travel. New developments must provide safe and attractive cycling and walking opportunities to reduce the need to travel by car”.

5. Climate Emergency – RTT refer to both TDC and KCC declaring a Climate Emergency and indicate that reopening Manston would be at odds with these declarations.

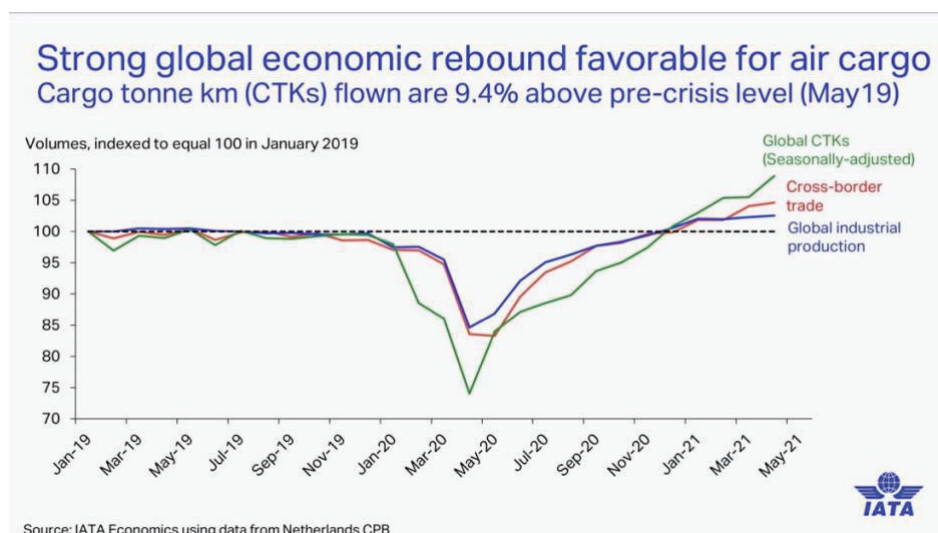
The Manston Airport development represents a tiny proportion of UK GHG emissions and a small percentage of total UK ATMs⁶. The Manston Airport development, through its Carbon Minimisation Action Plan, will be as Carbon Neutral as possible⁷.

6. Alleged reduction in demand for Air Freight – RTC refer to a reduction in the UK Air Cargo market of 20% between 2018 and 2020 and that *“IATA has recently described the past year as ‘the worst year for air cargo demand since performance monitoring began’.”*

This is from February 2021. The latest, released in July indicates that:

“June 2021 was another month of strong air cargo performance, as industry-wide cargo tonne-kilometres (CTKs) grew 9.9% compared to June 2019 and air cargo drivers point to further growth ahead”⁸.

The trend in the Air Cargo market since January 2019 is shown below:



The data clearly shows that the reduction in air freight occurred in the early part of 2020 and that there has been a strong growth since then.

7. Job predictions – RTT said in summary *“The negative effect on tourism demand and resulting decrease in available jobs and training opportunities in tourism and hospitality must therefore be set against any planned job numbers at Manston”.*
- The development will be one of the major employers in the area. Thanet only has 5 enterprises that employ more than 250 people⁹ and RTT refer to Manston employing 2,150 full time people by year 5.
 - Many of the jobs in tourism are seasonal and often involve a transient youth labour force on low wages.

⁶ CAA ATM data

⁷ [REP11 – 008]

⁸ IATA air freight monthly analysis June 2021

⁹ UK business counts statistics 2020

- The vast majority (82%) of VAT and / or PAYE based companies in Thanet are not directly involved in tourism¹⁰.
8. Unchanged factors – RTT state *“As we have highlighted in previous submissions, transport routes from the area are poor.”*

The use of Manston as a lorry park in December 2020 highlighted that the road infrastructure was able to cope with tens of thousands of HGVs that were diverted to Manston before heading for Dover. Exact numbers have not been published but local estimates put the number in excess of 200,000 HGVs that used Manston in the short time the airport was used as a lorry park and covid testing centre for HGV drivers.

Parkway Station is being built and is due to open in December 2020 and is less than a km from the airport boundary. Ramsgate Port is only 3.7 miles by road¹¹, a journey of 9 minutes. This will improve connectivity.

9. The Sixth Carbon Budget – RTT quote from a report produced by Alan Stratford Associates *“Manston’s potential 1.9% share of the UK’s aviation carbon target by 2040 is implicitly already allocated to other airports, many of which have existing planning consent for such growth”.*

It appears that Alan Stratford Associates have conflated two separate issues; the contribution aviation makes to the “carbon target for 2040” and “growth”.

The representation by Save Manston Airport association (SMAA) Matter 2 parts 1 & 2 section 1 explains in detail why “growth” at Stansted and Heathrow will not undermine the case for Manston.

Moving onto the role aviation will play in achieving the “aviation target by 2040”, this was dealt with at great length in SMAA [Matter 3]. In section 1.0, the Manston development itself will be as Carbon Neutral as possible *“The Proposed Development’s effect on the global climate is not significant”*¹².

In section 2.1, SMAA explained the role that aeroplane operators will have to play in achieving Net Zero by 2050. In particular, *“Aeroplane operators will be set a “CORSIA Eligible Emission Unit” quota by the ICAO Council and these must be cancelled by the buying and selling of Eligible Emission Units on the Carbon Market”*¹³. This makes clear that these *“will be set”* and so have not been *“implicitly already allocated to other airports”* as stated by Alan Stratford Associates.

10. Future technology – RTT refer to the possible use of Hydrogen propelled barges and new aircraft propulsion systems. These, they state, will not be operational until 2050.

In SMAA [Matter 3] section 2.4, they outline the efforts being made by Government and Industry to produce new technologies that will reduce GHG emissions by aviation. However, they make clear that *“The Manston Airport development is going to be done in phases over a 20-year period. All calculations used to achieve Net Zero at Manston have been based on a worst-case scenario and any advances in aircraft design that reduce or remove aircraft emissions can only be beneficial”.*

For all the reasons outlined above, and covered in more depth in previous representations, I believe that RTT have not made any credible arguments to prevent the Secretary of State from granting the DCO.

David Stevens

¹⁰ Thanet VAT & PAYE by Category

¹¹ AA route planner

¹² [APP – 034] – table 16.16

¹³ CORSIA – FAQs – page 20 section 2.14

References for DS representation to the Secretary of State for Transport
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ARCADIS GUIDANCE TO THE CIVIL AVIATION AUTHORITY
ON HEATHROW EXPANSION PROGRAMME

HEATHROW AIRPORT LIMITED
MASTERPLAN REVIEW
STEP 0 REPORT - FINAL



OCTOBER 2019

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[REDACTED]	[REDACTED]
6.1.1	[REDACTED]
6.1.2	[REDACTED]
6.1.3	[REDACTED]
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GLOSSARY

Abbreviation	Description
ADRM	Airport Development Reference Manual
ANPR	Automatic Number Plate Recognition
ANPS	Airports National Policy Statement
ATET	Around the End Taxiways
ATMs	Air Transport Movements
ASD	Airport Supporting Development (essential for safe and efficient operation of the airport)
ATP	Automated Ticket Presentation
BA	British Airways
BAA	British Airports Authority
CAA	Civil Aviation Authority
CAPEX	Capital Expenditure
CBS	Cost Breakdown Structure
CRA	Cost Risk Analysis
CDG	Paris Charles de Gaulle Airport
DCO	Development Consent Order
DDS	Design Day Schedules
DT	Department for Transport (UK)
EASA	European Aviation Safety Agency
EEA	European Economic Area
EfW	Energy from Waste
GSE	Ground Service Equipment
HAL	Heathrow Airport Limited
HEP	Heathrow Expansion Programme
HSPG	Heathrow Strategic Planning Group
IATA ADRM 10	IATA Airport Development Reference Manual 10 th Edition
ICAO	International Civil Aviation Organization
IDT	Integrated Design Team

Abbreviation	Description
IFS	Independent Fund Surveyor
JFK	John F. Kennedy International Airport
LoS	Level of Service
mppa	million passengers per annum
NA	Not Available
NATS	National Air Traffic Service
NWR	North West Runway (The 3 rd runway as part of the Preferred Masterplan option)
OLS	Obstacle Limitation Surfaces
Oneworld	Refer Appendix B
OPEX	Operating Expenditure
PHP	Peak Hour Passengers
pph	Passengers per hour per lane
PT	Public Transport
RAG	Red; Amber; Green
RICS	Royal Institution of Chartered Surveyors
RWY	Runway
SkyTeam Alliance	Refer Appendix B
Star Alliance	Refer Appendix B
TAAM	Total Airspace and Airport Modeler
TfL	Transport for London
TN	Technical Note
Totex	Total Expenditure
Tph	Trains Per Hour
TWY	Taxiway
T5N	Terminal 5 North
UK	United Kingdom

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EXECUTIVE SUMMARY

Arcadis has undertaken a review to assess whether Heathrow Airport Limited (HAL) has put forward a Preferred Masterplan that is operable, deliverable, timely, reasonable and reliably costed and in the interest of consumers.

Our review has concluded that the Preferred Masterplan has been well developed and is technically compliant in meeting the requirements of the ANPS to deliver additional runway capacity at Heathrow by 2030.

At this moment in time, some detailed elements of the plan will not be fully developed but this is not unexpected for a scheme of this size or complexity. It is noted that HAL's approach has been diligent and they have engaged with stakeholders and consumers throughout the development process.

Arcadis' Key Findings

Operable:

- HAL has undertaken the appropriate level of detail to assure the proposed infrastructure will meet the operational demands placed on it at **Step 0**;
- The integration of the new infrastructure with the existing airport operation is feasible and is unlikely to conflict with current operations;
- HAL has demonstrated the increase in runway capacity will provide more operational flexibility and resilience; and
- HAL is yet to develop detailed Operational Readiness and Trials workstreams which will be key to ensuring a smooth transition without causing any operational issues.

Deliverable:

- HAL's delivery of the elements of the scheme are presented in a logical sequence;
- HAL has sought to deliver the most efficient sequencing with the aim of delivering the new runway by 2026 however this has created a programme that has little margin to allow for delays or risk;
- HAL's programme is not unfeasible however this is reliant on the programme timings set out in the plan to be delivered; and
- HAL will be reliant on other organisations to deliver some of the elements of the scheme which they do not control or can mitigate against. Delays could pose a risk to HAL's own delivery programme.

Timely:

- HAL has developed a programme that has all the necessary steps needed to achieve the ANPS target for 2030 and there is no reason to suggest this date is not achievable;
- The current programme includes risk allowances for each component of the masterplan assessed on the basis of industry norms. There is no apparent programme-wide allowance for schedule risk; and
- With such a complex programme involving a significant range of interdependencies, many of which are out of the control of HAL, the objective to deliver an operational runway by 2026 carries a high level of risk.

Cost:

- HAL's Cost Estimate for **Step 0** is reasonably and reliably costed;
- HAL has developed a holistic baseline cost estimate and the approach to the structure and methodology of compiling the Cost Estimate reflects industry best practice; and
- The level of quantification and benchmarking has increased leading to an increased level of cost certainty.

Interest of Consumers:

- HAL continues to engage with consumers to capture insights as part of the masterplanning process to ensure that the interests of consumers are reflected in the Preferred Masterplan.

Arcadis has been appointed as a technical advisor to the Civil Aviation Authority (CAA) to undertake a review of Heathrow’s Preferred Masterplan.

Arcadis has been asked to assess the Preferred Masterplan across different timeframes based upon the “Step” process utilised by Heathrow Airport Limited (HAL) throughout the masterplan development process.

These ‘Steps’ are in alignment to the “Phases” included in the single Preferred Masterplan released as part of the Airport Expansion Consultation on 18th June 2019.

Step 0 is aligned to **Phase 1** that represents infrastructure required on the runway opening day, anticipated to be in 2026.

Arcadis has not been asked to undertake an assessment that is aligned to **Phase 2** for 2030 that is a specified year in the Aviation National Policy Statement (ANPS) for public transport mode share.

Step 3 is aligned to **Phase 2a** that represents the infrastructure requirement to meet 700,000 ATMs and 122.5mppa by the year 2033.

Step 8 is aligned to **Phase 4** where by 2050, the capacity at Heathrow is expected to be 142mppa.

This **Step 0** report has assessed whether HAL’s Preferred Masterplan and associated infrastructure required for the runway opening day in 2026 can deliver expansion in a manner that is operable, deliverable, timely, reasonably and reliably costed and is in the interest of consumers.

Two further reports will consider the delivery of expansion at **Step 3** and **Step 8** against the same objectives of this review.

Our assessment has been based on workshop and presentation sessions held between the CAA and HAL teams, and the review material provided by HAL. As part of the assessment process, Arcadis has raised queries with HAL based on these workshops, presentations and material. In addition, Arcadis has undertaken independent benchmarking assessments

It is worth noting that the meetings to date with HAL have been of a productive nature and the exchange of information and response to queries has in general been direct and forthcoming. Arcadis appreciates that some information that HAL has used to develop their Preferred Masterplan is

commercially sensitive and access to this has been limited.

Report Themes

This report considers whether HAL’s Preferred Masterplan proposal is:

- Operable;
- Deliverable;
- Timely;
- Reasonably and Reliably Costed; and
- In the Interest of Consumers.

All of the above themes are assessed in detail in separate chapters. The theme relating to ‘In the Interest of Consumers’ is assessed in all of the other themes and is concluded substantively in the last chapter of this report.

Operability

Heathrow is a live operational environment and the existing airport has to be able to function unhindered during the construction phases. To achieve this, airport operations must be maintained during the development of the proposed infrastructure and facilities. The development phases must also integrate into existing airport infrastructure.

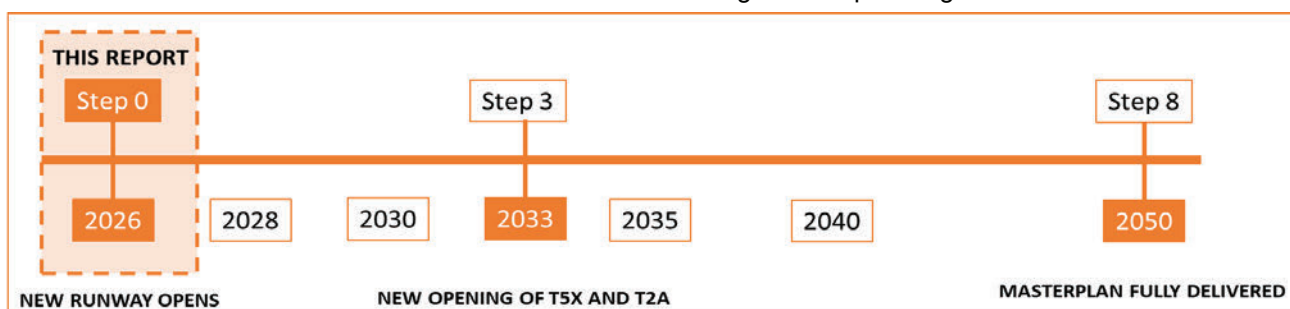
Arcadis has assessed both the design and the programme of the Preferred Masterplan to assess the operability of the airport from the existing situation to **Step 0** that takes the expansion up to the opening of the new 3rd runway.

Summary

Arcadis has undertaken its assessment using the information provided by HAL either directly or out in the public domain that takes the scheme to **Step 0**. The Preferred Masterplan sets out the infrastructure requirements up to **Step 0** using clearly developed capacity assessments of the airside, terminal and landside facilities.

Arcadis has analysed these assessments and is satisfied that HAL has undertaken the appropriate level of detail to assure the proposed infrastructure will meet the operational demands placed on it at this step of the development.

Arcadis has considered the level of flexibility and resilience that will be in place at **Step 0**. On the basis that the information provided by HAL has demonstrated the airport can adequately provide for the growth in passenger numbers and the increase



in runway capacity will provide more operational flexibility and resilience.

Arcadis acknowledges that HAL has used the masterplanning process to also look at today's operation and to take the opportunity to remove existing Airfield Hotspots. In addition, HAL is seeking to introduce taxiways around the end of runways (Around the End Taxiways (ATETs)) that will increase the flexibility of runway operations and be the first purpose built for this purpose incorporating international standards in a UK context.

Arcadis has identified potential challenges that may arise at **Step 0** in Landside areas if passenger mode choice is unchanged through some of the Surface Access Strategy work proposed by HAL.

If HAL cannot deliver the shift in mode share to public transport, there may be a greater demand on parking and forecourts than anticipated which could cause delays and congestion at the airport. However, at this stage in the masterplan process the level of detail required to assure the plan is not yet fully developed.

Arcadis is satisfied that the assimilation of the new infrastructure with the existing airport operation is feasible and is unlikely to conflict with current operations. HAL is yet to develop detailed Operational Readiness and Trials workstreams which will be key to ensuring a smooth transition without causing any operational issues.

Notwithstanding Arcadis' opinion that the Preferred Masterplan at **Step 0** will be operable, the challenges of deliverability, timeliness and cost still present the scheme with some challenges to open the new runway by 2026.

Delivery

The delivery of such a large and complex infrastructure project requires HAL to develop a delivery plan that is phased in a logical, feasible manner and has a robust programme for delivery taking into account the risks associated with it.

Arcadis has reviewed the Preferred Masterplan material to assess whether **Step 0** is deliverable and how new and impacted facilities will link with existing infrastructure and how HAL will maintain key assets during construction phases of delivery.

Summary

Arcadis has assessed the key elements required for the delivery of the new runway from the existing airport operation to 2026, **Step 0**.

It is clear from the significant amount of work that HAL has undertaken that the sequencing and multiple elements of the scheme are presented in a logical and well thought out sequence.

Arcadis has seen evidence that HAL has sought to deliver the most efficient sequencing to aim to deliver the new runway by 2026. This efficiency has however created a programme that has elements

that HAL does not have direct control over that could create little margin for delays or risk.

HAL has undertaken a Quantitative Schedule Risk Analysis (QSRA) assessment of the proposed schedule, with respect to schedule integrity. This assessment resulted in a P value of [REDACTED], indicating a [REDACTED] likelihood of achieving the schedule. Arcadis recognises that this reflects a schedule that has been designed to deliver the new 3rd runway at the earliest possible opportunity. Arcadis has not reviewed the likelihood of any alternative runway opening dates as part of this review.

Although it is not unfeasible that this programme and sequencing for the delivery of the required infrastructure is achievable, this is reliant on the programme timings set out in the plan to be delivered on time.

Arcadis has identified a number of deliverability challenges that, although achievable to meet the ANPS target of 2030, could only be deliverable by 2026 if no significant delays take place in the programme.

The challenge presented by the development of a Preferred Masterplan is about creating the space and then using that space to deliver a new runway and the associated infrastructure. This involves a significant amount of clearance of existing assets as well as undertaking a very significant number of earthworks to enable construction to proceed.

Much of this work is outside of the airport's existing boundary and will be reliant on gaining the appropriate consents, acquiring land and working with other agencies or organisations. This could create a level of risk to the programme that HAL may not be able to mitigate.

It is clear from the evidence that HAL has undertaken a significant amount of planning in connection with logistics and the use of off-site hubs that are a mitigation to some of the delivery risks identified.

As well as off-site hubs, HAL has sought to develop its procurement strategy to ensure it has mitigated the supply chain risks associated with delivering such a complex programme.

Timing

The success of delivering expansion at Heathrow is predicated on the fact that the planned deliverables for each step can be provided in accordance with the specified duration in the programme and the dates and deadlines detailed.

Arcadis has assessed whether the Preferred Masterplan can be delivered in a timely manner. In doing so, consideration has been given to the risks to delivery and what the potential impact of failing to provide for the relevant deliverables does to the programme.

The review has considered the strategies HAL has developed to mitigate risks and any subsequent

impacts from failure to deliver in a timely manner, with consideration for interdependencies

Summary

Arcadis considers that the overall Preferred Masterplan programme schedule is at the level of detail required for a programme of this scale at this stage of the development process.

HAL has developed a programme that has all the necessary steps needed to achieve the ANPS target for 2030 and there is no reason to suggest this date is not achievable.

The assessment by Arcadis highlights that whilst the activities controlled by HAL can probably be delivered within the timescales indicated in the masterplan programme, the overall sequence necessary to deliver an operational runway by 2026 are dependent on the timely completion of activities that are outside of the control of HAL. For example, the masterplan assumes that the DCO will be resolved within statutory timescales.

Furthermore, whilst individual elements of the masterplan include risk allowances based on benchmarks, there is little programme-wide contingency. With such a complex programme involving many critical interdependencies, the objective to deliver an operational runway by 2026 is associated with a high level of risk.

Arcadis can see from the evidence that HAL has undertaken the appropriate level of work in developing its plans and is confident that the approach used would allow HAL to achieve the ANPS target for increased runway capacity by 2030.

Although HAL has indicated that they could mitigate some of the potential delays through re-phasing and moving around work elements within the programme, the key consequence of delays to the delivery of the runway or re-scheduling of works is likely to be an increase in costs and a risk of not achieving the 2026 date.

In the report we highlight four areas where we believe that HAL is particularly reliant on positive programme outcomes to deliver the 2026 operational date:

- Dependency on the timing of the DCO;
- Delivery of enabling infrastructure (e.g. A4 relocation);
- Earthworks schedule; and
- Operational readiness.

Cost Estimate

A high-level summary of the Cost Estimate is detailed in the Table 1. A breakdown of the Task Orders contained in the **Step 0** report are detailed in Section 5. All costs within HAL's Cost Estimates are based on Q3 2014 prices.

The Risk Reserve detailed in Table 1 is HAL's assessment of programme level risk. Risk allocation related to the Task Orders is contained as

contingency and is included in the Direct and Indirect Costs in Table 1.



Arcadis has assessed whether the capital expenditure of the Preferred Masterplan phase for **Step 0** has been reasonably and reliably costed in relation to its design and programme.

Arcadis has reviewed HAL's approach to the Cost Estimate and process for development and has assessed the certainty and reliability of the Cost Estimate, including quantification, pricing and confidence in costs, the application of on-costs and HAL's approach to risk.

The review has observed that the level of maturity within the Cost Estimate, including the robustness of the evidence provided by HAL, in relation to its Preferred Masterplan and associated cost is appropriate for the current stage of the programme.

Arcadis has not reviewed property valuations as part of this review, and due to the confidential nature of the property cost estimate a breakdown of these costs is not available as part of this report.

Summary

It is Arcadis' opinion that on balance, HAL's Cost Estimate for **Step 0** is reasonably and reliably costed.

HAL has taken on board Arcadis's comments from previous reports regarding the structure of the Cost Estimate and produced a comprehensive document capturing all the relevant Cost Estimate data in one singular, well integrated, document.

The structure of the Cost Estimate reflects industry best practice standards and forms a good baseline on which to move forward. This can now form the basis on which to monitor and implement a change control process.

The structure of the Cost Estimates for each Task Order (TO) provides a standard platform for approaching the estimate and reflects best practice with how HAL has approached the quantification and pricing of direct and indirect costs

The level of quantification within the detailed estimates reflects the level of detail provided by HAL. The extent of quantification has increased since the Purple Book and the reliance on

allowances reduced which leads to an increased level of certainty.

Whilst HAL has reflected schedule risks in their risk models Arcadis is of the opinion that due to the ambitious and optimistic programme, as discussed in Sections 3 and 4 of this report, there remains further risk on the programme which could have an inherent risk on the Cost Estimate and the associated risks realised. The Cost Estimate is currently based on a risk percentage, the level of which has been reviewed against the Quantitative Cost Analysis.

Interest of Consumers

For the purpose of this report 'consumers' are defined as both passengers and users of the cargo users at the airport.

To review HAL's Preferred Masterplan with regards to the interest of consumers Arcadis has considered how HAL has acquired consumer insight and how well HAL has incorporated consumer insight into their masterplan development process.

This review will be building upon a previous Arcadis report submitted in December 2018, '*An initial review of consumer interests in the development of the HAL Masterplan*'.

Summary

Although not explicitly considered as part of this report, Arcadis has continued to see examples where the interests of consumers are being tested

through the development of the Preferred Masterplan.

In considering elements that are valued by consumers, the development of the infrastructure seeks to ensure that the existing airport operation can function whilst this phase of construction is taking place.

In addition, some of the work seen by Arcadis is seeking to increase the flexibility of the airport and ensure there is sufficient resilience available to cope with operational challenges.

HAL is seeking to minimise disruption for both consumers and the local community. HAL has spent a significant amount of effort to develop its delivery programme in a logical sequence to reduce the impact the works will have on both these groups.

In **Step 0**, there are no direct infrastructure improvements being proposed to support cargo users. However, there is evidence that HAL is actively engaging with the cargo community to develop improvements that will be delivered in future steps of the masterplan.

The majority of infrastructure improvements will benefit the consumers at Heathrow. The increase in runway capacity and on-going capacity improvements should contribute to delivering a scheme that is in the interest of consumers.

1 INTRODUCTION

Arcadis has undertaken a review of the Heathrow Airport Expansion Programme (HEP). This section sets out the objectives and approach to the key areas of focus Arcadis has adopted in compiling the report.

The steps taken by Arcadis to gather the relevant supporting information from HAL and other stakeholders have been identified and outlined in this section.

1.1 Background

Arcadis has been appointed by the Civil Aviation Authority (CAA) to provide technical advice in support of their work on capacity expansion at Heathrow Airport.

As part of this process Arcadis is undertaking a review of the Heathrow Airport expansion plans as detailed in their Preferred Masterplan published in June 2019. The Preferred Masterplan will act as part of Heathrow Airport Limited's (HAL) application for a Development Consent Order (DCO). HAL's

application for a DCO is anticipated to be submitted in 2020. The DCO, if granted, will contain the relevant permissions for building and operating an expanded Heathrow.

The Preferred Masterplan comprises of four phases. Each phase indicates the predicted annual passenger throughput, air traffic movements (ATMs) and the infrastructure enhancements required to accommodate this growth.

The phases represented in HAL's Preferred Masterplan are split into sub-phases. Previously the phases and sub-phases were identified as 'Steps'.

Preferred Masterplan Phases						
Phase	Step	Year	Passengers (mppa)	ATMs (000s)	Infrastructure	
1	0	2026	█	█	█	█
1a	1	2028	█	█	█	█
2	2	2030	█	█	█	█
2a	3	2033	█	█	█	█
3	4	2035	█	█	█	█
3a	5	2040	█	█	█	█
3b	6	2040+	█	█	-	-
3c	7	2040+	█	█	-	-
4	8	2050	█	█	█	█

Table 2 Preferred Masterplan Phases

Source: (01 Masterplan Briefing - HAL May 2019), (04 Forecasting and Capacity - HAL 2019)

Arcadis has been tasked with reviewing three key steps throughout the entire process: **Step 0**, **Step 3** and **Step 8**.

Arcadis' review of HAL's Preferred Masterplan will take the form of three reports. This approach has been approved by the CAA.

Step 0 Report (this report): Reviews the Preferred Masterplan with a focus on the requirements to open the 3rd runway in 2026 providing a capacity of 95mppa.

Step 3 Report: Reviews the requirements to achieve a capacity expansion of 122mppa using 2033 as the indicative point that this number of passengers will be processed.

Step 8 Report: Reviews the requirements up to the planned completion of the expansion programme with a date point of 2050, achieving a capacity of 142mppa.

1.2 Objectives

Our review of HAL's Preferred Masterplan considers whether the proposal is:

- Operable;
- Deliverable;
- Timely;
- Reasonably and Reliably Costed; and
- In the Interest of Consumers.

All of these themes are assessed in detail through the reports in separate chapters. The theme relating to 'In the Interest of Consumers' is featured in all of the chapters and is concluded substantively in the last chapter of the **Step 0** report.

This report focuses on analysing the themes as part of the **Step 0** proposals linked to the opening of the 3rd Runway. Steps 3 and Step 8 will be addressed in future reports.

When conducting our review, we have focussed on the following key technical areas, including elements of capex:

- Airfield;
- Terminals and Satellites;
- Landside;
- Surface Access; and
- Other key components including enabling works.

All the above key technical areas have been reviewed from the perspective of the themes identified. The scope of our review with regards to each theme is described in the following sections.

1.2.1 Operability

The airport will remain open during the construction phases. To achieve this, airport operations must be maintained during the development of the proposed infrastructure and facilities. The development

phases must also integrate into existing airport infrastructure.

Arcadis has assessed both the design and the programme of the Preferred Masterplan to assess the operability of the airport from the existing situation to **Step 0** that takes the expansion up to the opening of the 3rd runway.

Arcadis's assessment includes analysis on the following:

- The impact the Preferred Masterplan has on existing and future airport operations, including: Airfield, Terminals, Landside & Surface Access;
- Analysis of the operability of the plan with regards to complex issues including configuration, flexibility and resilience;
- Testing the reliability of forecasts and evaluating assumptions made by HAL;
- Reviewing the detail and calculations behind capacity assessments produced by HAL;
- The anticipated impact on existing consumers and operating airlines; and
- Observed level of maturity with regards to airport operations in the future.

1.2.2 Delivery

Arcadis has reviewed the Preferred Masterplan material to assess whether **Step 0** is deliverable. Our review has considered the following:

- The scope, design and programme;
- Feasibility of construction and ongoing airport operation during construction;
- Scope gap in deliverables, including the robustness of the programme for delivery and any risks associated with it;
- How new and impacted facilities will link with existing infrastructure and how HAL will maintain key assets during construction phases of delivery;
- The appropriateness of the detail provided in Project Management Plans and Programmes;
- The observed level of maturity with regards to deliverability; and
- Evidence that the single Preferred Masterplan and future development of the masterplan to DCO submission are adequately considered and appropriate for DCO award.

Some of these issues will be discussed in more detail in further reports as their impact on the deliverability of the scheme in **Step 0** is minimal.

1.2.3 Timing

This report assesses whether the single Preferred Masterplan at **Step 0** can be delivered to the anticipated timelines. Our analysis considers the following:

- Evidence that the single Preferred Masterplan and planned deliverables for each step can be provided in accordance with the specified duration in the programme and the dates and deadlines detailed;
- The risks to providing the relevant deliverables in accordance with the current specified duration in the programme and/or on the dates and deadlines detailed;
- The potential effect on overall programme durations of requirements that are not directly controlled by HAL, including the DCO and consent for the Energy from Waste (EfW) Plant.
- The impact of failing to provide for the relevant deliverables in accordance with the current specified duration in the programme;
- What strategies have been developed to mitigate risks and any subsequent impacts from failure to delivery in a timely manner, with consideration for interdependencies; and
- Evidence that the single Preferred Masterplan and future development of the masterplan to DCO submission are adequately considered and appropriate for DCO award.

1.2.4 Cost Estimate

Arcadis has assessed whether the capital expenditure of the Preferred Masterplan phase for **Step 0** has been reasonably and reliably costed in relation to the design and programme provided in the single Preferred Masterplan.

Arcadis' study has reviewed HAL's approach to create and develop the Cost Estimate of their masterplan, including:

- Review of approach to Cost Estimate and process for development and future development, amendments to Cost Estimate based on progress, assessment of progress and amendments to date;
- Scope gap review;
- Accounting for inflation; and
- Any corresponding impact with Opex and/or Totex.

Arcadis has assessed the certainty and reliability of the Cost Estimate, including:

- Quantification of costs (assessing the amount measured, the basis of the measurements and the extent of the work where quantification has not yet been undertaken);
- Pricing and confidence in costs (total, measured, assessed, benchmarks);
- Application of on-costs; and
- Approach to risk.

In addition, Arcadis has observed the level of maturity within the Cost Estimate. This includes:

- The robustness of evidence provided by HAL in relation to its single Preferred Masterplan and associated cost; and
- The integration of Cost Estimate with other elements of the single Preferred Masterplan such as; design, procurement, programme, logistics, external and mitigating factors, project specifics.

1.2.5 Interest of Consumers

For the purpose of this report 'consumers' are defined as both passengers and cargo operators of the airport.

To review HAL's Masterplan with regards to the interest of consumers Arcadis has considered the following:

- HAL's process for acquiring consumer insight
- The relevance of the information and the utilisation of customer insight;
- How well HAL has incorporated consumer insight into their masterplan development process;
- How well HAL's Masterplan reflects the stated and expected interests of existing and future consumers; and
- How well the future development of the masterplan reflects the interests of consumers.

This review will be building upon a previous Arcadis report submitted in December 2018, '*An initial review of consumer interests in the development of the HAL Masterplan*'.

1.3 Review Approach and Key Steps

Arcadis has proposed an approach to this masterplan review to meet the objectives identified above. The approach is aligned with CAA's expectations as agreed in a memo titled *HAL Masterplan Review* submitted by Arcadis to the CAA in July 2019.

The approach, and key steps taken are set out below:

- Arcadis has collected data and assessed all the information provided to it by HAL and has also used its own information and data for benchmarking and industry standards;
- Data and information have been analysed to understand the basis or source of the data. In addition, an assessment of the assumptions and parameters have been checked to ensure any proposed outcomes are aligned with these;
- The proposed technical solutions in the Preferred Masterplan have been reviewed and validated to ensure they meet the required criteria and objectives set;

- The impact of the proposed masterplan on various stakeholders has been considered;
- The delivery sequence and timing of the proposed masterplan has been reviewed;
- A study of the existing infrastructure has been undertaken to understand its link to the proposed facilities;
- The future demand and capacity needs of the expanded airport have been analysed and validated;
- An identification of any gaps in the robustness of the proposed masterplan, and an assessment of confidence in its delivery, have been undertaken;
- An interrogation of capacity assessments/ calculations has been made and these have been validated to ensure their alignment to expectations; and
- A review of the direct costs, indirect costs and programme specific costs in the Cost Estimate has been made to determine the

appropriateness of quantities, rates, percentage additions and allowances.

In the Interest of Consumers

Although this theme does not have a dedicated chapter as part of this **Step 0** report, Arcadis has considered the consequential impact that the themes will have on consumers and has made the relevant commentary within the theme chapters.

Arcadis has considered:

- To what extent HAL has gathered and utilised consumer insights to develop the masterplan;
- How well HAL has incorporated the interests of consumers into its masterplan development process; and
- Whether the masterplan reasonably reflects the stated and expected interests of existing and future consumers.

This element primarily builds upon the recent Arcadis Report '*An initial review of consumer interests in the development of the HAL Masterplan*' (dated December 2018).

2 OPERABILITY

Arcadis has assessed the **Step 0** proposals from an operational perspective. The impact on airport operations, configuration, flexibility and resilience has been assessed. This includes analysis of airside, terminal and landside infrastructure.

Arcadis has considered the simulation studies, assessed the reliability of forecasts and evaluated assumptions used in determining HAL’s models. **Step 0** has also been assessed against industry planning and compliance standards.

Arcadis’s key findings are:

- HAL has undertaken the appropriate level of detail to assure the proposed infrastructure will meet the operational demands placed on it at **Step 0**;
- HAL has demonstrated the increase in runway capacity will provide more operational flexibility and resilience;
- The integration of the new infrastructure with the existing airport operation is feasible and is unlikely to conflict with current operations; and
- HAL is yet to develop detailed Operational Readiness and Trials workstreams which will be key to ensuring a smooth transition without causing any operational issues.

2.1 Definition of Theme

This section of the report reviews the operability of **Step 0** and included an overview of the existing airport infrastructure and an analysis of the future infrastructure required to achieve the objectives of the HAL’s Preferred Masterplan.

Step 0 corresponds to Phase 1 of the Preferred Masterplan. This step/phase is when the new third runway becomes operational. This is currently anticipated to be 2026. This phase also includes some enhancements to existing facilities to meet the terminal and apron capacity demand.

This section of the report also assessed the assumptions contained within the Preferred Masterplan, considered the compatibility of the proposals with the existing layout of Heathrow Airport and reviewed the adherence to statutory requirements and known constraints.

In this high-level assessment of operability, we have considered the following elements of the Preferred Masterplan:

- Airfield, including the 3rd Runway;
- Terminals;
- Landside; and
- Wider surface access considerations.

As part of the masterplan HAL has completed forecasting and demand analysis. The Arcadis analysis has considered the appropriate metrics,

including passenger numbers and aircraft movements, in the review.

2.2 Assessment

2.2.1 Methodology

Our review consists of a high-level assessment of publicly available information and documentation provided to us by HAL at the time of writing this report. This documentation (listed in Table 3) includes a number of reports, presentations as well as a number of reference drawings.




Report Title	Report Source
Heathrow Strategic Brief	HAL – Public Documents
Preferred-Masterplan - June 2019	HAL – Public Documents
Updated-Scheme-Development-Report-Documents-1-of-5	HAL – Public Documents
Updated-Scheme-Development-Report-Documents-2-of-5	HAL – Public Documents
Updated-Scheme-Development-Report-Documents-3-of-5	HAL – Public Documents
Updated-Scheme-Development-Report-Documents-4-of-5	HAL – Public Documents
Updated-Scheme-Development-Report-Documents-5-of-5	HAL – Public Documents
	HAL – Airline Sharepoint
	HAL - Presentations
	HAL - Presentations
	HAL - Presentations
	HAL - Presentations
	HAL
	HAL
	HAL
	HAL – Airline Sharepoint
	HAL – Airline Sharepoint
Cargo Transformation Board pack	CAA

Table 3 Operability Documents Reviewed
Source: (CAA 2019), (HAL 2019)

2.2.2 Overview of Existing Infrastructure

The airport currently operates with a two-runway configuration. The runways are parallel and spaced far enough apart to enable independent parallel approaches. The dimensions of the runways are as follows:

- Northern Runway (09L/27R) – 3,902m x 50m; and
- Southern Runway (09R/27L) – 3,660m x 50m.

The declared capacity of the existing airfield is 88 movements per hour. The airport is currently limited to a total of 480,000 ATMs per year due to a planning condition associated with the construction of Terminal 5.

In the period 1st April 2018 to 31st March 2019, the airport handled 467,000 ATMs which is 98% of the capacity limit and equates to approximately 650 arrivals and 650 departures per day.

The terminal infrastructure at Heathrow consists of four terminals. Terminals 2, 3 and 5 are situated between the runways and Terminal 4 is located to the South of the Southern Runway.

In 2018 the airport handled approximately 80 million passengers per annum (mppa). The following data has been provided by HAL for each Terminal:

- Terminal 2 – [REDACTED] mppa;
- Terminal 3 – [REDACTED] mppa;
- Terminal 4 – [REDACTED] mppa; and
- Terminal 5 – [REDACTED] mppa.

The terminal facilities have surface access links for both private vehicles and public transport. The surface access infrastructure consists of adjacent vehicle forecourts, short stay car parks, road links to the motorway network and public transport interchanges for coaches, local buses, London Underground, and taxis.

2.2.3 Background of Current Operations

2.2.3.1 Airfield

Runways

The existing two runways at Heathrow are 3,902m x 50m and 3,660m x 50m. The runways are separated by 1,425m between centrelines. This allows for independent parallel approach. The runways are designed to operate the largest commercial aircraft, categorised as Code F by European Aviation Safety Agency (EASA) standards, which have a wingspan of up to 80m wide.

The runways are generally operated in segregated mode – landing aircraft are allocated to one runway and departing aircraft to the other. At specific times of the day when there is a build-up of airborne holding for arriving aircraft, tactical measures such

as using both runways for landings can be applied to minimise delays.

Despite the fact the minimum runways separation requirements as per EASA CS-ADR-DSN issue 4 and ICAO Aerodrome Design Manual (Doc 9157) Part 1 Runways are met, there is still a dependency between where air traffic control can position the arrival of an aircraft approaching one runway and an arrival on the other runway. The reasons behind this constraint are related to thresholds, approach categories, approach slopes, CTR Obstacles and abatement procedures. Separation between aircraft needs to be increased which reduces the landing rate on the runways and therefore the overall capacity. Solving the capacity constraint in this respect may impose the upgrade of the approach instruments / equipment and procedures and more advanced radar monitoring techniques.

Heathrow currently utilises its runways in an alternating operation, where they are switched for departing and arriving aircraft. This is done primarily to offer respite to local communities living under the flight paths from noise and overflying of aircraft. During westerly operations, the runways are alternated at 3pm each day. During easterly operations, the legacy of the now rescinded Cranford Agreement which prevented departures over Cranford from the northern runway, prevents runway alternation.

2.2.3.2 Terminals and Satellites

Heathrow has four operational terminals – T2, T3, T4 and T5. Terminal 1 is closed but houses the baggage handling system for T2. Terminal 1 is scheduled for demolition to enable future expansion of T2.

Terminal 2

- T2 opened in 2014;
- The main T2 terminal building is supported by a satellite – T2B;
- T2 is used by Star Alliance members and also by other non-affiliated airlines e.g. Aer Lingus;
- Handled [REDACTED] million passengers in 2018; and
- Current T2 area – 297,900m².

Terminal 3

- T3 is the oldest operational terminal at Heathrow today and opened in 1961;
- T3 is used by Oneworld members, Virgin Delta and SkyTeam;
- Handled [REDACTED] million passengers in 2018; and
- Current T3 area – 225,780m².

Terminal 4

- T4 is the only terminal located outside of the central core of the airport, being situated to the south of the southern runway;
- T4 opened in 1986;

- T4 is used by SkyTeam Alliance members and other non-aligned airlines;
- T4 handled █ million passengers in 2018; and
- Current T4 area – 132,400m².

Terminal 5

- T5 opened in 2008;
- T5 is used exclusively by British Airways and Iberia;
- T5 handled █ million passengers in 2018; and
- Current T5 area – 526,000m².

2.2.3.3 Landside

Car Parking

HAL has stated that the current car parking facilities for both airport workers and passengers total 67,050 spaces around the airport. This is made up of:

- 42,000, HAL controlled spaces;
- 9,500 off-site (Purple Parking in Southall, Bath Road and other)*;
- 9,300 onsite tenanted spaces;
- 3,100 off-site tenanted spaces;
- 2,700 car hire; and
- 450 taxi feeder park.

The airport has an existing cap of 42,000 spaces as part of the planning consent obtained for Terminal 5.

Of the total 67,050 car park spaces available the following spaces reserved for passengers and staff are:

- 33,000 passenger spaces across short stay, multi-storey and surface car parks including offsite locations;
- 24,800 staff spaces; and
- The remaining spaces are onsite tenanted spaces.

*It should be noted that the 9,500 off-site spaces declared by HAL has significantly decreased since the site being used by Purple Parking has now been redeveloped for housing.

2.2.2.4 Surface Access

Heathrow's baseline 2017 Public Transport mode share is circa. 40%. The mix of Public Transport services at the airport consist of:

- Heathrow Express – 4 trains per hour (tph);
- Piccadilly line – 12tph;
- TfL Rail Service – 2tph; and
- Various bus and coach services from CTA, T5 and T4.

This Public Transport infrastructure is currently not operating at full capacity which gives the airport scope to increase the use of public transport with this existing infrastructure as well as introducing new services such as the recently launched *Guildford Railair* coach as indicated in its plans.

2.2.4 Review of Preferred Masterplan

2.2.4.1 General Overview

The previous sections provided an overview of the infrastructure and operations of the current airport. This provides context for the review of the Preferred Masterplan proposals.

This section follows the overview by providing analysis on the operability of the masterplan proposals. It follows a logical sequence starting with the work HAL has undertaken on traffic forecasting and the design day schedule. This forms the basis of the capacity and design of the masterplan proposals.

The review then focuses on the individual aspects of the **Step 0** proposals, namely airfield, terminal and landside developments.

2.2.4.2 Traffic Forecasting

A fundamental aspect of airport masterplanning is the development of traffic forecasts. This provides the basic assumptions required to plan for the future growth of the airport.

HAL has developed Design Day Schedules (DDS) as part of this process. The DDS is typically used as the basis of designing the future size and capacity of an airport.

From our engagement with HAL, Arcadis has seen examples of the DDS and summaries of the methodology process behind their development. We note references to the █ and █ that documents the schedule generation methodology. Arcadis has not been provided with this documentation.

The DDS examples and extracts that were presented to Arcadis, included the following information:

- Flight and passenger information;
- Load factors;
- Annual passengers;
- Transfer rates; and
- Allocated stands.

The DDS has been used to derive passenger flows, transfer volumes and number of aircraft on the ground. The DDS information has been used for a range of workstreams in the masterplan process. The DDS has been used to inform the following sections of the masterplan:

- Masterplan design;

- Airfield;
- Terminal, satellites, aprons;
- Connectivity (bags and passengers);
- Surface Access;
- Environmental; and
- Utilities.

For example, the data from the DDS has been used in conjunction with the input assumptions for terminal and airside capacity modelling. The DDS suite serves as a single source so that all HAL workstreams use the same data for consistency.

Arcadis has seen evidence that a comprehensive suite of DDS has been developed by HAL. These were initially formulated back in 2015 and have been updated over subsequent years as the masterplan process has progressed.

The initial DDS were developed to match the Airports Commission and were provided for key years (2030 and 2040) with different scenarios, including carbon capped, carbon traded and baseline. These have been updated to account for future traffic, new layouts and phasing years. As a result, the DDS suite has expanded to encompass schedules for additional phasing years and different traffic scenarios such as high and base case.

Table 4 shows that HAL has developed DDS for a number of scenarios including a base and high case up to the opening of the new runway, and a base case and three variations of a high case in the year the third runway becomes operational. It should be noted that HAL has also developed DDS for two runway operations with increased traffic scenarios in the years prior to the opening of the third runway.

Year	Runways	Annual Movements			
		Scenario 1	Scenario 2	Scenario 3	Scenario 4
2018	2				
2022	2				
2023	2				
2024	2				
2025	2				
2026	2				
2027	3				
2030	3				
2035	3				
2040	3				
2045	3				
2050	3				

Table 4 Suite of DDS Currently Available for Use
Source: [REDACTED]

Based on this information, Arcadis is satisfied that the DDS suite appears comprehensive, providing parameters and assumptions that should aid various disciplines under the masterplan process, such as the terminal and airfield capacity studies.

The provision of schedules for a range of years in the masterplan period, as well as different traffic levels (high and base) indicates that HAL are testing different operating and growth scenarios for the development of the airfield.

The DDS for a two-runway scenario between 2018 to 2026 demonstrates that HAL has considered the operation of the airfield during the development works prior to the opening of the third runway (Step 0).

The DDS work appears to be detailed and is an ongoing process as per the Preferred Masterplan and phasing, as well as any layout changes. Arcadis notes that the DDS suite encompasses important years in the masterplan period and a variety of air traffic growth scenarios. To ensure confidence in the validity of the DDS data as an input to the different masterplan interfaces, we recommend that ongoing monitoring of the process is maintained by HAL in order to mitigate any potential risk.

2.2.4.3 Airside

3rd Runway Location

The requirement of the Airports National Policy Statement (ANPS) is that the runway must be at least 3,500m in length and enable an additional 260,000 ATMs per year. The position of the new runway must enable independent runway operations.

The position of the new runway has been through an extensive evaluation process and has been sited in accordance with the ANPS. This review does not revisit the previous study, but HAL has detailed the process in Document 2 of their Updated Scheme Development Report.

The new runway will be separated by 1,035m from the existing Northern Runway, from centreline to centreline. This will enable independent runway operations. HAL has previously stated that further benefits would be realised by separating the runways further apart than 1,035m. However, they have decided against this as greater separation would require further loss of property in Harmondsworth and 1,035m runway separation would be more efficient for ground operations. As a comparison, the centreline separation between the existing Northern and Southern Runways is 1,425m.

Arcadis agree with HAL's assessment with regards to the separation of the new 3rd runway from the existing Northern Runway and believe that a separation of 1,035m (as per the ICAO & EASA requirements) creates the conditions for operations density increase by introducing the independent parallel approaches and departures strategy, leading therefore toward absolute higher probabilities to meet the objectives in the ANSP. However, the delivery of the extra 260,000 ATMs is still subject to modelling which is currently an ongoing process.

3rd Runway Length

Analysis into the appropriate length of the runway was completed during the Airports Commission process. HAL provide a summary of the approach taken to the determine the length of the runway in Document 2 of their Updated Scheme Development Report.

The length of the proposed runway is 3,500m. It will be 60m in width, comprising 45m of runway and 7.5m wide shoulders on either side. This enables Code F operations.

The design of the runway also includes provision of displaced thresholds at both ends. These would be 550m (subject to final NATS/HAL safety case) at each runway end and this is designed to reduce noise impacts from aircraft on surrounding communities.

Runway Infrastructure and System

With the provision of the 3rd Runway, adjustments have been proposed for the two existing runways that will enable independent alternation of flightpaths across the three runways. These adjustments are designed to reduce the impact of aircraft noise on the surrounding community, enable efficient use of taxiways around the end of runways (Around the End Taxiways (ATETs)) and increase the flexibility of runway operations.

ATETs are a type of taxiway with the same characteristics as existing taxiways across the airfield. The only difference is that they are positioned at the end of runways to enable aircraft to taxi from one side of a runway to the other without having to cross an active runway. They are designed to be operated independently of runways and the ATET and the runway can be used simultaneously. Arcadis believes that this will contribute to the more effective operation of the airport and is configured for minimum land take.

On the existing southern runway, a 550m displaced threshold will be introduced. The centre runway (existing northern runway) will have 1,101m displaced thresholds introduced at both ends. Aircraft on approach will be at a higher altitude as they overfly local communities with the aim of reducing noise impact. At the east end of the centre runway, a new 211m starter extension strip will be provided to maintain a 3,500m take off run available as a result of the ATETs located at the western end.

The introduction of the 3rd runway requires changes to the modes of operation. One runway will be dedicated to landing aircraft, one to departures and the other used for landing and departing aircraft in a mixed mode operation. The different modes of operation will be circulated around the three runways to provide periods of respite from aircraft noise for local communities.

Airfield Modelling

Airfield modelling and simulation work has been undertaken for the future runway operations by HAL. This has been undertaken in conjunction with NATS. The modelling software used by HAL is Total Airspace and Airport Modeler (TAAM). TAAM is an industry recognised tool for airfield modelling and it is understood that this has been used for a number of years by HAL. Arcadis is satisfied that this is an appropriate tool to conduct airfield modelling.

HAL has confirmed that the modelling process has included engagement with airlines on a bi-lateral and multi-lateral basis. It is understood that these

discussions are confidential but Arcadis is satisfied that the airlines have been involved to provide a further level of verification, debate and analysis to the modelling process.

We have seen evidence that the simulation work has taken into account the daytime mode changes – alternating each runway between landing, departure and mixed mode. Furthermore, simulation has been undertaken for both easterly and westerly runway operations.

From our review of supporting documentation relating to the airfield design provided by HAL, a comprehensive list of modelling assumptions demonstrates that development work and analysis has been undertaken behind the future runway operations and airfield assessments for the masterplan development. The list of modelling assumptions encompasses both airspace and airfield characteristics which relate to aircraft separation, arrival and departure routings, taxiway flows, stand plans, ground movement speeds and the planned runway threshold displacements.

From these modelling assumptions, Arcadis believes that HAL has conducted airfield modelling that accurately replicates the future layout and assumed operation that this might entail. Arcadis has seen select outputs of the airfield modelling work that has been undertaken by HAL which were presented in workshop sessions. The outputs that have been made available indicate airborne delay, arrival taxi time and departure taxi time for different configurations of the runway operating modes.

HAL has not completed modelling for low visibility procedures at this stage but has started initial consideration for understanding the impact on the most complicated areas of the airfield. Arcadis is satisfied that the modelling is sufficiently advanced at this stage and would not expect this level of detail for a masterplan.

Overall, Arcadis is satisfied that HAL has conducted modelling that accurately tests their assumptions and proposed airfield infrastructure. It has been indicated by HAL that airfield modelling is ongoing to further develop the airfield design and test the proposed infrastructure against other scenarios such as low visibility operations and runway outages.

Taxiway System

The taxiway system is thoroughly described in the *Updated Scheme Development Report* produced by HAL in *Chapter 2, Document 2*.

The general layout of the current taxiway system consists of dual parallel taxiways assigned to each runway in part connected with nine cross-field taxiways linking north and south areas. Located to the south side of the Southern Runway (09R/27L) are Terminal 4 and the cargo area which are also linked with the whole airport taxiway system.

The new runway will require a taxiway system that connects with the new aprons and terminal as well as with the existing taxiway system. The taxiway system will have to comply with many requirements

to avoid any single points of failure, predictable and reliable respite from noise and compliance to EASA requirements for airfield geometry. In order to meet the above criteria, HAL decided to adopt a detailed scheme development process of optimisation regarding options development and selection.

The current layout of the airfield does not include any taxiways that go around the ends of the runways. All aircraft currently accessing T4 and the cargo area must cross the Southern Runway. The new sections of the airfield are designed to eliminate similar scenarios. Aircraft using the new 3rd Runway will not be required to cross the central runway to reach the rest of the airfield. It is preferable that, following the requirements for taxi time reduction, aircraft using T4 and the cargo area to be assigned the use of the future Centre and South Runways. Longer term, aircraft using T5N will use the new 3rd Runway and the existing Northern Runway.

The Total Airspace and Airport Modeller (TAAM) and Air Traffic Control (ATC) simulator modelling employed by HAL indicates that if aircraft were required to cross the central runway then it would not be possible to deliver the additional 260,000 ATMs as detailed in the NSP.

HAL propose dual Around the End Taxiways (ATETs) on the central runway to prevent aircraft having to cross active runways. These will be located at the west side of the airfield where the majority of the apron capacity is located. Situating the ATETs on this side reduces the overall land take required. This will also provide environmental and operational benefits as it minimises taxi times for aircraft accessing the new runway.

The ATETs will be Code F compliant and therefore compatible with all aircraft sizes using the airport. This provides maximum operational benefits and, as they are dual taxiways, will enable one taxiway to be used for departures and the other for arrivals.

On a localised section of the ATETs, the vertical stabiliser of Code F and some larger Code E (Boeing 747-8i) aircraft will infringe the take-off climb surface of the obstacle limitation surfaces (OLS) associated with the central runway, as indicated in Figure 1. This will have an impact upon airfield operations whilst Code F aircraft are taxiing in this area. The impact of this could be either airfield operations related restrictions or amendments to aircraft performance (through updates to Type A charts) depending on detailed solutions to be agreed upon with the airlines at the detailed design stage.

However, considering the small proportion of Code F aircraft movements Arcadis does not believe this should have a detrimental impact on safety or capacity. Movement of Code F aircraft in this area will be managed operationally by ATC to comply with airfield operations requirements and maintain the safe movement of aircraft, expected by routing Code F aircraft on the outer of the two taxiways.

The alternative would be to redesign the airfield with wider spacing between the runway and taxiways.

Arcadis believes that this would be excessive and is satisfied that the design proposed is sufficient with regards to safety and operational risks and that HAL has provided a pragmatic solution.



Overall, Arcadis agrees with the location and the design of the ATETs from an operational and airfield safety perspective.

Aprons and Stands

During **Step 0** there is no significant terminal expansion proposed with additional capacity being accommodated within the existing infrastructure. As a result, the apron infrastructure will remain similar to the existing layout. However, additional aircraft stands will be provided on existing airside areas.

Currently, Taxiway Kilo is under construction. The taxiway is located between the now closed Terminal 1 and Terminal 2B, as can be seen from Figure 2. Its completion will provide a new link between the two existing runways. The completion of the taxiway will also allow for additional aircraft parking space (Kilo box stands) either side of the taxiway. Some of these are already operational whilst others are under construction.

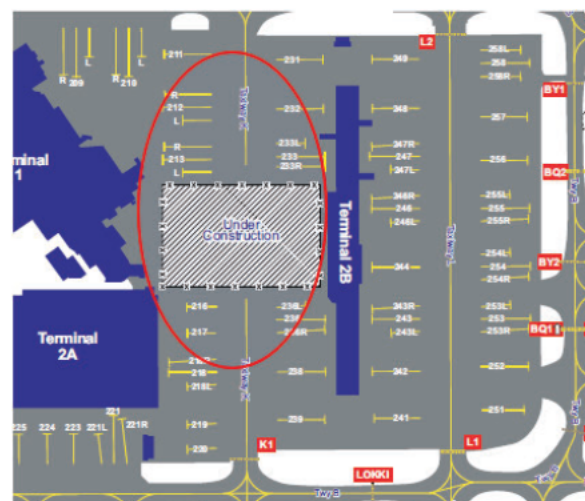


Figure 2 Taxiway Kilo and Associated Stands
Source: (NATS - AIS 2019)

As part of the 'T5 Plus' scheme, five non-contact stands located at the northern and southern ends of the T5B and T5C satellites will be converted to contact stands. It is expected that the required conversion works would render these stands temporarily unavailable and that during this period, alternative stands should be provided to accommodate any associated shortfall in capacity that may arise on the T5 apron. If the stands are currently used for towing, when aircraft are on the ground for prolonged periods between flights, then we believe that this would not be an issue as these can be accommodated elsewhere, for example in the Eastern Maintenance Base or on the 580s/590 stands.

It is proposed in HAL's *Stand Throughput* report that some or all of stand numbers 580s and 590s, currently located in the middle of the airfield between Terminal 5C and Terminal 3, could be reallocated from T3 to T5.

Arcadis are satisfied that these additions can be provided in an operable manner. The new stands will be accommodated within the existing airside infrastructure.

The *Stand Throughput* document outlines the mppa/stand ratio for the actual and declared capacity in 2018, on a per terminal and total stand basis. For both actual and declared capacity, the mppa/stand ratio is just below 0.5mppa.

At **Step 0**, the proposed additions and re-allocation of stand infrastructure, along with the envisioned capacity, the mppa/stand ratio for the overall airfield is 0.51 mppa. We have undertaken a high-level benchmark of airports which are either operating with three runways or have proposed development of a third runway with passenger throughput similar to the rate that is expected in **Step 0** (see Table 5 below).

For clarity, HAL provide two scenarios (A & B) in the *Stand Throughput* document. The difference between the two scenarios is the allocation of remote stands between terminals and consequently how this corresponds to the mppa/stand figures. However, in each scenario the total number of stands, the overall airport capacity and the overall

mppa/stand throughput is constant. Therefore, the analysis in Table 5 accounts for both scenarios.

Our high-level benchmark analysis indicates that the annual passenger to stand ratio in **Step 0** is aligned with similar sized airports operating with or proposing a third parallel runway. It is Arcadis' opinion that the annual passenger to stand ratio is in the upper range. However, based on comparison with similar sized airports, Arcadis is comfortable with the stand throughput proposed by HAL.

Airfield Hotspots

The existing layout has four airfield hotspots as indicated below:

- **HS1 (Links 23, 22 and 21)** – Pilots must maintain a good lookout and are responsible for wing tip clearance;
- **HS2 (SATUN)** – Pilots must maintain a good lookout and are responsible for wing tip clearance;
- **HS3 (Link 28)** – Code F movements must take care. Link 28 East of Taxiway Alpha is not Code F compliant; and
- **HS4 (TWY Y)** – Pilots are to ensure they have clearance to enter the runway before crossing the holding point.

The masterplan process is removing these hotspots by design over a period of time. Arcadis believes using the masterplan process to eliminate the hotspots is a sensible approach to enhancing the safety of the airfield. Arcadis' analysis of the airfield layout does not indicate that any new hotspots will be created.

Cargo Facilities

In 2018, approximately 1/3 of the UK's long-haul export goods moved through Heathrow airport and the airport is the UK's biggest port by value. The main cargo facilities are located to the south of the airport. This infrastructure handles a significant amount of cargo which equates to c. 1.7 million tonnes per annum. This is supported by the large amount of freight and logistics businesses located

Airport	Total No. of Terminals	Annual Pax - based on 3 parallel runways (MPPA)	Total No. of Stands	Annual Pax per Stand (MPPA)	Comments
Heathrow*	4	95.0	186	0.51	
Hong Kong*	3	97.0	160	0.61	Based on three runway system with 3rd runway passenger building (Masterplan 2030)
Singapore Changi*	4	82.0	159	0.52	
Kuala Lumpur	2	70.0	162	0.43	
Munich*	2	61.0	156	0.39	Third runway plans submitted but not pursued during the current Bavaria Coalition Government legislative period (2018–2023).
Beijing Capital	3	95.5	171	0.56	

*Third runway proposed or in development

Table 5 Comparison of Heathrow Step 0 Scenario mppa per Stand Ratio
Source: (Arcadis Internal Library 2019)



Figure 3 Location of Cargo Terminal and Cargo Related Businesses in the Surrounding Area
Source: (Preferred Masterplan - HAL 2019)

in the surrounding areas of this airport (refer to Figure 3 above).

Arcadis understands that new third runway would permit the growth of cargo volumes to the forecasted demand which is anticipated to reach 3 million tonnes per annum by the year 2040.

The Preferred Masterplan proposes up to 206,000m² of additional cargo facilities to support the forecasted demand. The development strategy followed to meet the projected demand comprises of four key criteria:

- Increasing capacity to facilitate the throughput of 3M tonnes per annum;
- Improving performance and efficiency;
- Reducing freight vehicle traffic; and
- Minimising risk of delivery vehicles.

HAL has proposed improvement measures support each of the development strategies. The improvement measures are explained concisely in Table 6.

These infrastructure developments are not proposed to be delivered before 2026 so are not covered in the **Step 0** report. Arcadis aims to undertake a full analysis of the proposed cargo infrastructure in the Step 3 and Step 8 reports.

Air Traffic Control Tower

A second ATC tower is proposed in the masterplan (refer Figure 4). This is positioned adjacent to the hard stands array facing T5XN in the west side.

HAL anticipates that technology may negate the need for a second tower. Therefore, the position of the tower is for safeguarding purposes only should it be required in future.

Arcadis has no information about the height, line of sight or any other parameter in relation to its construction.

From aeronautical point of view the location of the tower must be checked against the height limitations imposed by the Obstacle Limitation

Development Strategy	Improvement Measures
Increasing Capacity To facilitate cargo throughput of 3M Tonnes P.A	<ul style="list-style-type: none"> • Facilitating growth and intensification of land use on site • Provision of additional capacity through development of new cargo terminals / transshipment facilities
Improve performance and efficiency	<ul style="list-style-type: none"> • Minimising Minimum Connection Times (MCTs) for transiting freight through • Addressing traffic issues at Control Posts • Addressing access issues with Dnata City • Reducing number of touch-points
Reducing Freight Vehicle Traffic	<ul style="list-style-type: none"> • Consolidation of freight forwarder facilities • Providing excellent airside road links from new apron areas to the cargo areas • Provision of cargo staging areas close to aprons • Provision of transshipment areas
Minimising risk of delivery vehicles using residential roads by	<ul style="list-style-type: none"> • Developing a truck park with appropriate call forward facilities • Investigate the possibility of an Intermodal / Rail hub for cargo

Table 6 HAL Development Strategy for Cargo
Source: (Cargo Transformation Board pack 2019)

Surfaces provisions – EASA CS ADR DSN – Chapter H.

Rescue and Fire Fighting Services

ICAO Document 9137 – Airport Services Manual Part 1 details the regulations and requirements for the fire protection level based upon the air traffic movements at airports. Heathrow Airport is able to provide Rescue and Fire-Fighting Services category A 10 level.

Within the Preferred Masterplan document HAL is declaring a Satellite Fire Station in relation to the 3rd Runway operation positioned in proximity of new THR 27R, east of TXN satellite. The requirement is that the fire service must be able to respond to emergencies and reach the runway thresholds within three minutes of a call.

It is noted that the position of the facility may require 90 degree turns when accessing taxiways. ICAO recommends that 90-degree turns should be avoided. However, Arcadis accepts that the level of

detail in the masterplan may not show all of the airside roads. We would expect that the design will allow provision for local airside roads to prevent this scenario.

A more centrally located position to the runway would provide a faster response time to the west side of the new 3rd Runway, however, with the competing demands of other airfield infrastructure Arcadis believes the proposed location can provide a compliant solution.

Therefore, Arcadis is satisfied that the location of the fire station can be made compliant regarding emergency response times.

As the masterplan develops the final design of the facility will be determined. This will include items such as the vehicle fleet allocation and the extinguishing agents. Following this, the Emergency Plan will detail the response plan for emergencies and the specific detail regarding equipment and personnel.

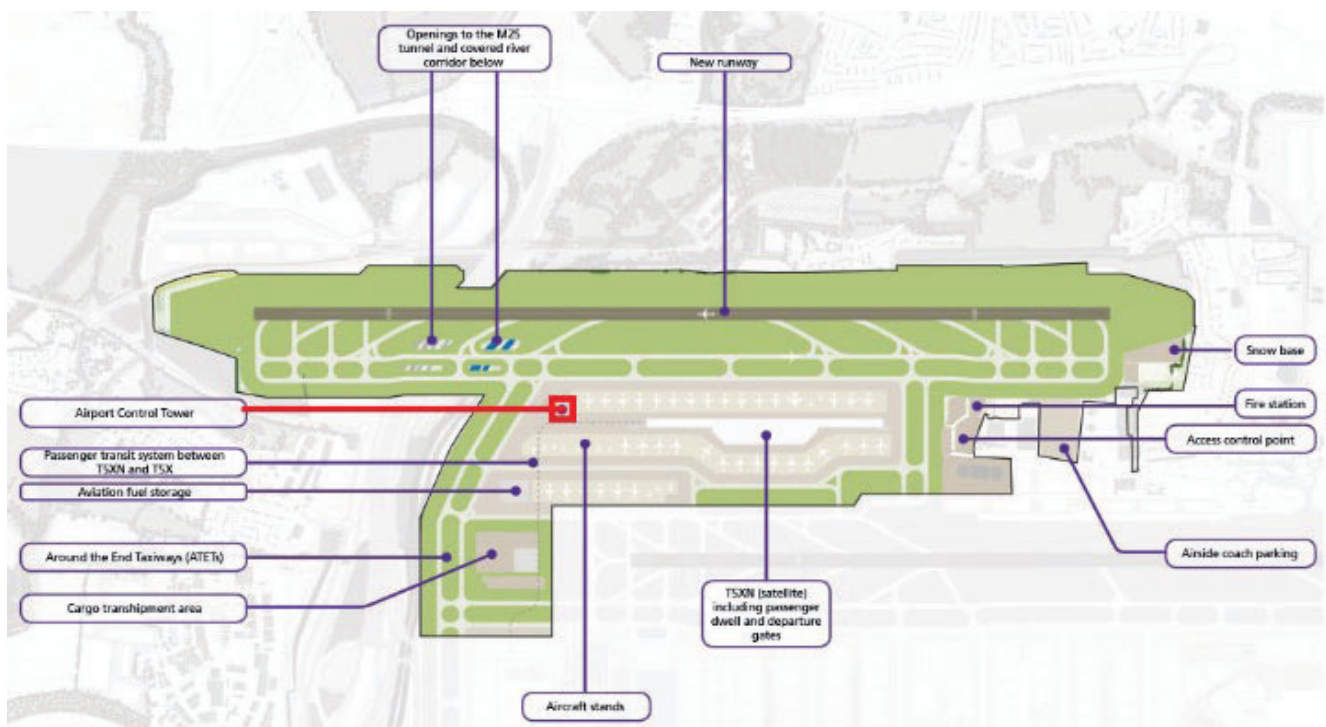


Figure 4 ATC Second Tower Location – 3rd Runway
Source: (Preferred Masterplan - HAL 2019)

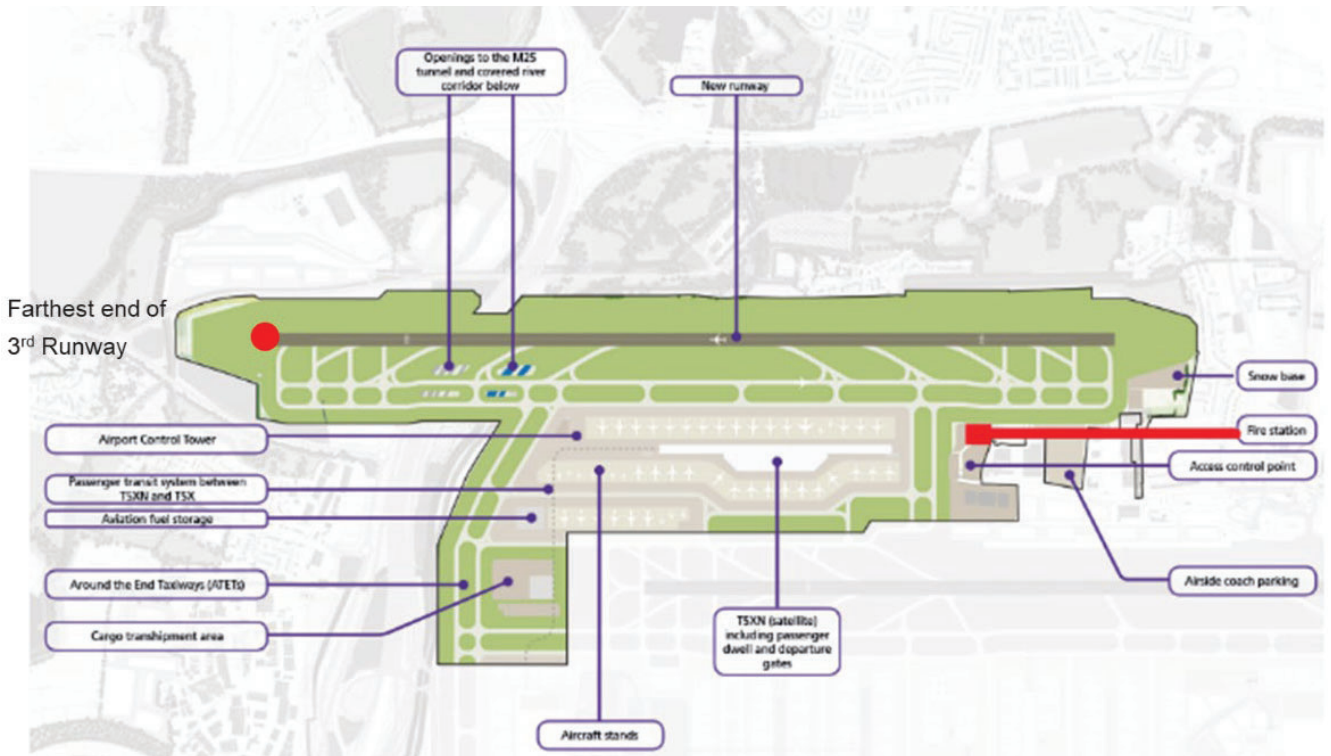


Figure 5 Satellite Fire Station Location
Source: (Preferred Masterplan - HAL 2019)

Fuel Farm

The aviation fuel demand at Heathrow today is 100 million litres per day. This is delivered primarily through an extensive pipeline system including the use of rail transport.

Before being pumped through the hydrant systems, the aviation fuel needs a buffer (ground level tanks) in order to ensure a settling period for quality aircraft delivery purposes and in a certain adequate volume aiming to continue to feed the airport in case of supply disruption.

There are two fuel farms at Heathrow today:

- Northern (Perry Oaks) Fuel Farm; and
- Southern (Cargo Zone) Fuel Farm.



Figure 6 Existing Fuel Farm – Perry Oaks Depot
Source: (NATS - AIS 2019)

The Northern Fuel Farm is located west of Pier 5 Terminal 3, South from TWY B, neighbouring Stands 596, 595, 594. (Figure 6).

The Cargo Zone Fuel Farm is located South from TWY S, across Cargo Apron Z (Figure 7).

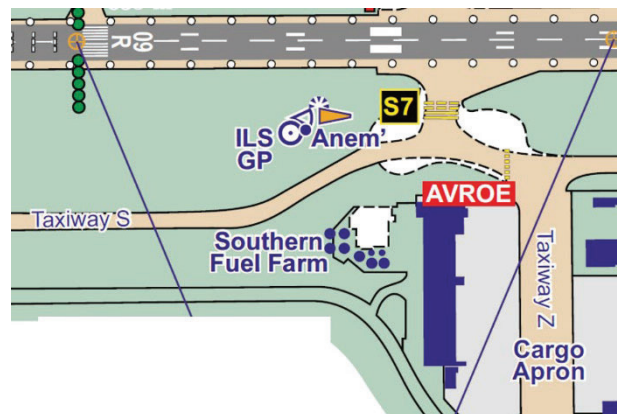


Figure 7 Cargo Apron Fuel Farm
Source: (NATS - AIS 2019)

HAL has evaluated several options for fuel storage facilities development in order to cope with the forecasted 740k ATMs average peak demand schedule and 100 million litres per day required by the expanded airport. Some supply disruptions were considered - ranging from 2 to 14 days with severity of fuel loss of supply from 25% to 40%.

The most fuel resilient option identified as optimum was the construction of four supplementary tanks next to Perry Oaks Depot, on parking stand 596 and six more tanks on the Southern Apron. Thus, this option would be able to withstand a prolonged 35% supply disruption and up to five days at 40%.

Together with the above planned extension there are also reconfiguration of the supply network as pipelines and Railhead.

The development of the fuel farms and space reconfiguration must also take into account the safe distances in relation to the existing structures and operating aircrafts. Information received from HAL indicates that the safety clearances for the fuel tanks are compliant with the Control of Major Accidents Hazards (COMAH) regulations.

Arcadis believes that HAL has undertaken a comprehensive analysis of the fuel demand. The proposed expansion of the existing facilities planned to meet this demand, whilst providing the necessary capacity for disruption.

Ground Support Equipment (GSE)

HAL has presented a high-level view within the Preferred Masterplan document setting out the positioning of the Maintenance Base for Ground Support Equipment (GSE) repairment and parking within Area A, 3rd Runway related.

While the location of the GSE Maintenance (and other similar facilities) is dictated by the aerodrome performance and standard operating practices, the GSE inventory and capability is important for the entire airport operations.

This defines the services assumed by HAL and technical capabilities of other airport users such as Handling Companies.

Currently, Arcadis has not analysed any GSE fleet inventory, capacity estimation or planning in relation to the new 3rd Runway operations. There is a risk that GSE may need to take up stand space that could cause operational inefficiencies.

Snow Base

The Preferred Masterplan has the location of the Snow Base at the east end of new runway 09L/27R in the proximity of the GSE Repairment facility.

The location of the Snow Base as indicated in Figure 8 below is dictated by the local standard operating procedures of the aerodrome.

Arcadis believes that the snow base is located in a suitable position on the airfield to respond to operational needs in periods of adverse weather.

2.2.4.4 Terminal and Satellites

As **Step 0** does not include expansion to existing terminals or the construction of new terminals, Arcadis has focused on the external airport infrastructure and the construction of the runway. However, as part of the existing 'On-Airport' portfolio of capital projects, HAL currently has plans to increase the capacity of T5 and potentially T3 in advance of the new terminal facilities being developed and to maximise the opportunity of a potential uplift in ATMs following the DCO approval. These projects are referred to as the 'Plus' projects.

Additional demand in this period is anticipated by HAL to be absorbed by the existing terminal facilities. There will be additional capacity measures implemented but these will be through alterations to the existing infrastructure and measures including technological enhancements to processing facilities.

Arcadis is satisfied with the approach taken by HAL. Namely, that **Step 0** concentrates on external infrastructure and airfield infrastructure. Arcadis after a high-level assessment based on the thumb

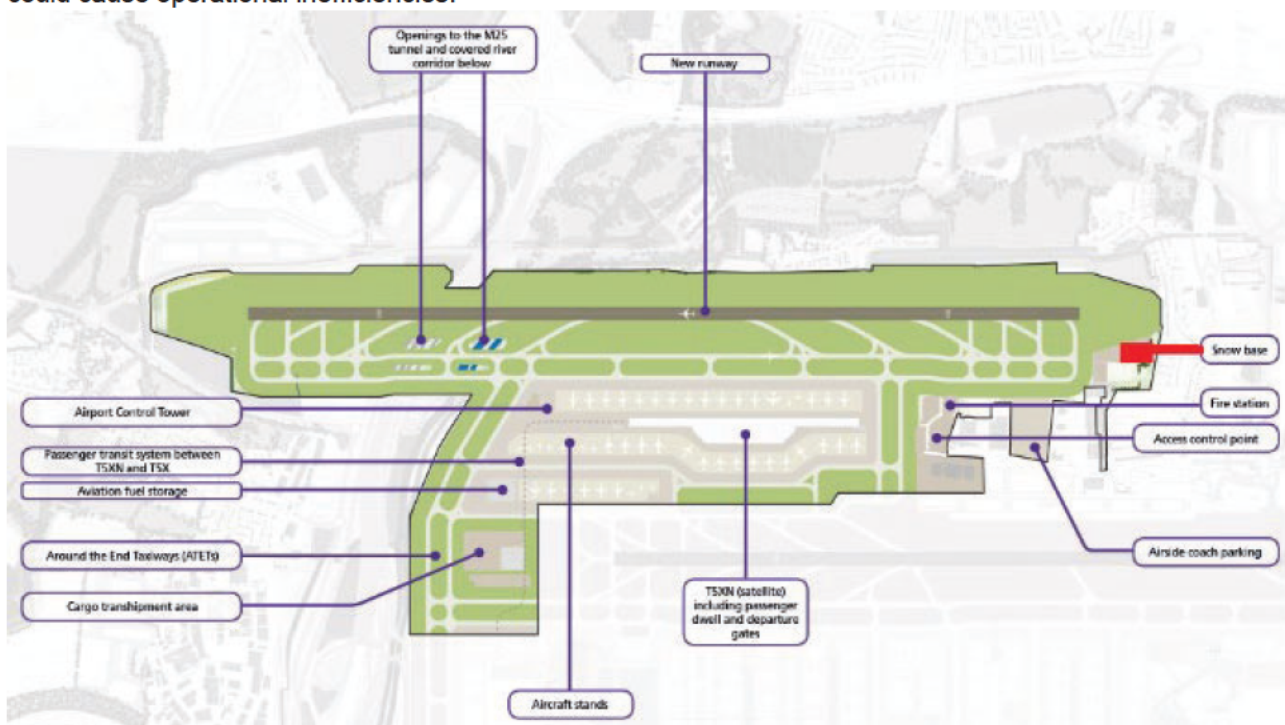


Figure 8 Snow Base Location Zone A
Source: (Preferred Masterplan - HAL 2019)

rules and benchmarks due to limited access to information is satisfied that the terminal facilities can cater for the passenger demand in the Step 0 phase.

2.2.4.5 Landside

Forecourts

HAL is proposing to provide 'Kiss and Fly' facilities within the new parkways. Arcadis has measured the total airport wide kerbside that amounts to circa 32m per mppa. Arcadis has not been provided with any figures for the equivalent Kerb length HAL's new scheme will provide. It is not possible to make any meaningful analysis on whether this will be operable to a reasonable level of service. Arcadis considers that if HAL significantly reduces capacity from today's available kerb capacity, the drop off services may become have operational challenges

Taxi and Private Hire Vehicles

Arcadis has considered the effect that the proposed Heathrow Access Charge may have on Black Taxi and Private Hire Vehicle (PHV) fares and availability. The Heathrow Access Charge is a strategy to be implemented, originally as a pollution charge and then moving on to an access charge in 2026, this fare will be enforced for both private vehicles and taxis, with staff, freight and busses/coaches being exempt. If the access charge is applied upon every entry rather than on a daily basis, passengers will have to pay more to use these services.

Some passengers are unable to use public transport due to their location (when the public transport network is not operational -such as very early mornings) or due to a physical disability (that reduces access to public transport). Those passengers are likely to be adversely impacted financially by HAL's access scheme

In addition, this may lead to a reduction in the number of taxis and PHVs available at the airport, which would create longer queues at the Taxi ranks and for passengers seeking to use PHVs.

Bus and Coach

HAL has stated that they will expand the Central Bus Station and landside terminal zones to account for their improved bus and coach network. Arcadis has not been provided information by HAL of any plans to expand the bus and coach facilities at T4 and T5, with the proposed increased bus and coach services.

Arcadis considers that there is a risk that without an increase in available facilities, the airport will be unable to manage this increase in demand which will cause operability problems and cause delays to both passengers and staff using these services.

Car Parking

The current number of passenger parking spaces both short and long stay is 33,000, this includes both HAL controlled spaces and offsite Purple Parking. This sets a ratio of 435 parking spaces per mppa.

Whilst HAL do not have a target for **Step 0**, the current proposals for the number of HAL controlled parking spaces for passengers is 38,600 for 2030 with this number increasing in line with expansion through to **Step 8** (2050). This level of parking sets a ratio of between 330 and 335 parking spaces per mppa.

Arcadis notes that HAL has included 9,500 off-site parking spaces currently outside of their control in their baseline numbers. This has created a surplus of parking in their current levels compared to the proposed expansion plans as the latter only includes HAL controlled spaces.

As HAL is unable to rely on the additional provision of external parking for passengers, Arcadis have analysed the HAL provided numbers in terms of operability despite this discrepancy in methodology.

This reduction is reliant upon a significant level of change in how passengers choose to travel to and from the airport over the next ten years where the airport has little control. HAL has set out its Surface Access Strategy which includes high level information on incentives that aim to offer a Public Transport alternative for passengers travelling to and from the airport.

However, aside from the introduction of the Heathrow Access Charge, it is not apparent within the documentation how HAL will achieve this reduction in demand if passengers choose to continue to access the airport by private car and wish to park.

The risk associated with the reduction in parking space ratios is that HAL will have to manage the demand.

Staff Travel

The baseline of staff parking numbers for 2013 originally recorded has been flagged as anomalous by HAL, and as such are mediating between the significantly higher 2009 and 2017 values for their baseline. This does not affect their ability to operate the airport post 2026 but will significantly affect their ability to meet the 2030 and 2040 ANPS targets.

A modal shift to public transport will reduce car parking spaces for staff allowing spaces to be used for passengers. Car parks are to be consolidated into fewer sites that are clustered together into groups with good access to road networks. HAL has anticipated an increase of 2,150 car parking space provision in 2026.

The allocation of staff car parking is within HAL's control and the opportunity to achieve their proposed reduction is possible. This is however dependant on alternative options being available for staff to be able to get to and from work. Arcadis notes that without other options being available, there is a risk that the ability of the airport to bring in this change is limited and their ability to deliver the parking capacity for use by passengers at **Step 0** is reduced. This again may create the knock-on operability issues highlighted above in both the car parks and forecourts.

Freight

The opening of the 3rd Runway will see an increase in ATMs and will result in an increase in the availability of air freight capacity at the airport. This will mainly be in the availability of more ‘belly hold’ capacity rather than through a significant growth in dedicated air cargo flights.

Although HAL has set out a plan to increase the use of virtual consolidation of freight, the evidence or impact of this is yet to be demonstrated. Arcadis believes that the increase in air freight capacity at Heathrow is likely to lead to a greater volume of road-based freight traffic accessing the airport campus to feed this demand.

This increase in air freight activity will impact on the operability of the airport as the resulting increase in road-based freight is likely to increase queuing at control posts and delays on the airport and wider road networks.

HAL has not set out detailed information on the level of freight activity linked to the opening of the 3rd Runway in 2026. Arcadis is therefore unable to fully review the operability implication the growth of air freight will have in Step 0 at this stage.

2.2.4.6 Surface Access Strategy

The ANPS detailed a number of requirements for surface access as follows:

- Increase the proportion of passengers accessing the airport by public transport, cycling and walking to at least 50% by 2030 and at least 55% by 2040;
- Reduce staff car journeys by 25% by 2030 and by 50% by 2040 from a 2013 baseline level;
- Strive to meet the HAL public pledge to keep landside related traffic no greater than 2019 levels;
- Set out the mitigation measures that it considers are required to minimise and mitigate the effect of expansion on existing surface access arrangements; and
- Keep CO² emissions within UK climate change targets.

This section analyses the assessment for Step 0 up until the anticipated runway opening in 2026. It should be noted that there are no specific ANPS targets set for this period. However, the existing Surface Access Strategy mode share targets seek to maintain a public transport mode share above 40% with a goal of 45% by 2024.

Most of the targets set out as part of the ANPS for an expanded airport are measures that are required beyond the Step 0 date. Arcadis recommends that the work to achieve these targets should begin in the early phases. The masterplan does not include the anticipated metrics for achieving these targets

by 2026. However, it does include the progress expected to be made by HAL by 2027.

HAL has stated that ‘good progress’ is expected to be made on the mode share and staff travel targets. HAL also state that compliance with UK Air Quality limits is expected to be achieved by 2027. HAL is confident that the pledge to keep landside traffic levels no greater than 2019 levels is expected to be achieved.

HAL’s pledge of generating no more airport related traffic greater than 2019 levels is in the process of being monitored by HAL for the purpose of setting a baseline. HAL are utilising an Automatic Number Plate Recognition (ANPR) systems in a tight corridor around the airport. To date, HAL has not provided information on how their consolidation areas for retail and construction traffic will be taken into account for this purpose.

As the current proposed monitoring cordon does not include airport specific facilities such as the proposed Consolidation Centre the quantity of traffic not using ‘airport roads’ but still Heathrow related traffic will not be captured as part of this calculation.

In order to achieve this a range of infrastructure measures have been proposed for the period up to 2027. The relevant tangible measures proposed to achieve these targets include:

- Expanded coach facilities at Central Bus Station and Landside Terminal Zones;
- Cycle lanes and bus priority on A3044;
- Cycle lanes and bus priority on A4;
- Piccadilly Line enhancements (by TfL);
- New Multi-storey long stay car park at T4 (on site of existing surface level parking); and
- Staff parking reduced from approximately 25,000 spaces to approximately 19,000.

The following operational improvements are proposed:

- New taxi backfilling model;
- Vehicle access charge;
- Elizabeth Line operational;
- New Heathrow Travel Account for staff; and
- New coach services.

The above measures will contribute to the achievement of increasing the use of Public Transport and sustainable modes of travel and that these infrastructure and operational models will help meet the surface access targets. However, the targets for **Step 0** are not clearly defined and these are only specified for later phases.

The provision of this information for **Step 0** would assist Arcadis in determining the potential impact that these could have on the operability of the Landside areas of the airport in 2026.

2.2.5 Review of ANPS and Regulatory Compliance

This section of the report reviews **Step 0** against the main principles of the ANPS. The main points for **Step 0** relate to the airport design specifications and the surface access considerations.

2.2.5.1 Airport Design

The Preferred Masterplan has adopted the airport planning principles including those provided by:

- International Civil Aviation Organization (ICAO);
- European Aviation Safety Agency (EASA) Certification Specifications and Guidance Material for Aerodromes Design (CS-ADR-DSN);
- UK Department for Transport (DfT); and
- Civil Aviation Authority (CAA).

Arcadis agrees that the Preferred Masterplan provides the minimum required runway length and meets the requirements set out in ANPS regarding the 3rd Runway.

The working assumption is that the new 3rd Runway will be operational by 2026. In order to achieve this a significant amount of non-airport infrastructure works will be required to accommodate the new runway including river diversions, moving the M25 motorway, building other local roads etc. This is in addition to the works necessary to integrate the new runway and associated infrastructure including taxiways, service roads and utilities.

Analysis of how this will be achieved is detailed in the Delivery section of this report however from an operational perspective there are a range of issues to consider. The analysis in this section focuses on the on airport operational aspects once the infrastructure has been completed.

Step 0 assumes that when the runway opens the maximum capacity of the airport will be 95mppa (Updated Scheme Development Report 2 of 5) split between terminals as per the *Masterplan Proposal Study* and [REDACTED]



However, **Step 0** does not propose any significant changes to the existing terminal facilities. Additional demand is anticipated to be catered for by enhancing existing facilities which are part of the existing 'On-Airport' portfolio of capital projects and are referred to as the *Plus* projects. This includes

increasing T5 capacity to 40mppa through the T5 plus programme comprising of works including the extension of T5B and C by converting remote stands to contact stands.

A layout of the airport at **Step 0** is located in Appendix A. This image is sourced from HAL's *Preferred Masterplan* dated June 2019.

2.3 Capacity Review

2.3.1 Airside

Arcadis is aware that prior to **Step 0** HAL is seeking to raise the capacity through the removal of the ATM cap through the DCO process. The removal of the cap will enable an additional 25,000 ATMs per annum on the two existing runways.

HAL states that this growth can be achieved mainly with airspace and operational changes along with minor infrastructure changes. For this reason, this has not been considered as a separate phase of the masterplan.

HAL states that the capacity of the three-runway system will achieve a minimum rate of 129 movements per hour. This is broken down per runway as follows:

- 48 movement per hour on the mixed mode runway (arrivals and departures);
- 39 arrivals per hour on the arrivals runway; and
- 42 departures per hour on the departures runway.

This capacity that this achieves will enable HAL to deliver its stated aim of achieving 756,000 ATMs, supporting 142mppa including an 8% resilience allowance.

Arcadis is satisfied with the fact that HAL has considered consumer interest as a key consideration in the evaluation of masterplan assembly options and also during the development of the Preferred Masterplan. However, we still foresee possibility of passenger dissatisfaction due to increased taxi time from the new 3rd Runway.

The forecasted proportion of narrow-body aircraft to the total traffic at Heathrow is more than 62% while for wide-body aircrafts is around 38% in the year 2022 and 2023. Arcadis foresees a scope for up gauging the fleet mix. This might result in substantial reductions in infrastructure requirements. Due to insufficient data, we are unable to analyse the rationale used behind keeping the percentage of NB aircrafts as high as 62%. However, to support our observation we have prepared a benchmark study in comparison with the Paris Charles de Gaulle Airport which is Europe's second-busiest airport after London Heathrow airport. This analysis can be found in Table 7.

Airport	LHR		CDG
	2022	2023	
Year	2022	2023	2018*
Annual ATM's (000s)			481
Annual Pax (MPPA)			72.22
% of NB Daily Pax ATM's			48%
% of WB Daily Pax ATM's			52%
Total	100%	100%	100%

*2018 data is used for comparison due to unavailability of future fleet mix

Table 7 Comparison of Aircraft Fleet Mix with Arcadis Benchmarked Data

Source: (Arcadis Internal Library 2019)

Arcadis believes that there will be potential to increase the proportion of wide-bodied aircraft once the NWR is operational. Prior to this, Arcadis believes that the proportion of narrow-body to wide-body aircraft is unlikely to change due to the existing capacity constraints and business models.

However, after assessing all the available documents and information provided by HAL, Arcadis is satisfied that HAL has undertaken the necessary detailed work in the development of Step 0 proposal.

Apron Facility Review

This section reviews the proposals for the planning and design of the apron and stand facilities. It also reviews the methods used for stand planning.

The [redacted] document details the current assumptions being used by HAL to generate apron frontage and stand planning. HAL has used the ICAO wingspan standards for Code C, E and F aircraft.

The proposed clearances being used by HAL are a 7m inter-stand clearway plus 1m clearance either side. The ICAO publication, *Document 9157 Aerodrome Design Manual*, states a minimum of 7.5m clearance for Code E and F aircraft and 4.5m for Code C.

HAL is using an approximate stand depth of 92m. The justification for this depth is that there is sufficient space for an 82m length aircraft with clearance all around. HAL has indicated that Heathrow is not considered by the airlines as being a critical airport for fuselage length. These are also dimensions that HAL has previously used for apron and stand facilities.

HAL is also applying a [redacted] buffer to the calculated stand frontage to provide resilience for events such as:

- Arrivals / departures off slot;
- Stand outages;
- Clearing time between aircraft departing or arriving; and
- Layout inefficiencies.

This [redacted] buffer is based on historic planning figures validated by HAL data from 2009 and 2016.

Although Arcadis does not see this approach as being unreasonable, no rationale has been provided as to why the resilience buffer is a percentage of stand frontage and if alternatives have been considered. For example, additional stands for resilience are based on a percentage of provided stands rather than frontage.

However, Arcadis is satisfied that the HAL parameters comply to relevant industry standards and in some cases exceed the standards for apron and stand design.

With regards to stand planning, HAL has used stand planning models to determine how effectively flights can be allocated to the defined stand layouts within the masterplan. This includes validating the stand frontage. The relevant stand planning assumptions include:

- Linking flights i.e. the turnarounds based on the design day schedules;
- Time between flights on stands (buffer) to build in resilience – [redacted] minutes;
- Towing of aircraft that are on the ground for a prolonged period of time between flights – HAL has used a time of more than [redacted] hours and a minimum of [redacted] minutes on stand for arrivals and departures if an aircraft is towed as per the HAL operational stand planning;
- No allocation preferences other than the overarching terminal occupancy – airlines are assigned any stand within the allocated terminal / apron;
- Resilience of one remote Code E contingency stand on each apron which aligns with HAL operational stand planning; and
- Target pier service level of 95% as per the current regulated service level.

This is a typical approach used in airport planning and Arcadis agrees with the principles being used to develop the input assumptions used for stand planning. The majority of the assumptions are aligned with HAL's operational stand planning practices and reflects the current operation and is assumed by HAL as being low risk.

It should be noted that although the stand planning model has been developed on the assumption that airlines can be assigned to any stand within their allocated terminal or apron, airlines currently have preferences for stands. HAL supports the principle that airlines can be assigned to any stand, as detailed in [redacted]

Arcadis notes that HAL's plans appear to be working on the assumption that this current airline behaviour will need to change. There is no supporting evidence that the airlines are willing to adopt to this new way of working.

Arcadis notes that there may be a risk that if the airlines do not change their current behaviours, the consequences may lead to the introduction of stand

inefficiencies and may therefore impact on the operation.

Notwithstanding this, Arcadis is satisfied that the approach being used by HAL for stand planning is appropriate and provides enough flexibility for operational purposes.

2.3.2 Terminals and Satellites

Arcadis has reviewed a document produced by HAL titled [REDACTED] in order to assess the requirements for terminal and apron facilities.

This document sets out the parameters and assumptions used by HAL in determining the initial view of terminal and apron facility requirements for each of the masterplans used for the M3 Gateway evaluation.

M3 is a milestone used to confirm the shortlisted masterplan options to be taken forward in the detailed masterplan evaluation.

The assumptions are based on information that is related to industry recommendations, operational assumptions and standards previously used by HAL:

- Assumptions that other airports / airlines have already achieved;
- IATA ADRM;
- Previous HAL standards;
- HAL standards relating to operations and passenger service levels;
- Service offering that is currently being worked towards at Heathrow; and
- Observations of passenger processor / transaction times and data.

[REDACTED] includes recommendations for sensitivity testing focussing in particular on assumptions that affect space take. The [REDACTED] document categorises the tabled parameters and assumptions under the following themes:

- Stand planning;
- Passenger waiting times;
- Passenger processing;
- Baggage Reclaim; and
- Transfers.

The parameters and assumptions are used within HAL's models to derive the facility requirements in each masterplan for:

- Stands;

- Check-in processing facilities;
- Ticket presentation ATP / desks;
- Security lanes;
- Lounge population;
- Immigration processing facilities;
- Baggage reclaim belts;
- Queue lengths to inform queueing space; and
- Transfers.

The *IATA Airport Development Reference Manual (ADRM)* – 9th and 10th editions – has also been considered by HAL. Arcadis is aware that the 11th edition of ADRM has been published and is the latest version.

Arcadis acknowledges that much of the masterplanning work undertaken by HAL was developed prior to the March 2019 publication of the 11th edition of the ADRM. HAL is aware of the latest edition of ADRM and will be undertaking a comparison with earlier editions to ensure that the input assumptions are aligned with the latest industry recommendations.

Terminal Assumptions

This section reviews the proposals for the planning and design of the terminal facilities.

A comparison of some of the relevant parameters relating to passenger processor waiting times in [REDACTED] with ADRM 10 are presented in Table 8. Arcadis is satisfied that the passenger processor waiting time assumptions in [REDACTED] appear to be within the range of IATA ADRM LoS C / Optimum.

Arcadis notes that for some processors, HAL has utilised a mid-range value such as for standard bag drop. However, for other processors, such as standard check-in or security lanes, a lower or upper range value has been applied.

Arcadis has observed that for some processors, [REDACTED] refers to a transaction. An example of this is for self-service kiosks and premium (business and first class) check-in counters. The transaction is a metric that accounts for varying processing times aligning with IATA ADRM. Arcadis assumes that these transaction times relate to the processor transaction assumptions stated in [REDACTED]. Clarification has been sought from HAL on this point.

Our analysis has identified that the immigration waiting time assumptions in [REDACTED] are noticeably different from the IATA ADRM recommendations (see Table 8).

Passenger Waiting Times (minutes)			
Processor	Passenger Type	IATA ADRM LoS	ADRM LoS Assumption
Kiosks	All Passengers	LoS C / Optimum	1 - 2
	Standard		1 - 5
Bag Drop	Premium		1 - 3
	Standard		10-20
Check-In Full Service	Business		3-5
	First		3-5
	All Passengers		ADRM 10 does not consider automated ticket inspection gates
Security	Standard		5-10
	Premium		1 - 3
	Transfer		5-10
Immigration*	Non-EEA		5 - 10
	EEA		
	eGates		ADRM 10 does not consider eGate processors
	Premium		1 - 5
	Transfer	5	
Baggage Reclaim	All terminals except northern apron	ADRM considers waiting times based on narrowbody / widebody aircraft	
	Northern apron		

Table 8 Comparison between ADRM LoS and ██████████ Passenger Processor Waiting Time Assumptions
Source: (██████████ Modelling Assumptions 2018) & (IATA ADRM Edition 10 2014)

Although IATA ADRM does not distinguish the different types of immigration lanes (in the case of Heathrow, EEA and non-EEA immigration facilities), the parameters used by HAL does account for these different immigration lanes as well as standards that reflect the airport's operation i.e. previous BAA (HAL) standards. Arcadis believes that this is a sensible approach to immigration facilities reflecting the actual operations of the airport.

HAL has set out a comprehensive list of parameters and assumptions that relate to processor transaction times and modal splits for different check-in types (desks, kiosks, bag drop) or immigration routes (EEA/non-EEA or eGate).

Arcadis has reviewed these assumptions and compared with its own benchmarked data for New York – JFK and Paris – CDG airports. We consider that JFK and CDG are reasonable comparisons for terminal parameters and assumptions due to the mixture of traffic and the passenger profile. The figures in Table 9 provide a comparison of processing times.

The figures provided by HAL for ██████████ indicate that check-in processing times are broadly in line with

JFK and CDG. The exception is with bag-drop where JFK and CDG are achieving lower processing times. However, Arcadis is comfortable that ██████████ per transaction represents a reasonable assumption as HAL is in the process of testing the impacts of shorter and longer transaction times.

HAL currently process ██████████ passengers per hour in security, which is lower than both JFK and CDG. The proposal in ██████████ is for ██████████ passengers per hour. Arcadis is comfortable that this is a reasonable assumption, considering that HAL aims to introduce high automation in its operating system.

However, Arcadis considers that significant improvements in the system and operational processes would be required to achieve reliable throughput above ██████████ passengers per hour.

Arcadis understands that this is a sensitivity test and is attempted to make significant improvements in the process. However, Arcadis is unable to assess the impacts and benefits of such an aspirational number due to unavailability of further information as to how the expectations would be fulfilled.

		JFK (T5)	Paris CDG
Airport-wide Pax 2018 (MPPA)		62	72
Processor		Processor Transaction Times (seconds)	
Self-Service Kiosk		125	90
Bag Drop		30	50
Assisted Check-In Desks		140	130
Security Lane		~180 pax per hour	~150 pax per hour
Immigration		Not useful for comparison as based on US CBP requirements.	Not available for comparison
		Provision (%)	
Departure Lounge		50%	70%

Table 9 Comparison of [REDACTED] Assumptions of Processor Transaction Times and Arcadis Benchmarked Data
Source: [REDACTED] Modelling Assumptions 2018) & (Arcadis Internal Library 2019)

Arcadis is satisfied that HAL’s capacity modelling inputs are reasonable for the studies it has undertaken as part of its masterplanning process. The parameters / assumptions for the processor transaction times, modal splits for check-in methods and immigration channels (EEA or non-EEA) and baggage reclaim operation and capacity have been developed from a range of information sources including:

- British Airways data;
- Data from current terminal operations;
- Previous BAA (HAL) planning assumptions;
- HAL surveys;
- Passenger analysis;
- T5 modelling assumptions; and
- UK Border Force – source of assumptions relating to immigration.

Although these information sources are referenced in [REDACTED] they have not been made available to Arcadis by HAL.

Arcadis has been able to determine from our engagement with HAL and the available information in [REDACTED] that the planning parameters and assumptions have been developed from and align to industry recognised standards, such as IATA ADRM Version 10 and a broad range of data related to Heathrow’s operation.

Arcadis is satisfied that these assumptions in [REDACTED] are reasonable inputs for the capacity analysis workstreams in the masterplan process. Arcadis has validated its assessment with analysis of industry guidelines such as IATA and our own benchmarked data.

Terminal Sizing

The terminal buildings are not being expanded during Step 0. HAL has studied the maximum potential capacity of the terminal facilities, particularly for T5 as provided in the presentation 04 Forecasting and Capacity. This has resulted in the assumption that the maximum capacity can be increased. For example, T5’s capacity could be increased from the current [REDACTED] to [REDACTED]

According to HAL, this increased capacity could be achieved by implementing terminal operating process improvements, including stand and other facility upgrades. HAL’s studies have resulted in the updated capacities for all terminals:

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

This generates an overall capacity of 95mppa. No specific details of the internal terminal operating process improvements have been provided by HAL. Additional stands and stand upgrades are being provided on the T2 (with 4 new Code F stands) and T5 aprons.

The lack of information for the current and proposed passenger processor facilities within the terminals means that Arcadis is unable to assess and review in detail whether the capacity increases proposed by HAL can be achieved.

However, from a high-level perspective, Arcadis has analysed the terminal capacity in terms of required area and mppa. Based on the passenger throughput in 2018 and the terminal area, the

overall m² per mppa ratio for all terminals is [REDACTED]

This is substantially above the [REDACTED] per mppa ratio targeted by HAL in Evaluation 2 of the masterplan process. As indicated in Table 10, all terminals are currently achieving a m² per mppa greater than [REDACTED]

Arcadis has used the [REDACTED] per mppa ratio and the terminal areas to estimate the maximum highest potential capacity at high level in terms of mppa, the results of which are summarised in Table 12. When compared with the proposed capacity increases by HAL, it can be seen that by using HAL's own benchmark, there is excess capacity at a declared 95mppa throughput.

These high-level outputs cannot be used to arrive at a definitive conclusion. This would need to be verified by the capacity modelling undertaken by HAL which assesses the terminal facility and passenger processor requirements. From the available information provided by HAL, Arcadis understands that the terminal design will move to a 'bottom up' analysis, based on the DDS and input

assumptions as stated in technical note [REDACTED] HAL has stated that this will be completed at the end of August 2019.

Table 10 below presents the square metre per mppa currently achieved in all terminals. The square metre area per mppa ratio is used to validate the amount of space achieved per million passengers annually. This analysis clearly helps to establish that the area per mppa in T2, T4 and T5 is well above the targeted high-level metric of 12,500m²/mppa which was established during Evaluation 2. Whilst, in T3 the area per mppa falls just below the targeted value.

Subsequently, in Table 11 we have derived the terminal area requirements from the php numbers based on the regulations provided in the IATA ADRM 10. It is noted that the areas of T2 and T5 are substantially above the mandatory IATA space definition criteria. T3 just falls above the expected range, whilst T4 is experiencing a minor shortfall to align with the expected IATA requirements. However, we are comfortable that the Terminal areas are within the acceptable range of IATA recommendations.

Terminal Current	Terminal Area (sqm)	MPPA (2018)	Achieved Space (sqm/MPPA)
	Source: HAL	Source: www.heathrow.com	
T2	[REDACTED]	18.5	[REDACTED]
T3	[REDACTED]	19.5	[REDACTED]
T4	[REDACTED]	9.4	[REDACTED]
T5	[REDACTED]	32.8	[REDACTED]
Total	[REDACTED]	80.2	[REDACTED]

Table 10 Existing Square Metre per mppa Achieved
Source: (Arcadis 2019)

Terminal	T2	T3	T4	T5	T5X
Area/PHP by IATA (sqm)	30	30	30	30	30
Required Area (sqm) per IATA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total Required Terminal Area (sqm) per IATA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Existing Terminal Areas (sqm) from HAL	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Not available
Difference (sqm)	63,900	5,280	-2,600	205,000	-

Table 11 Terminal Area Requirement Based on IATA ADRM 10
Source: (IATA ADRM Edition 10 2014), (HAL 2019), [REDACTED] - HAL 2019), (Arcadis 2019)

Terminal Current	Terminal Area (sqm)	Space target (sqm/MPPA)	MPPA (2018)	Capacity Gap (MPPA)
Source	From HAL		www.heathrow.com	
T2				13
T3				4
T4				4
T5				22
Total				43

Table 12 Terminal Capacity Gap

Source: (www.heathrow.com 2018), [REDACTED] Modelling Assumptions 2018), (HAL 2019)

Arcadis is satisfied that HAL is undertaking the necessary detailed work in the development of planning parameters and assumptions for the purpose of determining the facility requirements for the terminals and aprons.

2.4 Summary

Arcadis has assessed all the available information and data shared during the **Step 0** to consider whether the Preferred Masterplan will be Operable.

The approach taken by Arcadis has been analyse the capacity assessments made by HAL of the airside, terminals and landside facilities and consider whether these are appropriate.

In addition, Arcadis has also assessed the simulation studies, forecasts, assumptions and parameters used in developing the HAL Preferred Masterplan to determine whether these use industry and compliant standards.

Arcadis is satisfied that HAL's capacity assessments are based on sound data and are fit for purpose. In addition, the forecasts, models and standards used to develop the Preferred Masterplan are also compliant with industry best practice and there are no departures from standards in the information used by HAL.

Arcadis observes that based on the capacity requirements set out by HAL, their Preferred Masterplan does provide a scheme that can

assimilate with the existing airport operation and the current configuration in **Step 0**.

Arcadis has considered the level of flexibility and resilience that will be in place at **Step 0**. On the basis that the information provided by HAL has demonstrated the airport can adequately provide for the growth in passenger numbers and the increase in runway capacity will provide more operational flexibility and resilience.

Arcadis has identified potential challenges that may arise at **Step 0** in Landside areas if passenger mode choice is unchanged through some of the Surface Access Strategy work proposed by HAL. However, at this stage in the masterplan process the level of detail required to assure the plan is not yet fully developed.

Although there may be some challenges that may arise, at this point in the masterplan process Arcadis is satisfied that on balance the proposals are operable and can be integrated into existing airport infrastructure.

HAL is yet to develop detailed Operational Readiness and Trials (ORAT) workstreams which will be key to ensuring a smooth transition without causing any operational issues.

Notwithstanding Arcadis' opinion that the Preferred Masterplan at **Step 0** will be operable, the challenges of deliverability, timeliness and cost still present the scheme with some challenges to open the new runway by 2026.

3 DELIVERY

Arcadis has assessed whether the masterplan and plans for **Step 0** are deliverable. As part of this review, consideration has been given to the scope and design provided for and when this is scheduled to be delivered according to HAL's current programme.

The review has assessed the feasibility of constructability (including logistics) and ongoing delivery during "construction" phases of the programme from today's existing operations to **Step 0**.

Arcadis has analysed any scope gap in deliverables, the robustness of the programme for delivery, the internal and external risks to delivery, and the confidence in HAL's ability to deliver the infrastructure required for **Step 0**.

Arcadis's key findings are:

- HAL's delivery of the elements of the scheme are presented in a logical sequence;
- HAL has sought to deliver the most efficient sequencing with the aim of delivering the new runway by 2026 however this has created a programme that has little margin to allow for delays or risk;
- HAL's programme is not unfeasible for the delivery of the required infrastructure however this is reliant on the programme timings set out in the plan to be delivered; and
- HAL will be reliant on other organisations to deliver some of the elements of the scheme which they do not control or can mitigate against. Delays could pose a risk to HAL's own delivery programme.

3.1 Definition of Theme

This section of the report reviews the deliverability of **Step 0** to understand if the required changes can be achieved in practice and can integrate with the existing airport infrastructure.

Arcadis has reviewed the proposals to ensure that they follow a logical delivery sequence. The scale and complexity of the proposed expansion of Heathrow requires a significant volume of work outside of the existing airport perimeter including earthworks, roads, rail, rivers and utilities before airport related infrastructure can be built.

The critical path to constructing the runway relies on these works being completed in a logical sequence. This review analyses the logical sequence of events to ensure that overall layout at the end of **Step 0** can be achieved.

Arcadis has reviewed the Preferred Masterplan material to assess whether **Step 0** is deliverable. Our review has considered the following:

- The scope, design and programme;

- Feasibility of construction and ongoing airport operation during construction;
- Scope gap in deliverables, including the robustness of the programme for delivery and any risks associated with it;
- How new and impacted facilities will link with existing infrastructure and how HAL will maintain key assets during construction phases of delivery;
- The appropriateness of the detail provided in Project Management Plans and Programmes;
- The observed level of maturity with regards to deliverability; and
- Evidence that the single Preferred Masterplan and future development of the masterplan to DCO submission are adequately considered and appropriate for DCO award.

Some of these issues will be discussed in more detail in further reports as their impact on the deliverability of the scheme in **Step 0** is minimal.

The review includes the following stages of the scheme delivery:

- Proposed Construction Phasing;
- Procurement;
- Pre-Construction;
- Early Works;
- Creating the Space;
- Earthworks; and
- Main Works.

Arcadis has identified potential risks to delivering the infrastructure needed to achieve Step 0. These are important to identify and mitigate against due to the volume of external infrastructure works required to achieve the Step 0 airport works.

3.2 Assessment

3.2.1 Methodology

This review is based upon discussions with HAL and a review of documentation released by HAL (listed in Table 13 below). This documentation includes a number of reports, presentations as well as a number of reference drawings.

Report Title	Report Source
HEP Procurement Strategy Review	Arcadis
[Redacted]	HAL
	HAL
	HAL
	HAL
	HAL
	Gardiner & Theobald LLP
	Gardiner & Theobald LLP
	Gardiner & Theobald LLP
	HAL
	HAL
	HAL
DfT Heathrow Expansion Programme Assurance Review of Heathrow Airport Limited's Delivery Schedule	Costain

Table 13 Delivery and Timing documents reviewed
Source: (CAA 2019), (HAL 2019), (Arcadis Internal Library 2019), (IFS 2019)

In addition to this documentation Arcadis has had various workshops and briefing meetings with HAL where there was the opportunity to discuss with HAL the detail behind the information presented.

It is apparent that a significant amount of work has been undertaken by HAL on the likely sequence, impacts and durations of the overall Preferred Masterplan schedule. This would be in keeping with a Nationally Significant Infrastructure Project seeking approval via the Development Consent Order (DCO) process.

The need to assess the impacts of construction on all the receptors around Heathrow required a detailed review of the methodologies and timings being proposed for the development.

The following sections review the deliverability of the proposed development at Heathrow. They will review the sequence of the works as a whole and in detail for key elements of the development.

3.2.2 Proposed Construction Phasing

Step 0 requires an expansion of the airport boundary to accommodate the new runway and airfield infrastructure. Prior to this, the main works required are outside of the existing boundary.

The challenge presented by the development of a preferred Masterplan is about creating the space and then using that space to deliver a new runway and the associated infrastructure. This involves a significant amount of clearance of existing assets as well as undertaking a very significant number of earthworks to enable construction to proceed.

HAL has created a time slice walk through (images in Appendix A) of the likely construction process that will be undertaken to allow for a runway to open in the 4th quarter of 2026, Step 0.

These time slices are in 6-month windows and help to explain the thinking and challenges associated with the development. It is apparent from a detailed assessment of the points in time that the challenge to the development timescale is the creation of the space, the requirement for HAL to clear the construction zone of existing occupiers and incumbents prior to undertaking the construction process.

Any relocation, from rivers and roads to people, businesses and ecology, must be considered within the timescale and context of availability and vacant possession. The proposed relocations may be a significant and very real constraint and may be perceived as potentially negative.

Arcadis understands that it is difficult to capture the real impacts of these process on people, flora, fauna, infrastructure and the environment however, it is apparent that much thought has gone into how the construction process can be incorporated into this live environment.

The development requires the removal or relocation of some key utilities to the west of the existing boundary. These are indicated as early works and will pave the way for the construction of the new M25 route. The indicated sequence of works shows these works being undertaken prior to gaining approval for the overall development via the DCO process.

HAL will also require early engagement with the utility companies and will therefore incur costs before the approval for the scheme has been achieved.

The sequencing proposed by HAL will also require front end design and procurement for key replacement facilities that are required to be vacated to deliver the proposed earthworks strategy. These include the following:

- Energy from Waste facility;
- Harmondsworth Primary School; and
- Colnbrook Immigration Centre facility.

Arcadis understands that the Energy from Waste facility move will be subject to a separate Town and Country Planning Application. Arcadis has not seen any evidence that HAL has considered the risk to the delivery programme or any mitigation if this application is refused or challenged.

The proposed construction phasing indicates when the location of these facilities will be developed, and the detailed programme gives an indication for when the replacement facility will be constructed and made operational

The outer boundary indicated on Figure 9 is the extent of the construction works for **Step 0**. This is the work envelope for all works associated with the HAL Masterplan and includes areas outside of the current and future airport boundary.

Arcadis understands that prior to DCO approval HAL has identified a number of enabling works that they could start which are restricted to utilities and linked to environmental issues. HAL has proposed the phasing for these early works begins in the first half of 2020 with the relocation of utilities in the path of the realigned M25. This is followed by ecological works in the first half of 2021.

HAL has indicated that, upon DCO approval the following works will begin in early 2022:

- Utilities diversions;
- River diversions;
- Local road diversions;
- M25 diversion;

- Earthworks; and
- Establishment of the Construction Consolidation Site.

These elements of work are critical features of **Step 0** and require to be progressed in advance of the airfield works. The schedule issued to Arcadis for review indicated timescales for these activities, some of which occur prior to DCO approval. However, the sequence and timings are built around the needs of vacant possession of key areas to facilitate construction activities associated with the new runway development.

Arcadis considers that this approach to deliverability developed by HAL is sequenced logically. The programme set out by HAL indicates that the utility works will begin shortly after DCO approval, followed thereafter by the other infrastructure listed above. This culminates in construction of the airfield infrastructure starting in mid-2023.

3.2.3 Procurement

HAL has created a delivery procurement strategy that has been reviewed by the airline community. The high-level mission statement seeks to “Create a Heathrow Expansion Procurement Strategy that motivates productivity, drives value for money to create a new UK benchmark for the way infrastructure is sustainably procured that delivers the programme.”

This has then been further clarified by HAL who list 5 statements on how this will be achieved. These

HEP – DELIVERY & SCHEDULE TO FIRST FLIGHT - DEFINITION OF DELIVERY - CHALLENGES

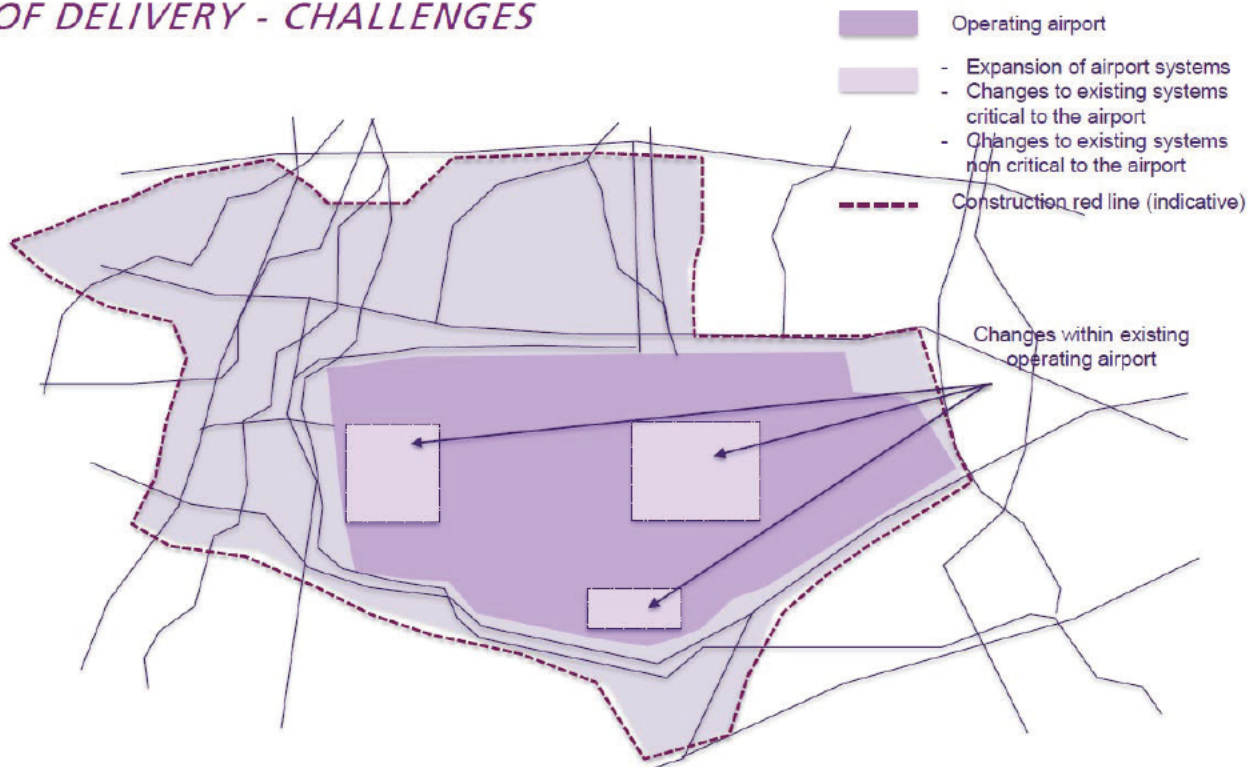


Figure 9 Extent of Expansion Works
Source: [redacted] - HAL 2019)

are extracts from a report created by HAL and offered as part of the review process.

1. Establishing HAL as a UK Client of Choice

There is a strong pipeline of infrastructure work in the UK over the next 10+ years. Heathrow's total spend accounts for 4%, with the remainder lying largely with the government. To attract the supplier market, it is critical that HAL positions itself as a client of choice. HAL will be placed front and centre in the programme as the owner and will define long-term value.

2. Mobilising the UK supply chain for successful delivery of an expanded Heathrow

Delivering a programme that will enable an aircraft to take off from the new northern runway will be an enormous construction delivery challenge. It is vital that HAL sets the supply chain up for success and utilises different procurement engagement models to harness the value created in the supply chain by being a capable owner that will build relationships.

3. Creating the right environment that motivates the supply chain to be successful to deliver the programme

Once the supply chain is mobilised onto the programme, it is essential that commercial and contracting environment motivates productivity and value for money. Heathrow will form long-term enterprises through the creation of an inclusive ecosystem (supply chain) environment that stimulates value creation and focuses on outcomes. Additionally, HAL will need to create the environment that helps people and the supply chain fulfil their potential and work together to deliver with energy and pride.

4. Supporting the operation, the passenger and the local community

Construction will be delivered against the backdrop of a live airport environment, busy road network and bustling local communities. It is of paramount importance that any potential impacts by construction activities are managed and mitigated and communicated with the operation and airlines. Heathrow will optimise the use of off-site hubs to increase productivity and predictability, improve quality, health and safety thereby significantly reducing the number of workers on site.

5. An alert and agile Procurement Strategy that is aware of market dynamics and forces

The programme will be spanning numerous years. During this time, Britain will be exiting the European Union and numerous market movements and changes will take place. Therefore, the procurement strategy needs to be agile to manage challenges and optimise opportunities.

Arcadis understands that HAL has undertaken a deep review of the procurement process that they wish to use to engage with the required supply chain. HAL has set out to engage the whole of the UK into the development giving opportunities to

other parts of the UK and not just the South East construction market.

This strategy seems to be targeted to spread the manufacturing process across a large an area as possible. The manifestation of this strategy will most likely be a benefit during the latter stages of the development when the development moves to a more terminal and passenger process facilities delivery. During the early stages the works are mainly around works in the ground and demolition and clearance of existing space.

The approach for expansion demonstrates HAL has learnt lessons from their previous experience of T5 and T2A developments. This learning has been brought into the strategy procurement plan.

In discussions with HAL during this review process the key themes that are to be targeted involve identification of the interface between work packages. Examples were discussed around how the key earthworks packages should be phased to minimise the risk of disruptions and delays across the geography of Heathrow. This proactive approach should provide dividends when applied to key packages, however there are multiple interfaces across the planned works, and this will require a significant input from HAL.

As part of the document review, it should be noted that there was no detailed procurement timeline, or a detailed design development programme available however, this would not be unusual for a development at this stage.

Success in the next stages will require careful and detailed design development and procurement to ensure works are brought at the appropriate time and with the right level of commercial tension built into the process.

Some of the key early works packages may require to be procured under the OJEU guidance process. This adds time to the overall period due to the rules governing notification and assessment of a large pool of potential contractors. HAL are seeking clarification of the need to follow OJEU processes. At the point of review this had not been clarified.

The early utilities reconfiguration (SSE power lines) require the works to be procured via the utility companies own contractual arrangement prior to the DCO approval. HAL will need to work closely with the existing supply chain to achieve the goal of clearing the existing pylons and substations by the required date to facilitate the M25 works. Also, within these early works will the need to instigate the replacement of the Lakeside Energy from Waste (EfW) facility. The procurement of this facility will be undertaken by a third party on behalf of HAL. This will add risk into the programme that HAL can only attempt to influence but not control.

HAL has also identified other key assets that will require separate procurement strategies. These include the replacement Colnbrook Immigration Centre facility and Harmondsworth Primary School. HAL identified these as likely to be design and build contracts with a modularization delivery strategy.

These projects may undergo a re-evaluation as HAL works through the detailed design development programme.

In line with statement 2 listed above, HAL is cognisant that the magnitude of HEP will require a wide range of suppliers and contractors to deliver the programme successfully. In particular, it is key that HAL engage early with the supply chain to allow potential suppliers to understand the pipeline of opportunities associated with HEP.

This will be a key factor in ensuring that the supply chain have the capacity to respond to the aggregate demand of HEP. From our interactions with HAL, it is clear that they have initiated engagement with the supply chain in specific areas, such as earthworks contractors where capacity may be a particular concern. HAL also plan to undertake market-wide supplier engagement, commencing with the "Heathrow Expansion Supplier Event" in September 2019.

The key to any procurement strategy is to choose the most appropriate to the needs of the projects, no one solution fits all situations. The strategy of supply chain engagement and a non-confrontational strategy will require detailed assessment over the next few months to establish the requirements.

3.2.4 Pre-Construction

The key to any development is to gain the required statutory approvals for the scheme. With the development at Heathrow this will primarily be gained by using the systems designed for Nationally Significant Infrastructure Projects (NSIP) also known as the Development Consent Order (DCO) process. This process was created by the Planning Act of 2008.

As part of the process defined by the Act, there are various defined processes that must be achieved within prescribed timescales. To fulfil all the requirements of the process the developer (in this case HAL) must create a design the sets out and defines the extent of the proposed development. HAL has created a series of drawings and plans the defines the 3R Masterplan which establishes the extent of the proposed works. These plans have been used as the basis of the assessments as required by the DCO process.

Whilst Arcadis has not undertaken a detailed assessment of the quality of the design outputs HAL has created, it should be assumed they will be fit for purpose. HAL has set a target to achieve the required public and specialist consultations by the end of 2019 to enable the completion of the pre-submission process in early 2020. The target submission date for the DCO documentation is [REDACTED] 2020.

The Planning Act of 2008 set out a prescribed process that will be followed submission. These includes set timescales for each section of the process. Therefore, the period from submission to expected delivery of the approval by the Secretary of State for transport is set at between [REDACTED] to [REDACTED] months. HAL has allowed a period of [REDACTED] months

within their proposed programme. Which translates into an average of 520 calendar days.

The HAL programme for the development process gives a clear indication of the timelines for pre-submission and post submission as set out by HAL. It also shows some of the early works required to be processed while the DCO process is being undertaken, to maintain the programme. These activities are to be progressed at risk and are required to underwrite the 2026 runway opening date, **Step 0**.

Arcadis has compared HAL's timescales compared with other development that have used the DCO process and there are examples where the timings to achieve consent have been extended.

The HAL programme is dependent upon having an undisputed submission that will pass through the pre-examination and examination process without dispute. To underwrite this aspiration the original documentation will have to achieve total and full compliance with the DCO requirements.

Whilst there is little doubt that HAL is planning to achieve a 100% compliant submission there are always external influencers that could cause the planned timescale to be extended beyond the planned 17-month period.

Although none of these examples are a direct comparator to Heathrow Expansion, as can be seen from the graph in Figure 10 the process does not always follow the prescribed timescales. One third of all the applications that have been through this process having exceeded the number of days HAL are planning that their application will take, with two going to Judicial Review.

The impacts of any delay will have a significant influence on the overall development at Heathrow. The current plan is to follow the achievement of the DCO approval in November 2021 with the start of earthworks in the spring of 2022.

The approval will also grant approvals for various key activities such as ecology mitigation works in the winter of 2021 and spring 2022, The approval also triggers the following key activities:

- River diversions;
- Demolition of properties;
- Establishment of construction consolidation sites;
- Utility diversion; and
- Construction of the trunk roads diversions.

The period between delivery of the DCO approval and the start of the key earthworks is only four months which also includes the Christmas period. HAL has indicated that they are confident that they will be able to set up the team to deliver this.

This period would have to include for the finalisation of the contract conditions and the mobilisation of key staff and equipment for an activity that is key to the success of the opening of the new runway in 2026.

Any prolongation of the strict timescales will have a detrimental impact on the early works of the development.

HAL will also have to consider any constraints placed upon the development by the planning process. Whilst detailed consultation with the public, local authorities and the key consent granting bodies will help to clarify and draw out any imposed constraints; until the planning process has completed its full course these will not be fully known, and the impacts assessed. Which may impose restrictions on the planned early works.

A key part of the development phasing proposed by HAL will be to gain access to key areas to deliver the programme. HAL has identified key Vacant Possession (VP) dates, which have been derived from a detailed phasing strategy. To manage the impacts of and plan to minimise the influence of the key VP dates HAL has undertaken extensive negotiations with the relevant owners and interested parties.

While these are commercial agreements which have not been open to review, the principle is to negotiate key VP dates and not rely on legislation that would be granted as part of the DCO process. The normal convention would be to seek Compulsory Purchase Orders (CPO) powers over all the required land identified in the Preferred Masterplan. However, this process can take up to 9 months to deliver the required access, which would have a detrimental impact on the planned timescales.

No information was offered as to the likely success of this strategy and it remains a key constraint on the development. In discussions with HAL, the current strategy is underwritten by the main

earthworks being sequenced to commence in an area not requiring VP of property and in an area already agreed with the landowners. However, some of the early works associated with ecology and river diversions require access to significant parcels of land around the western side of Heathrow.

The current plan as declared by HAL will be to obtain key VP of land as soon as the DCO has been declared. There are at least [redacted] VP's required to be obtained by mid November 2021. These relate to setting up of the construction logistics and the early earthworks. HAL assume that these will be obtained, and the work commenced as envisaged. The impact of no availability of the vacant possession dates will require assessment if the dates slip. The worst-case scenario would be to delay the development; however, it may only involve a re-sequence of the works until the possession dates are achieved.

A development of such a size as the expansion at Heathrow requires a significant amount of design input to feed into the procurement process. The schedule issued to Arcadis to review did not contain a detailed design programme.

When questioned, HAL indicated that the design programme would be developed during the next stages of the programme. This would be in keeping with a development at this stage in the process. There will therefore be a need by HAL to work up the design to a suitable stage to allow for a meaningful procurement process.

This will be a balance between the commercial decision to commit funds to designing a development that has not gained planning approval. However, the expansion at Heathrow has been

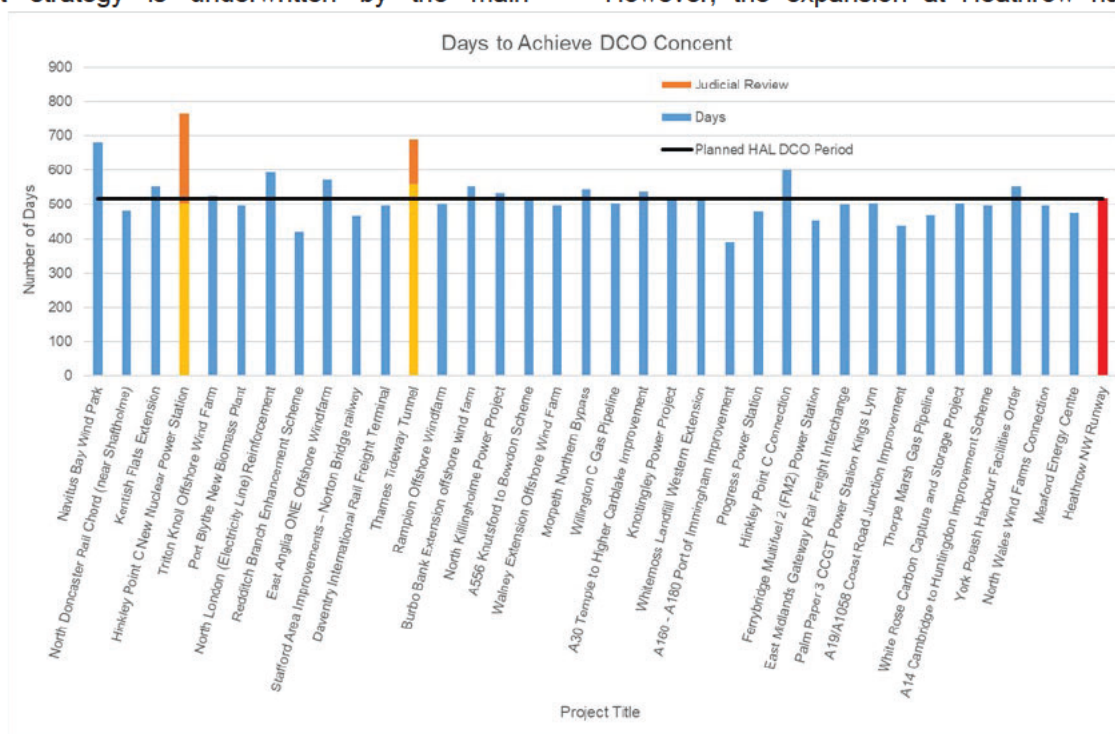


Figure 10 Graph Presenting the Days to Achieve DCO Consent
Source: (Bircham Dyson Bell-DCO Applications 2014)

sanctioned by the government and parliament so it is more a question of undertaking the design at the most appropriate stage in the development balanced against incurring costs in advance of official approval.

However the front end of this development is aggressive in its need to commence works four months after formal approval and the design will need to be progressed over the next few months to ensure the procurement process can be developed to ensure the works packages are set up to deliver the works when required.

The key to delivering **Step 0** by 2026 requires the full DCO process to have been completed by the 4th quarter 2021. Thus, allowing HAL to mobilise the required early works contractors. Whilst HAL has planned the DCO timescale around the “normal” allocation of time, it does not allow for any contingencies in the timings. The Heathrow scheme has attracted a lot of public scrutiny over the years and there would be no reason to suggest that it will not be subject to intense scrutiny during the Development Consent Order process.

The proposed development programme requires that the earthworks proceed in the spring of 2022, and therefore any delays in the approval process will have a detrimental impact on the proposed start of works.

3.2.5 Land and Property Acquisition

Prior to the DCO application, HAL will need to have identified the extent of land and building acquisitions that will be necessary for expansion. It is understood that these acquisitions will be through a combination of agreed purchases followed by compulsory purchases.

The main period for this stage will be from [redacted] 2019 to [redacted] 2022 including the periods for acquisition by mutual agreement followed by compulsorily powers coming into effect. HAL has identified the stages as follows:

Timescale	Agreement
[redacted]	Create Bond subject to board approval
[redacted]	Agree relocation and options agreement
[redacted]	Bonds redeemed subject to board approval
[redacted]	Businesses start to relocate
[redacted]	Acquire homes
[redacted]	Compulsory Acquisition Powers

Table 14 Acquisition Timescales
Source: [redacted]; HAL 2019)

HAL has provided the total number of bonds and agreements required for residential and commercial properties prior to the DCO submission. This is broken down into the completion requirements per month and day.

Arcadis has not seen any assessments from HAL regarding the level and complexity of these acquisitions so cannot determine whether HAL’s timescales or their ability to process the volumes of transactions set out below is feasible. It is however important to note that where HAL cannot secure acquisitions through agreement, the use of compulsory purchase powers may throw up additional complications that may impact on delivery.

Acquisition	Type	Requirement
Bonds	CPZ Residential Properties	[redacted] per month
Bonds	Wider Property Offer Zone (WPOZ)	TBC
Commercial Agreement	Business relocation	[redacted] agreements per week

Table 15 Acquisition Requirements
Source: [redacted]; HAL 2019)

3.2.6 Early Works

HAL has identified works that are required to commence prior to receiving full approval of the development via the DCO process. These are in addition to the main works design and procurement process that would naturally occur during the DCO timescale, in support of an earliest start on site of the main body of works.

The works revolve around the clearance of existing infrastructure that due to restrictive timescale are required to commence early to facilitate the relocation of the main M25 road re-alignment works. See the extract below from a presentation created by HAL to indicate these early works.

The image below shows the extent of these works to clear the area for the M25 reconfiguration. From the programme information and phasing slides produced by HAL it is apparent that these works are required to commence in early 2020. The assumption being that the utility company responsible for the assets will undertake these works under a local Town and Country Planning Application (TCPA). The risk to the programme would be that if this strategy is brought into question then the overall development would be significantly compromised.

As part of an overall Heathrow development HAL will be undertaking expansion works within the western campus. These works will be improvements to T5A and expansion of T5B and T5C. These works are listed as Business As Usual (BAU) investments and will contribute to the baseline growth at Heathrow. However, these will also support the additional passenger processing requirement to be in place when the new runway capacity is delivered.

The key to the expansion of Heathrow will be to remove the constraints in the way of the new airfield development. The M25 is a significant impediment to the expansion. Therefore, HAL propose to move it further west and build over the existing alignment. However, to undertake these works the proposal will require designing to the relevant standards imposed by Highways England. Currently HAL propose to

design and procure these works on behalf of Highways England and manage the delivery to achieve a transfer of the motorway across to the new alignment by 2025. This will require the design to be progressed sufficiently to allow for procurement of the main packages of motorway works to commence from the start of 2022. There will be a significant amount of design, approvals and procurement required over the next 2 years to ensure this target is achieved.

The risk to the HAL development timelines will be that some of these activities within this timescale are not under the direct control of HAL and are therefore susceptible to other organisation's timescales. The procurement process associated with the M25 possibly required to follow the OJEU process which could add time and complications to the process. The HAL procurement department are actively investigating this risk. Until this has been clarified it remains a procurement timescale risk.

Other areas that are required to be replicated or replaced include the key Energy from Waste (EfW) facility as managed by Grundon. There is also a primary school to be replaced and a key immigration facility. HAL has worked hard to minimise the need to replace existing facilities, and when investigated as part of the Arcadis study, the response has been to consolidate functions within the impacted organisations existing facility or to agree a commercial agreement. This has helped to minimise the quantum of works that require re-provision and replacements. Of those identified to

be replaced HAL have a clear strategy to create replacement facilities. However, these replacement projects may require separate (TCPA) applications due to the need to gain vacant possession early in the overall programme.

Existing Facility	Vacant Possession Date	Programme Indicating Replacement
SSE Power Lines Relocated		
Energy from Waste Facility		
Immigration Centre		
Hamondsworth Primary School		
Heathrow Primary School		
Heathrow Special Needs Farm		

Table 16 Key Facilities that Need to be Replaced

Source: [Redacted]

There will be a residual risk to the development timelines if these projects cannot gain the required planning approval by the required date.

It should be noted that there does not appear to be a timeline for replacement of the Heathrow Primary school or the Heathrow Special Needs Farm.

There is a significant amount of key activities that are positioned as early works within the proposed development timelines. While this is not unsurprising within the context of the volume of works required to be completed within a tight target to achieve a new runway by 2026. Some of the identified works will require separate approval routes to the main DCO, they will also require

commitment to placement of contracts to deliver replacement assets before the main works are let.

There is also a need to review the planned dates for some of the replacement assets as the school replacement projects are not harmonised with the school academic year.

3.2.7 Creating the Space

3.2.7.1 Rivers

Water courses are a significant constraint to the development at Heathrow. Not only for flood risk mitigation but also because of their wider influence on the surrounding environment. It will be of interest to the Environmental Agency as to how HAL deals with the migration from the existing systems to the new. The following slide extracted for the HAL presentation gives an indication of the challenge.

Part of the early works will be to divert the existing rivers, creating new fluvial paths and infill existing ponds. The impact of these environmentally sensitive systems will require very careful management and will be seasonally influenced.

The proposed phasing and schedule identify the time periods for these works. There is a significant risk to the front end of the programme associated

with these works, due to the potential restrictions imposed by the consent granting body.

Prior to any earthworks to the west and north of the existing campus the river diversions are key to the release of the space. Due to the nature of river flows the system of temporary or permanent diversion are subject to key invert levels. HAL has created a strategy where these factors are considered.

The phasing diagrams provide evidence that HAL is working closely with the various bodies to provide a system that will maintain the river flows necessary to support aquatic life above and below the development zone.

Further work will be required to fully understand the risks associated with the fluvial flows around Heathrow. With reference to the protection measures to be put in place to protect these vulnerable environments. This will be particularly key during the earth work seasons where the potential to cause pollution damage to watercourses is at the highest.

The agreed code of construction practice would be the document that sets the criteria for working in and around any water courses at Heathrow. Although Arcadis has not been provided with specific monitoring or enforcement criteria that would be used to ensure compliance, the high-profile nature

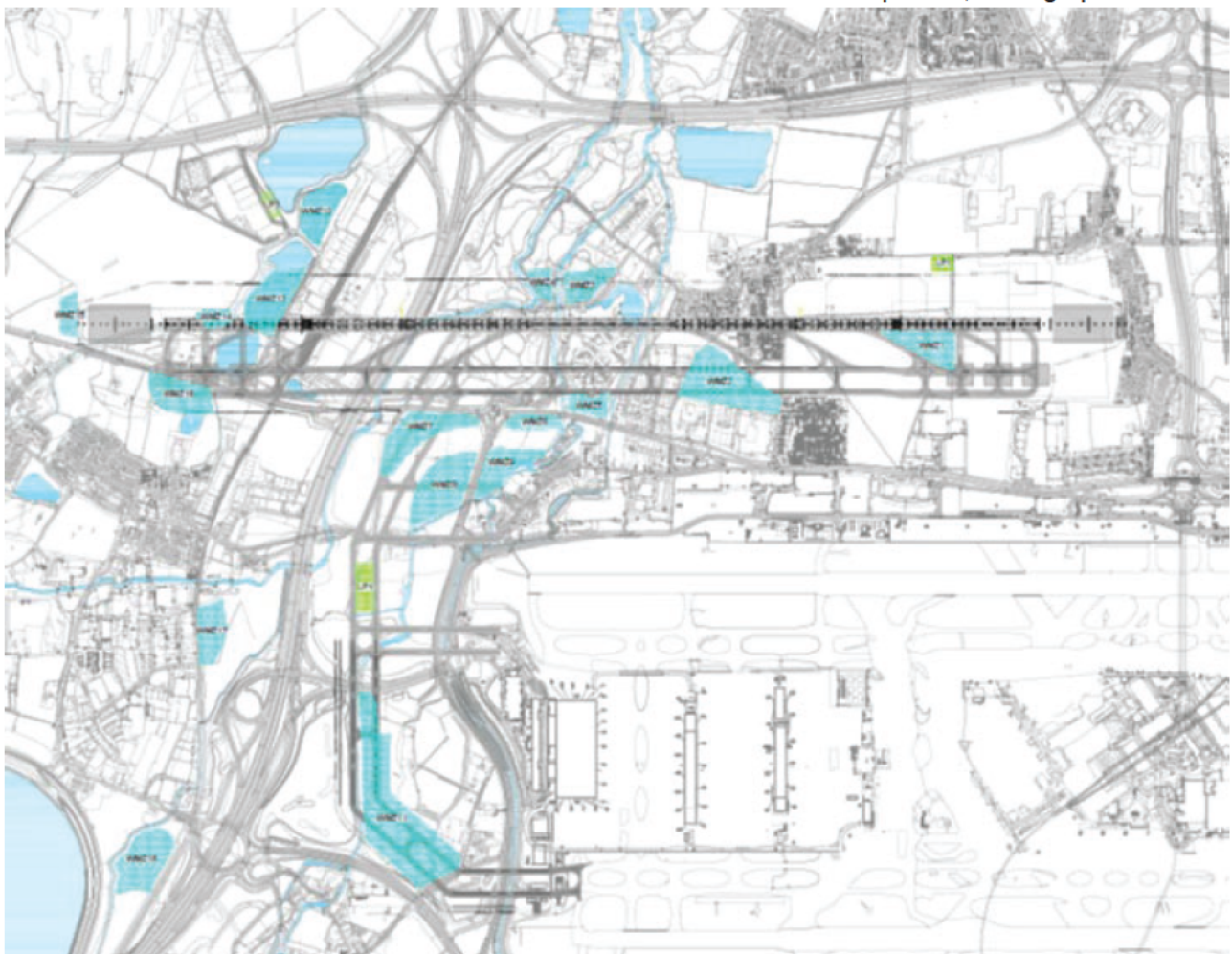


Figure 12 Waterways Impacted by Expansion Plans
Source ()

of the development should ensure the works are kept under scrutiny and any pollution or risk of pollution of water course will reflect badly on HAL and could cause a delay to the progression of the works.

The river diversions as required by the development place these environmentally sensitive areas in conflict with the timings and demands of the construction process. The consent granting body associated with these water courses has significant interest and powers over the scheme, which could lead to tensions in the approval process. Careful management of the changes to the water courses will be the route through these challenges. HAL will need to be aware of the seasonal nature of some of these works and draw up a plan accordingly. The existing rivers and water courses and the new routes play a significant role in the ecology and environment of the areas around Heathrow and are very susceptible to damage caused by the construction process.

3.2.7.2 Roads

Heathrow is surrounded by an extensive road system. Ranging from nationally significant roads system (M25) to major trunk roads and minor local roads. The planned development impacts this road system from the south of the airport around the western side and too the northern zone. Part of the early works will be to reconfigure these roads to create the space to deliver the Heathrow expansion as set out in the Preferred Masterplan.

To facilitate the expansion at Heathrow, major changes to the surrounding road network are required. This includes realignment of the M25 and A4. The schematic of the existing road network is shown in Figure 13 and the new road network is shown in Figure 14.

The A4 will be realigned and reconfigured to the north of the NWR. HAL has currently produced a number of alternative alignments due to the complexity of this work. The proposals will however enable offline construction prior to connecting to the existing road network. It is proposed that the A4 diversion works begin in [REDACTED] 2022 and conclude in [REDACTED] 2024.

HAL has built an extensive road development sequence that respects the need to maintain access for all around the airport as well as maintaining routes for staff and passengers into the airport. The road system are the main arteries for all the functions at the airport, and ensure it continues to function.

While much has been made of the relocation of the M25 to free up the runway development the re-provision of the existing A4 provides a much more challenging route and resolution and will directly influence the earthworks to the north of the existing runway.

The sequence published by HAL indicates the significant level of thinking that has gone into the works and indicates that the road design has also

been adjusted to provide the maximum space for the earthworks.

The impact of the works sequence associated with the relocation of the M25 is a significant strand through the main works programme. The re-provision of the HV infrastructure is planned to commence before the DCO approval has been achieved.

Once approval is given the space can be cleared for the new M25 route. This can be constructed "off-line" to minimise disruption. Once completed, the existing M25 can be transferred to the new route. The existing M25 can then be cleared and the area prepared for the earthworks and runway infrastructure construction.

This string of activities is key to the creation of the new runway and requires the early works to commence before the main approval of the Preferred Masterplan. This indicates the significant nature the road system will play in the development of the Heathrow scheme. Arcadis notes that the delivery of the road elements is crucial to the timeline risk associated with works commencing before the DCO process has delivered the required development approval.

The current scheme indicates that the relocation of the M25 infrastructure will be constructed adjacent to the existing route. This would be the preferred solution to creating the space required to deliver the runway. It also creates the opportunity to construct most of the new motorway "off-line" with minimal disruption to the existing traffic flows.

There are significant challenges associated with the motorway junctions as these will be re-modelled to provide access to the new road layout. These will be the areas of concern during the development because of the risk that these will be the cause of major disruption and delays to the free flow of traffic into the Heathrow campus.

There will be an area of the M25 / A4 development that will require careful co-ordination. This will be the construction of the new M25 route around the existing A4 overbridge. This bridge cannot be demolished and cleared until the alternative A4 route has facilitated the closure of the existing road.

This will place areas of the A4 road development as constraints on the creation of the alternative M25 route. This will require careful management and close co-ordination between two key packages of works. The phasing plans as presented by HAL indicates that the new A4 route will be opened in early 2024. With a target to complete the M25 works 1 year later.

In addition to the M25 realignment, the existing single J14 on the M25 will be removed and replaced with two junctions. Again, Arcadis understands that this will be constructed offline and then connected once complete.

Arcadis understands that the diversion of the A3044 is included within the local roads programme however the delivery programme does not state if the realignment will be constructed offline. It is

proposed that the construction of the A3044 diversion begins in [REDACTED] 2022 and concludes in [REDACTED] 2024.

Arcadis agrees with the principle that constructing the roads offline is the right approach as it should simplify and speed up the construction process, whilst minimising impact on the existing road network or airport operation.

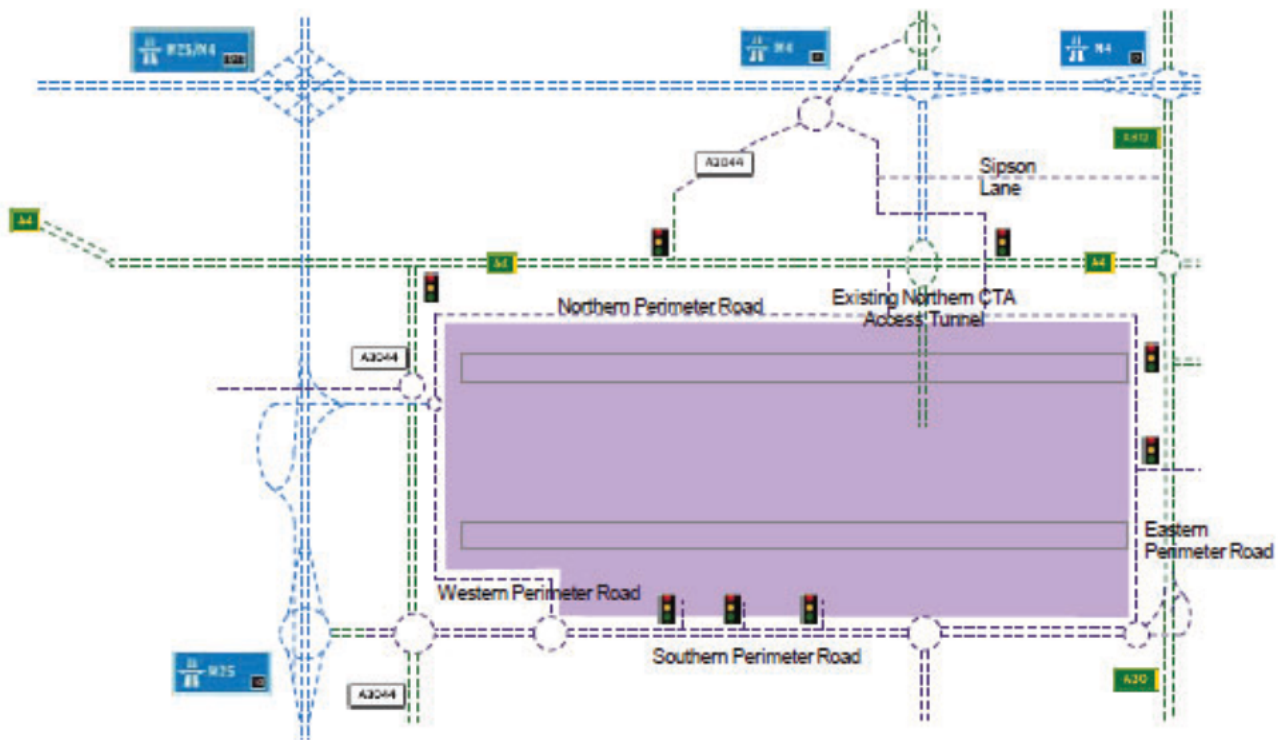


Figure 13 Existing Roads Layout
Source: [REDACTED]

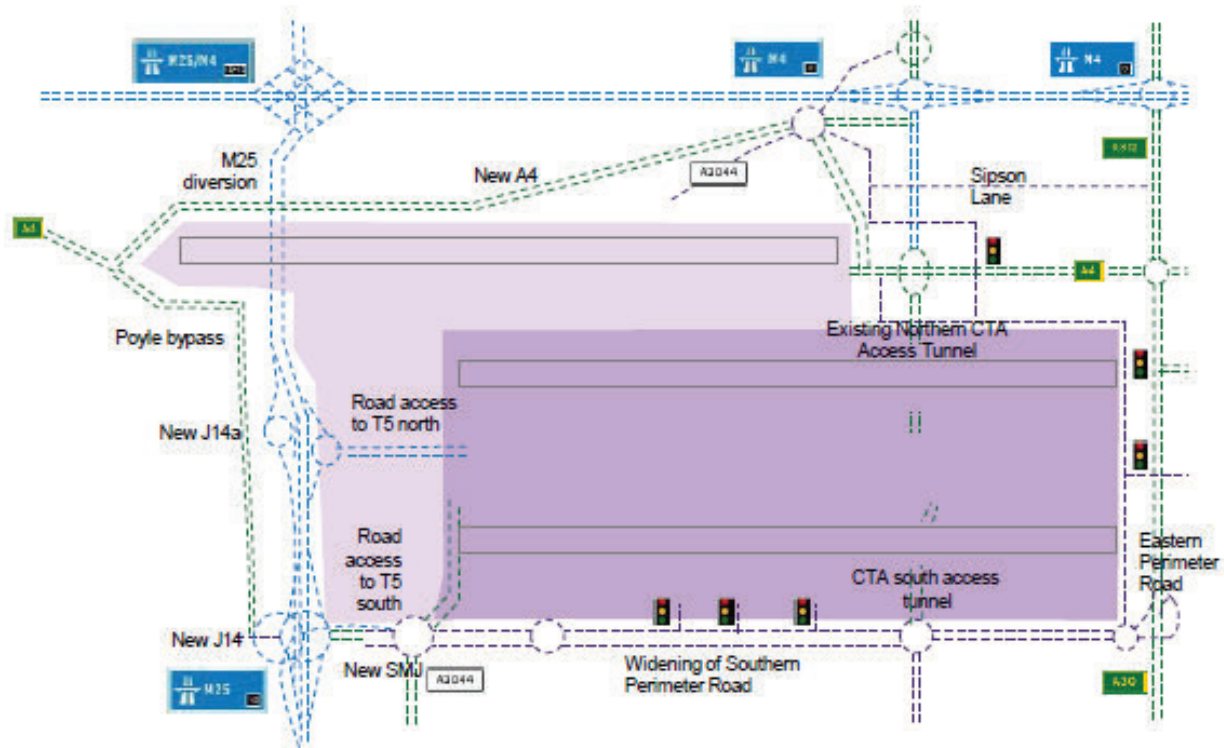


Figure 14 New Roads Layout
 Source: ([REDACTED])

3.2.7.3 Rail for Construction

The non-passenger rail system will be enhanced with new freight, fuel and sidings facilities to the north-west of the new 3rd runway.

For operational purposes the primary use of the rail facilities is to provide and maintain the fuel supply

to the airport. However, HAL has indicated that the rail facilities are also planned to be used to transport construction materials to and from the site.

The railhead is scheduled to be completed in [REDACTED] 2023 – and so will not be available for the first year of construction which includes the construction of the A4, A3044 and M25, initial earthworks, river diversions, property demolition and utility diversions.

3.2.7.4 Utilities

The first major utility works is currently planned by HAL to commence prior to DCO approval. The works to the M25 are dependent on relocating the existing above ground electricity pylons. These are currently situated in the path of the realigned M25. The works to relocate these are scheduled for [REDACTED] 2020.

All utility works are scheduled for completion in [REDACTED] 2024.

3.2.7.5 Properties

HAL has indicated that demolition of properties will commence in [REDACTED] 2022 with the last demolition scheduled to be completed [REDACTED] 2024. This is consistent with the assumption that the acquisition process will have concluded by [REDACTED] 2022.

However, as indicated in the risk section below, there is a risk that the acquisition process takes longer than anticipated which may then impact upon the overall delivery timescales.

The acquisition of properties is controversial with any development. Arcadis has not seen any provision in the delivery timetable to take into account potential action by protestors that may slow down or hinder the delivery of this phase of the process.

3.2.8 Earthworks

HAL has placed a significant amount of work to resolve the earthworks strategy and when questioned provided a credible sequence of works.

The following extracts from a HAL presentation captures the strategic view of the early earthworks around the area of Harmondsworth, Sipson and Longford villages.

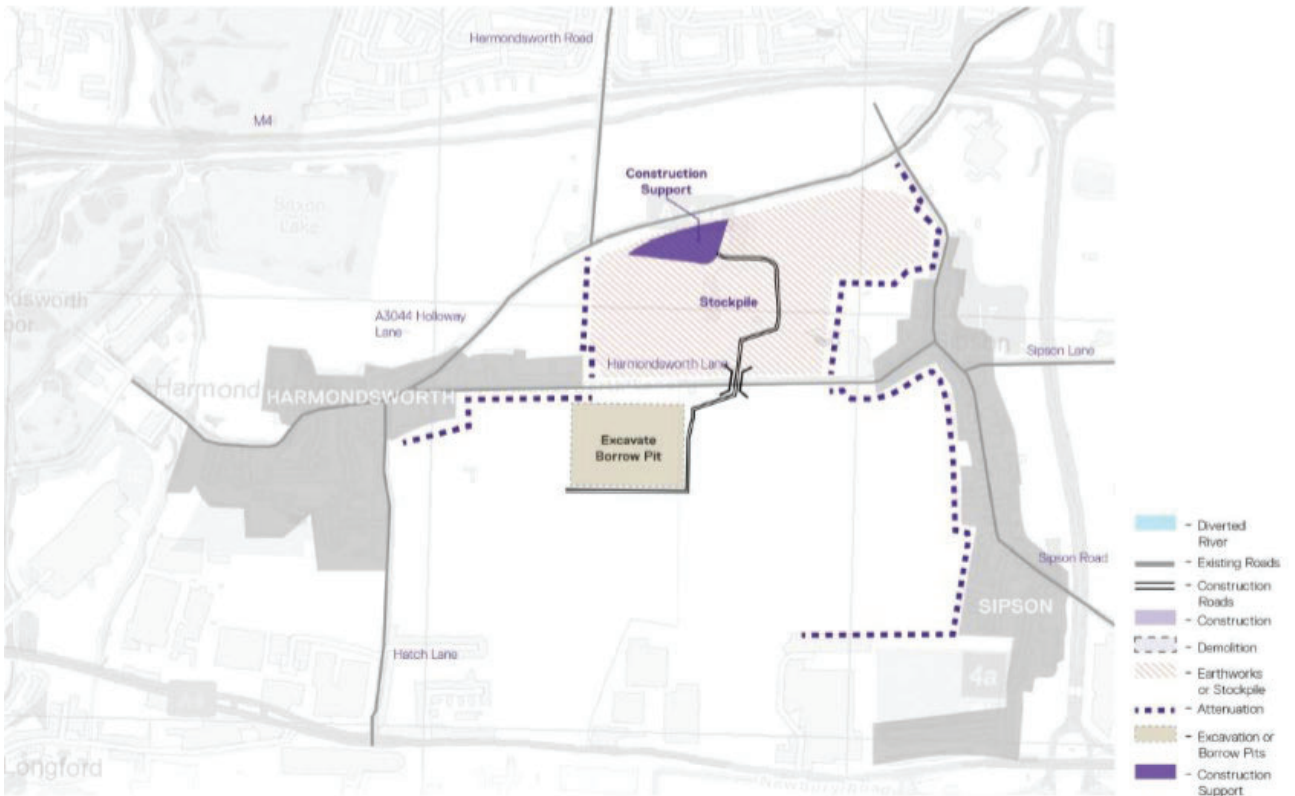


Figure 15 Earthwork Phasing – Stage 1
 Source: ([redacted])

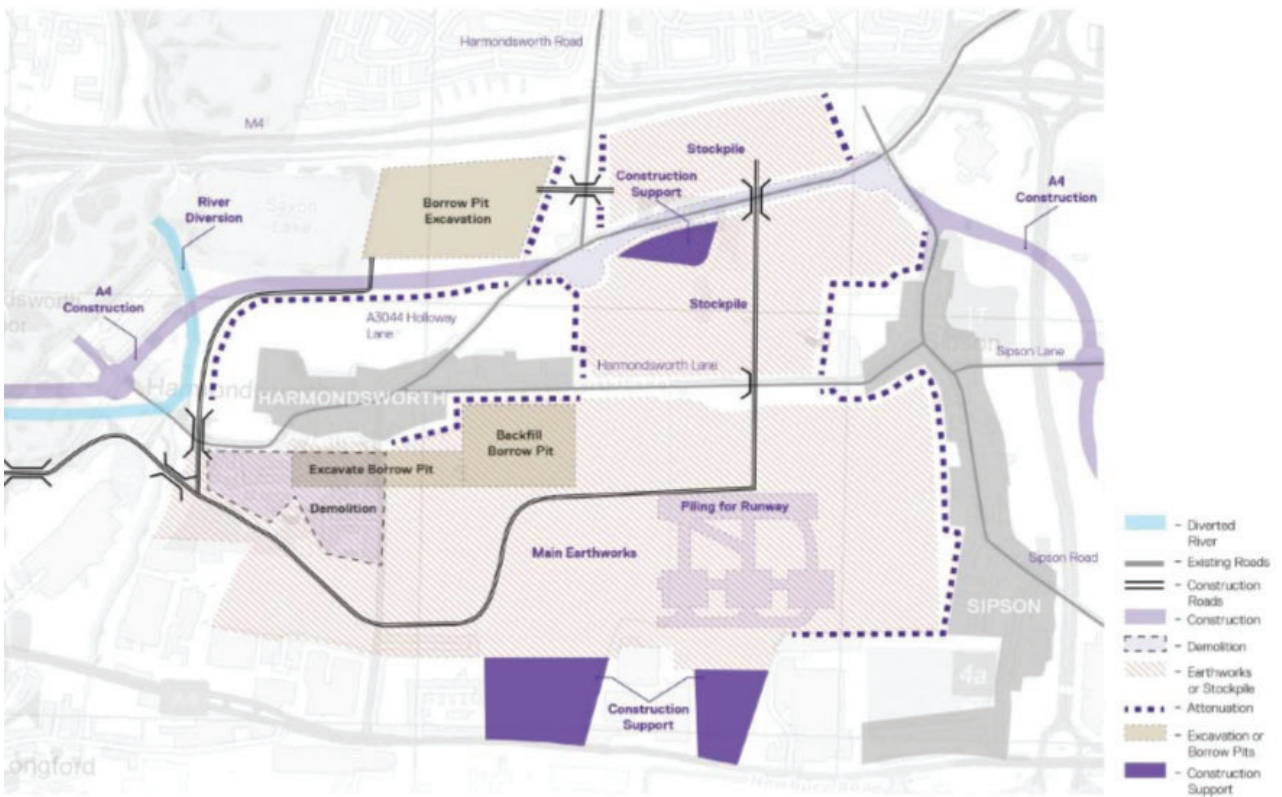


Figure 16 Earthwork Phasing – Stage 2
 Source: ([redacted])

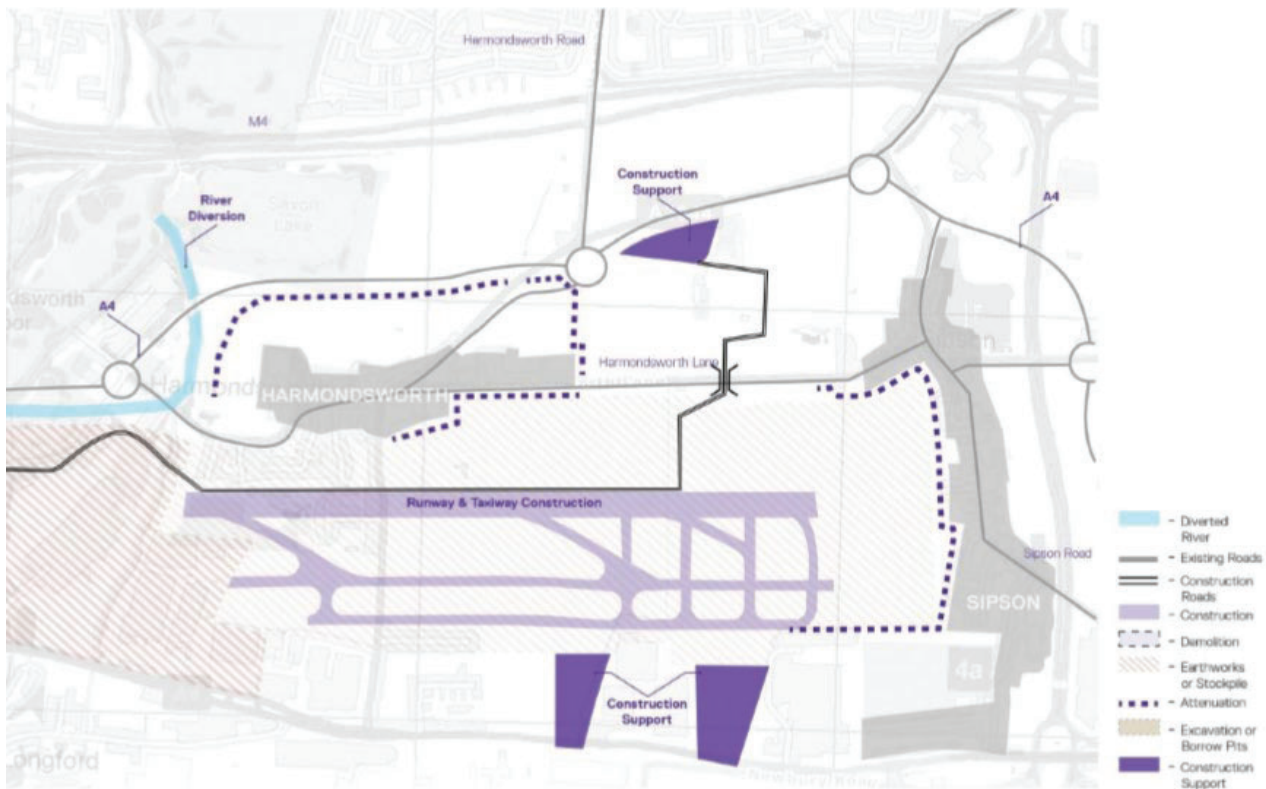


Figure 17 Earthworks Phasing – Stage 3

Source: ██████████)

As can be seen from the high level slides the earthworks and reconfiguration of the road system are linked and create a delivery sequence.

The challenge to the earthworks will be the need to create borrow pits that provide clean fill and transfer any contaminated arisings into the borrow pits to mitigate any migration of spoil off site. This sequence is critical to the success of the earthworks strategy and relies heavily on integration between differing suppliers and the works commencing at the earliest opportunity in ██████████ 2022.

When asked for clarification HAL confirmed that they will require long working windows and multiple shifts during the first year to achieve the target of moving ██████████ material during the first year and approximately ██████████ the following year. This presents a very challenging target to be achieved by the supply chain and will require detailed engagement with existing contractors. When challenged HAL responded that they have had extensive dialogue with the supply chain and validated the targets against industry norms. However, it is a challenging target and could be easily de-railed by exceptionally inclement weather or curtailed by intervention by the local authorities if the impacts of the works become intolerable.

The success of the earthworks programme will rely heavily on a positive engagement with the specialist supply chain, as well as the contractors having access to the right equipment in enough volume to achieve the goals set. Procurement of the supply

chain will have to have progressed to the point of placement of the contracts due to the limited mobilisation period after approval has been granted. There are significant risks within the earthworks works packages due to the interfaces between each area. HAL is aware of this risk and intend to engage with the supply chain on a more collective responsibility contract.

With a limited earthwork season (spring to autumn) these targets are ambitious and will require multiple shifts per day and 6 days a week working. Which may cause conflicts with the local authorities due to detrimental impacts. Arcadis understands that HAL is working through these challenges to create a stable working regime that will help to achieve these goals.

3.2.9 Main Works

Once the space has been cleared by the early works and the reconfiguration of the road systems, the remain space will be developed to create the new runway. There are multiple areas of development that will be progressed upon completion of the DCO process. The constraints at the beginning are around the environmental mitigation measures that will be required to be instigated as soon as the DCO approval has been granted. The early stages are governed by the need to set up the construction support areas and logistic strategy.

Very quickly the whole area will be impacted by the development. With the earthworks dominating the northern sector. The early years are dominated by

the need to relocate and remove the existing occupiers of the areas under development. These include commercial properties, residential properties and a few key utility relocations. This is shown as taking 2022 and 2023 in the phasing plans. While the areas are being cleared of existing functions and facilities the existing airfield will be adapted to allow for connections into the new areas.

HAL has undertaken a detailed assessment of the main body of works to understand the required sequence, constraints and influencers on the works. They have created a high-level programme with the appropriate time periods to undertake the identified scope in the required sequence. It is the appropriate level of planning with the information available at this early stage in the development. Further work will be required to determine the next level down in detail to enable a guidance programme can be created to inform the procurement process. The programme has a series of key milestones that help to identify the targets to be achieved it also identifies the multiple level of projects that are to be delivered.

The development at Heathrow is complex in that it requires a significant number of projects to clear space and then change the function of that space. Which in a normal development would provide a clear and concise path through the development to enable the easy identification of the key or critical projects. The reconfiguration of Heathrow to facilitate additional airline capacity requires the redevelopment of entire sections of the surrounding areas. The consequence will be that any of these projects and sub-projects could have a detrimental impact on the overall development. It will be up to HAL to instigate a robust management and control plan to ensure close monitoring of all projects with the portfolio of development at Heathrow.

HAL has published a works delivery sequence in the form of time slices slides (Appendix A). These provide a pictorial representation of the main works over a period of 2020 to runway opening in 2026. It is clear to see from these slides that the area around Heathrow will be significantly impacted by construction activities. There will be concerns that the extra traffic needed to feed the construction sites will cause disruption to the normal operations at Heathrow. HAL is fully aware of this risk and in discussion have referenced the work done to identify remote parking, and remote manufacturing centres to move as much of the construction process away from the Heathrow site. There is bound to be a detrimental impact of the works on the day to day operations, with particular concern

around the changes to the roads systems. Further work will be required to fully understand these risks and impacts.

3.2.10 Risks

HAL has identified the top 15 Expansion Risks for the **Step 0**, as indicated in Figure 18. A number of these directly relate to Deliverability.

HAL has identified that the pre-DCO enabling works can begin prior to the main external works. The schedule indicates that this will include ecology related works beginning [REDACTED] in 2022. This will be ongoing whilst the DCO application is under consideration and awaiting a final decision. We do not consider this a risk to the delivery programme.

Arcadis considers the earliest risk to the delivery of **Step 0** comes from the DCO process, property acquisition and business relocation. These must be completed prior to the main **Step 0** construction programme.

The risks have been identified by HAL and mitigation measures are in place. The relevant Risk ID and Risk Titles are detailed in the HAL document, Risk Management – M4 and the summary of these risks are indicated below.

Arcadis has seen evidence that HAL has been working through the risks identified in this early phase of the process and is seeking to develop appropriate mitigation measures to minimise the impact of any risks.

HAL has undertaken a Quantitative Schedule Risk Analysis (QSRA) assessment of the proposed schedule, with respect to schedule integrity. This assessment resulted in a P value of [REDACTED], indicating a [REDACTED] likelihood of achieving the schedule. Arcadis recognises that this reflects a schedule that has been designed to deliver the new 3rd runway at the earliest possible opportunity. Arcadis has not reviewed the likelihood of any alternative runway opening dates as part of this review.

It should be acknowledged that such a major programme will have risks that HAL can mitigate as these are directly under HAL's control. However, there will be a number of risks that HAL does not have direct control over which could lead to delays in the programme that will impact on HAL's ability to deliver the timetable for **Step 0**.

3.3 Summary

Arcadis has assessed the key elements required for the delivery of the new runway from the existing airport operation to 2026, **Step 0**.

It is clear from the significant amount of work that HAL has undertaken that the sequencing and multiple elements of the scheme are presented in a logical and well thought out sequence.

Arcadis has seen evidence that HAL have sought to deliver the most efficient sequencing to aim to deliver the new runway by 2026. This efficiency has however created a programme that is both ambitious and optimistic with little margin for delays or risk.

Although it is not unfeasible that this programme and sequencing for the delivery of the required infrastructure could be achievable, this is reliant on the programme timings set out in the plan to be delivered.

Arcadis has identified a number of deliverability challenges that, although may be achievable to meet the ANPS target of 2030, could only be deliverable by 2026 if no significant delays take place in the programme.

The first challenge to delivering the new third runway by 2026 requires the full DCO process to have been completed by [REDACTED] 2021.

Whilst HAL has planned the DCO timescale around the “normal” allocation of time, it does not allow for any contingencies in the timings. The Heathrow scheme has attracted a lot of public scrutiny over the years and there would be no reason to suggest that it will not be subject to intense scrutiny during the DCO process.

The proposed development programme requires that the earthworks to proceed in [REDACTED] of 2022, and therefore any delays in the approval process will have a detrimental impact on the proposed start of works.

There is a significant amount of key activities that are positioned as early works within the proposed development timelines. While this is not unsurprising within the context of the volume of works required to be completed within a tight target to achieve a new runway by 2026, some of the identified works will require separate approval routes to the main DCO, they will also require commitment to placement of contracts to deliver replacement assets before the main works are let. There is also a need to review the planned dates for some of the replacement assets such as the school replacement projects that are not harmonised with the school academic year.

The river diversions are environmentally sensitive areas in conflict with the timings and demands of the construction process. The consent granting body associated with these water courses has significant interest and powers over the scheme, which could lead to tensions in the approval process.

Careful management of the changes to the water courses will be the route through these challenges. HAL will need to be aware of the seasonal nature of some of these works and draw up a plan accordingly.

The existing rivers and water courses and the new routes play a significant role in the ecology and environment of the areas around Heathrow and are very susceptible to damage caused by the construction process.

The road system amendments proposed by the scheme are a significant risk to the development due to the complex sequence of works required. There are many risks associated with the re-configuration of the road systems and as such the construction activities will present many challenges

The success of the earthworks programme will rely heavily on a positive engagement with the specialist supply chain, as well as the contractors having access to the right equipment in enough volume to achieve the goals set.

Procurement of the supply chain will have to have progressed to the point of placement of the contracts due to the limited mobilisation period after approval has been granted. There are significant

risks within the earthworks works packages due to the interfaces between each area.

The volume of earthwork required to be achieved in the first two years is significant. A limited earthwork season (spring to autumn) means these targets are ambitious and will require multiple shifts per day and 6 days a week working. Which may cause conflicts with the local authorities due to detrimental impacts.

HAL has published a works delivery sequence covering the main works over a period of 2020 to runway opening in 2026. It is clear to see that the area around Heathrow will be significantly impacted by construction activities. There will be concerns that the extra traffic needed to feed the construction sites will cause disruption to the normal operations at Heathrow.

HAL is fully aware of this risk and in discussion have referenced the work done to identify remote parking, and remote manufacturing centres to move as much of the construction process away from the Heathrow site.

There is likely to be a detrimental impact of the works on the day to day operations, with particular concern around the changes to the roads systems. Further work will be required to fully understand these risks and impacts.

4 TIMING

Arcadis has assessed whether the masterplan and plans for the **Step 0** period is timely. The review has considered whether the Preferred Masterplan and planned deliverables for **Step 0** can be provided in accordance with the specified duration in the programme and the dates and deadlines detailed.

Arcadis has considered the risks to providing the relevant deliverables in accordance with the current specified duration in the programme and on the dates and deadlines detailed in HAL's plans.

The review has analysed the impact of failing to provide for the relevant deliverables in accordance with the current specified duration in the programme and what strategies have been developed to mitigate risks and any subsequent impacts from failure to delivery in a timely manner, with consideration for interdependencies.

Arcadis's key findings are:

- HAL has developed a programme that has all the necessary steps needed to achieve the ANPS target for 2030 and there is no reason to suggest this date is not achievable;
- The current programme includes risk allowances for each component of the masterplan assessed on the basis of industry norms. There is no apparent programme-wide allowance for schedule risk; and
- With such a complex programme involving a significant range of interdependencies, many of which are out of the control of HAL, the objective to deliver an operational runway by 2026 carries a high level of risk.

4.1 Definition of Theme

This section of the report reviews whether the Preferred Masterplan can be delivered in a timely manner from the existing airport infrastructure to **Step 0**.

Arcadis has already reviewed the proposals to ensure that they follow a logical delivery sequence. This purpose of this section of the report is to assess the programme Work Breakdown Structure (WBS) and overall schedule resilience.

The WBS has been presented to Arcadis in a form of a detailed Gantt chart developed in recognised programme management software using benchmarked and as build data sources to develop the schedule. Table 17 sets out the key dates that are contained within the programme that HAL is seeking to achieve to be able to deliver the new runway by 2026, **Step 0**.



Table 17 List of Milestones
Source: (Arcadis 2019)

4.2 Assessment

In order to undertake this review Arcadis has engaged with HAL attending presentations with HAL then providing the presentation slide decks.

In addition, Arcadis has undertaken sessions with the relevant Subject Matter Experts at HAL who have developed the programme schedule and have answered detailed questions regarding the information presented to Arcadis.

Arcadis has been provided with access to a detailed assessment of the schedule structure that was undertaken by Costain on behalf of the Department for Transport in June 2019. The report investigated the Work Breakdown Structure (WBS) and overall schedule resilience

The results of those investigations is published in a report *DfT Heathrow Expansion Programme, Assurance Review of Heathrow Airport Limited Delivery Schedule* dated 14th June 2019.

Arcadis' review has fundamentally considered the same information and approach that has already been assessed by Costain but for the purpose of this report has only considered the programme up to **Step 0**.

4.2.1 Pre-Construction

Development Consent Order

The expansion at Heathrow requires the developer to seek a DCO and there are clear steps that the developer will need to follow to comply with the process.

Arcadis has examined HAL's programme and the timings are dependent upon HAL having an unopposed submission that will pass through the pre-examination and examination process without dispute. The proposed DCO timescale does not allow for any deferral of the final approval date of the submission. To underwrite this aspiration the original documentation will have to achieve total and full compliance with the DCO requirements.

HAL is fully aware that there is opposition to their scheme and there have been legal challenges and attempts to seek multiple judicial reviews over time to seek to slow down or stop expansion at Heathrow. HAL has experience of working through complex planning submissions and are aware of the level of engagement required to gain approval.

As part of the DCO process, there is a requirement to create a body of information and evidence prior to formal submission. HAL has undertaken multiple formal consultations as well as many informal consultations. This has enabled them to capture a significant amount of responses and points of issue.

These consumer insights have been fed back into the design development process. This should give HAL the opportunity to balance their emerging design and associated mitigation with the needs of the scheme objectors.

Arcadis has not undertaken a comparison between the 3,000 responses received in the spring 2018 consultations and the emerging design agreed at the M4 gateway. HAL has confirmed that it has taken into account, and sought to address, the concerns raised during the public consultations.

Having also engaged with the relevant consent granting bodies, HAL has a clear understanding of the concerns and areas of objections likely to come from these sources.

In addition, HAL has also taken extra measures to ensure that they gain acceptance from a wider audience with the introduction of an inclusive procurement strategy and a draft construction management plan. The dedicated expansion website pages have extensive information and are designed to help engagement of all relevant parties.

Whilst there is little doubt that HAL is planning to achieve a 100% compliant submission there are always external influencers that could cause the planned timescale to be extended beyond the planned [redacted] month period. As can be seen from the graph (refer to Figure 10) the process does not always follow the prescribed timescales.

The period allowed by HAL from submission to approval of approximately [redacted] days. Arcadis has compared these timescales against other submissions and although some simpler developments are shorter, 1/3 of schemes that have gone through the DCO process have taken longer.

Arcadis considers that a vigorously pursued Judicial Review could cause enough delay to the approval process to cause the planned spring earthwork window being lost, delayed or compromised.

Arcadis considers the time allowance between DCO approval and start of works in [redacted] 2022 is ambitious with little or no contingency. It will rely on a period of effective and swift discharging of the planning conditions imposed on HAL after the DCO date.

It is likely that HAL will be aware of the planning conditions at the point of the Planning Inspectors recommendation to the Secretary of State. However, there will be a risk that more will be imposed during the final stages of the process.

Consent Deliverables.

Arcadis is aware HAL understands its requirement to map the environmental impacts of the planned works in detail. HAL has indicated an understanding of the seasonal variations for each species expected to be discovered within the development zone.

As part of its assessment Arcadis discussed with HAL how they would deal with contingencies if species were discovered in key earthwork zones. One example includes Badger Setts within the area of the early earthwork areas. There are known Badger Setts on the edge of some of the early earthwork zones. These will be of interest to the Environmental Agency and the means by which HAL will protect existing species.

As part of the Preliminary Environmental Impact Report (PEIR) a full field and desktop study of all the areas impacted by the scheme will need to be undertaken by HAL. Arcadis understands the scope of this study has been agreed with the relevant authorities. This will form the basis of all studies and environmental mitigation measures undertaken between pre-submission and the completion of all works.

HAL has indicated that they have created all documentation as required by the Development Consent Order (DCO) process as well as enquires by the relevant authorities. The published schedule indicates the time allowed for these studies. HAL is aware of the need to create the full information pack in support of the DCO submission prior to the review by PINS (Planning Inspectorate) as any failure to provide the full information will risk the rejection of the submission at the first hurdle.

4.2.2 Design

The Preferred Masterplan schedule supplied by HAL has indicated a period for design development. HAL has indicated that there are several key design Consultants engaged to deliver the necessary detail, from concept guardians through to engineering specialists.

The design programme as indicated on the Preferred Masterplan schedule indicates the required time frame for the design and is at a level that would be in keeping with a pre-submission scheme. However, Arcadis considers that the complexity and potential impacts of the works would require a clearer statement of the design development process.

Arcadis has not been able to analyse the fully detailed design programme but HAL has indicated that this has been set up to feed into the procurement timescale. Arcadis considers that with a scheme of this complexity there will be a need to progress the design on many fronts to ensure visibility of the interfaces between works packages and systems to ensure compliance. HAL is aware of this constraint and are pursuing this strategy through the procurement process.

HAL is currently working through the design development to achieve the Preferred Masterplan milestone of M5. This is intended to pull in all the comments and issues raised during the consultation process to provide an updated design that will form the basis of the DCO submission in [REDACTED] 2020.

This should also provide the basis upon which the early works packages will be progressed into the procurement process. There are indications of the need to progress key areas of design early to feed the requirements of the early works and procurement of the large infrastructure works.

Arcadis were unable to review in detail the plan for elements such as the SSE high voltage works, the M25 infrastructure, the replacement of the Immigration Centre and Harmondsworth School facilities. These will require detailed work over the

next period to ensure full compliance prior to the works commencing on site.

Arcadis is aware that one of the key constraints to the development of the new runway construction will be the Energy from Waste facility. HAL are working with the owner of this asset to undertake a separate planning application to relocate this facility. There is a significant risk that by removing this facility from the DCO process that the Local Authority Planning Application could reject or defer this application and causing this project, and the DCO, to be delayed.

It is Arcadis' view that this could have a detrimental impact on the planned construction sequence and timings of the main runway works. Although HAL is aware of this risk, by transferring this to a separate developer they have diminished their close control of this risk and any opportunity to mitigate this.

4.2.3 Procurement

HAL has created a delivery procurement strategy that has been reviewed by the airline community. The high-level mission statement to "Create a Heathrow Expansion Procurement Strategy that motivates productivity, drives value for money to create a new UK benchmark for the way infrastructure is sustainably procured that delivers the programme."

Arcadis has not been provided a detailed procurement plan built into the information supplied by HAL. Discussions with HAL indicates that it has been undertaking a review of the works packaging strategy and procurement methodology to ensure their stated aims (as listed above) will be achieved.

The focus to date has been to create the design and delivery strategy as required to meet the requirements of the DCO process. Whilst HAL has engaged the services of a professional construction adviser who has advised them on construction methodology, sequence, and timings, there is a lack of detail to the next level on procurement.

Arcadis has raised queries in discussion with HAL on the likelihood of the need to build the OJEU process into the time allowance for works, especially those relating to works outside of the airport boundary.

HAL has not yet clearly identified which packages of works may require OJEU. This may be a function of the unknown status of the UK post 31st October 2019 however any requirement to undertake OJEU procurement could extend the programme and therefore delay the implementation of works.

4.2.4 Pre-DCO Works

Arcadis understands that, to achieve the required clearance of the development space there are certain projects that need to be undertaken prior to the full DCO approval has been achieved.

These are required to clear key areas to facilitate the works and are time critical. This is because of the long string of works that follow these key early works or the need to remove the constraint on the development early.

These projects include the relocation of a high voltage cables and associated substations, which are required to be cleared out of the way to make room for the construction of the new M25 alignment. This works sequence influences the requirement to demolish the existing M25 road to allow for construction of the new runway. Whilst it is not a constraint on the commencement of the runway works it is an influence on the middle section of the runway development.

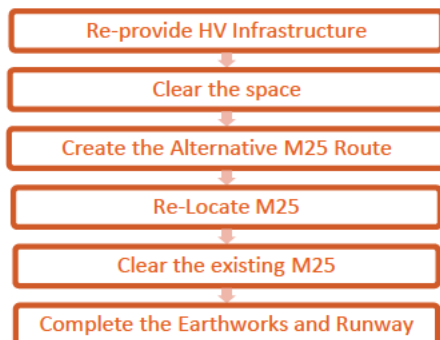
Other projects are pre DCO due to the need to re-provide the facilities to enable occupancy by the construction contractors to clear the areas and commence the earthwork as soon as possible. These projects include for the re-provision of the Harmondsworth Primary School, Immigration Centre, and Energy from Waste facility.

4.2.5 Roads

The reconfiguration of the M25 and A4 are key to the release of a significant area of the development site, to the north and west of the existing Heathrow campus.

The M25 road amendment is constrained by two primary strings. The first will be the design and procurement processes that are required to deliver a Highways England compliant scheme. The second will be the need to clear high voltage surface cables from the development zone.

This sequence is shown below.



Source [REDACTED]

Due to the timing of the works the HV infrastructure works will occur prior to the scheme DCO approval. These works will have a significant influence on the overall development timescale and any delays in this work stream will impact in HAL's ability to deliver the runway for 2026.

The current sequence and timings assume that all the works will commence at the earliest opportunity and the design and procurement and works to the SSE HV network will commence pre DCO approval. Arcadis understands that there are few opportunities to mitigate delays in this sequence, however it will not completely stop the commencement of the runway build but significantly influence the completion of the middle section.

The other key road system will be the relocation of the A4 trunk road. This again will influence the earthworks and development to the north west of the current campus. It is vital that traffic is routed

away from the main earthworks zones and an alternative route around the western perimeter is created, before the existing road system is shut down.

The significance of the A4 will also play into the relocation of the M25, as there is currently a significant bridge that takes the A4 over the M25. The impact of this can be seen by the following works sequence. Deliver the alternative A4 Route including a temporary bridge over the 'live' M25 and an enabling A4 bridge over the M25 diversion.



Source [REDACTED]

The creation of the new A4 route will involve a significant bridge structure over the live M25 to allow traffic to pass from the west of Heathrow to the north.

These two areas will need to be worked up in detail with the supply chain to de-risk these very difficult scope of works. Whilst a period for these works has been allowed within the Preferred Masterplan programme schedule, Arcadis understands that it will be difficult for HAL to assess the certainty of the proposed timescale until further design work has been undertaken.

Although the existing construction delivery consultant will have undertaken a review of the sequence and timings to give a professional opinion on the likelihood of achieving the required dates, there is a risk that any delay to the A4 is again likely to impact on HAL being able to achieve the runway opening of 2026.

4.2.6 Earthworks

HAL has developed a strategy around the DCO consent being delivered in [REDACTED] 2021, and the main earthwork commencing in [REDACTED] 2022.

The requirement is therefore for HAL to mobilise, set up the required logistics centres, clear any DCO conditions, achieve vacant possessions, and undertake environmental mitigation measures in order to achieve a meaningful start of the earthworks in [REDACTED] 2022.

The stated goal of the first year of earthworks is to move approximately [REDACTED] of material. To achieve this goal HAL is planning to work extended days and weeks during this first season. Whilst much thought

and investigation of the possible methodologies has been undertaken, HAL cannot finalise the actual methodology until the DCO process has delivered any imposed constraints.

Due to the tight timescales allowed in the programme, between the DCO approval and the start of works, any delays in the DCO approval process will have a direct impact on the ability of HAL to achieve the planned start of the works in the [REDACTED] 2022. The target of the [REDACTED] of material to be moved would then be compromised.

The HAL strategy requires large areas of land and existing facilities to be available under Vacant Possession at the beginning of the works. To achieve this, HAL has indicated that they will be negotiating agreements with the various landowners and vested interests prior to the DCO. These agreements are planned to come into force at the point of DCO approval with dates indicated within the programme for some of the key land acquisitions to become operational [REDACTED] after the issue of the DCO.

Arcadis is not able to accurately forecast whether the required parcels of land will be available on the required date, with the risk that the process may take longer than planned. This will also put pressure on the earthworks sequence and methodology leading to potential delays in the release of areas to following activities.

The earthwork periods are constrained by weather impacts, with the expectation that the majority of the work will be carried out from spring to autumn in 2022 and 2023. Seasonal variance and inclement weather could have a significant impact on the ability of HAL to deliver the required production targets.

Arcadis considers that with a limited earthwork season (spring to autumn) the programme targets are challenging and will require multiple shifts per day and 6 days a week working. Arcadis understands that HAL is working through these challenges to create a stable working regime that will seek to achieve these goals.

4.2.7 Runway Opening

The runway delivery sequence as defined by HAL in the time slice presentation (images in Appendix A), seems to be in keeping with the known constraints around the campus at Heathrow.

Arcadis has seen a sequence that shows a clear strategy to deliver the works as and when required. It highlights the works necessary to be cleared in advance of the main runway delivery. It also shows the constrained method of delivery for the main runway works. The Preferred Masterplan programme schedule supplied by HAL indicates the proposed time periods for the works.

Arcadis has discussed the development of the programme with HAL. Arcadis notes that no separate allowance has been made for programme-wide schedule risk. HAL has clarified that programme allowances for individual work-

packages are based on industry benchmarks for completed work and accordingly include allowances for programme delay.

However, in our experience, a prudently designed masterplan schedule will include some allowance for programme risk, dealing for example with the interdependency of work items on the schedule.

Arcadis has analysed the document "[REDACTED] t" that was published on [REDACTED] 2019. HAL's report sets out information on the benchmark data used and the source of that data. Although this helps to validate the time periods allowed within the programme, it does not eliminate any schedule risk and only clarifies the periods used.

4.2.8 Schedule Risk

Arcadis notes that, throughout the schedule and delivery sequence published, HAL has taken an optimistic approach to the interdependency of key components of the Masterplan. Whilst this outcome may indeed be delivered, it would be a prudent step by HAL to take greater account of a number of highly significant sequencing risks that we set out below:

Dependency on the Timing of the DCO.

HAL has been optimistic in achieving the key dates as set out above. HAL's Preferred Masterplan programme schedule assumes the ability to complete the DCO process within the proposed 17-month timescale.

Delivery of Enabling Infrastructure

The timescales to relocate the SSE High Voltage infrastructure, the M25 Motorway and the A4 Trunk road is again reliant on a smooth programme without delays or disruption. The A4 relocation must be completed for the site for runway construction to be made fully available.

Earthworks Schedule

Even once the site is available, the need to achieve [REDACTED] of earthworks in the first year, to the start of works within [REDACTED] of receiving the DCO is again ambitious, relying on additional consents to allow for extended working days.

Operational Readiness

HAL has not yet shared their plan for "day one operations". Arcadis has analysed the programme and has identified a period allowed for operational readiness. This period is indicated on the programme as 5 1/2 months, from [REDACTED] 2026 to [REDACTED] 2026.

Arcadis' assessment, based on other operational readiness activities that Arcadis has been involved with (including T5 and T2 at Heathrow) is that this duration is optimistic, as the new runway will require extensive integration into the existing Heathrow operations.

Arcadis understands that the new infrastructure will also require integration into a revised airspace plan.

Prior to this testing and proving period, there will be a need to update the airfield licence and operating procedures to accommodate changes to airspace.

These tasks are not highlighted on the master schedule received by Arcadis. The assumption being that these tasks will be undertaken in parallel with the construction delivery team and be ready and agreed prior to the operational testing period.

The date is driven by completion of the runway construction, which is shown as [REDACTED]. There is little or no contingency built into the start of this operational readiness period which we considered to be an optimistic position.

No information was provided on the detailed programme as to how the new runway capacity will be integrated into the existing Heathrow operations. Further work will be required to clarify all the conditions necessary to achieve a successful integration of the new assets.

Given the high reputational risk associated with handover and operational readiness, we expect that HAL would take a more conservative approach to their planning of handover timescales.

4.3 Summary

Arcadis considers that the overall Preferred Masterplan programme schedule is at the level of detail required for a programme of this scale at this stage of the development process.

HAL has developed a programme that has all the necessary steps needed to achieve the ANPS target for 2030 and there is no reason to suggest this date is not achievable.

HAL are aware of these risks. Figure 18 for example sets out HAL's assessment of the top 15 expansion risks, which include for example, the extension of the DCO period.

The programme has been developed from a sequence of discrete activities that each include

their own allowances for schedule risk based on industry norms. There is no apparent programme-wide allowance for schedule risk and, based on our understanding of the methodology adopted by HAL, no additional risk allowance for the particular challenges associated with the delivery of the works sequence in a constrained location.

The risks and the work HAL has undertaken to consider these to the delivery and therefore the timing is set out in 3.2.10 above. Arcadis has seen evidence that HAL is continually developing and refining its risk assessment to the programme.

Arcadis has no doubt that HAL has spent a significant amount of resource developing its plans and is confident that this approach would allow HAL to achieve the ANPS target for increased runway capacity by 2030.

However, there are a number of elements within the programme that HAL will not have full control over and therefore cannot fully mitigate the risks associated with these tasks being delivered. The lack of control on specific elements such as the DCO process, SSE HV works, the Waste to Energy facility and M25 works could lead to timings and key milestones not being achieved that will have a knock-on to the rest of the programme.

Although HAL has indicated that they could mitigate some of the potential delays through re-phasing and moving around work elements within the programme, the key consequence of delays to the delivery of the runway or re-scheduling of works is likely to be an increase in costs and potential failure to achieve the 2026 date.

The **Heathrow Expansion Programme, Assurance Review of Heathrow Airport Limited Delivery Schedule** report prepared for the DfT by Costain has also highlighted a similar set of risks associated with meeting the 2026 timescale but again agrees with Arcadis' view that the ANPS target of 2030 can be achieved.

5 COST ESTIMATE

Arcadis has assessed whether the Preferred Masterplan Capital Expenditure (CAPEX) for the **Step 0** period is reasonably and reliably costed. The review has considered the approach HAL has taken to build, further develop and update their cost estimate in accordance with the Preferred Masterplan.

Arcadis has examined HAL’s approach to developing the cost estimate any ‘Scope Gap’ and the certainty of the cost estimate based on the quantification of costs, pricing and confidence in costs, application of on-costs and HAL’s approach to risk and maturity.

Arcadis’s key findings are:

- HAL’s Cost Estimate for **Step 0** is reasonably and reliably costed;
- Arcadis’s comments from previous reports to the CAA have been taken on board by HAL and an all-encompassing baseline cost estimate has been produced by HAL;
- HAL’s approach to the structure and methodology of compiling the Cost Estimate reflects industry best practice;
- The level of quantification and benchmarking has increased since previous iterations of the Cost Estimate with analysis of benchmarks from other sectors incorporated leading to an increased level of cost certainty; and
- [REDACTED]

5.1 Definition of Theme

This section of the report reviews the Cost Estimate for **Step 0**. HAL’s Cost Estimate has already been reviewed and assured by the Independent Fund Surveyor (IFS). To understand the IFS’s approach Arcadis met with the IFS in May 2019. Arcadis consider that the IFS has undertaken a thorough and detailed review of the Cost Estimate and have therefore looked to build on and further the work already done by the IFS rather than duplicate.

reasonably and reliably costed. Arcadis has based their assessment on industry practice and Royal Institution of Chartered Surveyors (RICS) New Rules of Measurement (NRM).

An industry recognised approach to cost estimating is detailed below in Figure 19.

After compiling the Base Costs of the Cost Estimate Indirect costs are taken into consideration, these are detailed in Figure 20.

Arcadis has assessed whether the Preferred Masterplan Capital Expenditure (CAPEX) is



Figure 19 Approach to Cost Estimating, Direct Costs



Figure 20 Approach to Cost Estimating, Indirect Costs

Arcadis has considered the approach HAL has taken to build, further develop and update their Cost Estimate in accordance with the Preferred Masterplan. This consideration includes:

- HAL's approach to developing the Cost Estimate, process for development and future development, amendments to the Cost Estimate based on progress, assessment of progress and amendments to date; and
- Scope Gap review (Cost Estimate to design and delivery of Preferred Masterplan).

Arcadis has reviewed the certainty of the Cost Estimate that HAL has produced for the Preferred Masterplan. This review includes:

- Quantification of costs: Assessing the amount measured, the basis of the measurements and the extent of work where quantification has not yet been undertaken;
- Pricing and confidence in costs (total, measured, assessed, benchmarks);
- Application of on-costs; and
- Approach to risk.

Arcadis has assessed the observed level of maturity within the Cost Estimate. This has included assessing:

- The robustness of evidence provided by HAL in relation to its Preferred Masterplan and associated cost; and
- The integration of Cost Estimate with other elements of the Preferred Masterplan such as; design, procurement, programme, logistics, external and mitigating factors, project specifics.

5.2 Assessment

5.2.1 Information Reviewed

In order to undertake this review Arcadis has engaged with HAL attending presentations with HAL for each Task Order. These Task Orders reflect the packages of work that the Cost Estimate is broken down into and is likely to be reflective of the structure of the packages to be procured. Following the presentations HAL provided the slide decks. These presentations were:

Report Title	Report Source
[REDACTED]	HAL
[REDACTED]	HAL
[REDACTED]	HAL
[REDACTED]	HAL
[REDACTED]	HAL
[REDACTED]	HAL
[REDACTED]	HAL
[REDACTED]	HAL

Table 18 Presentations and Documentation Provided by HAL

Following these presentations, HAL provided their Cost Estimate; dated [REDACTED], which forms the main document for review under this section of this report. This document contains sections on scope, cost, schedule, risk & inflation. It has appendices containing:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

This document collates all the elements of the Cost Estimate and as such addresses one of the concerns Arcadis previously noted in earlier reports to the CAA.

Task Order	Direct (£m)	Indirect (£m)	Sub-Total (£m)
Enabling works	█	█	█
Earthworks	█	█	█
Utilities	█	█	█
Rivers	█	█	█
Roads	█	█	█
Runways & Taxiways	█	█	█
Landscape	█	█	█
Programme Specifics	█	█	█
Total:			█

Table 19: Direct and Indirect breakdown of Cost Estimates
Source: █

The largest section of the document is Appendix C: Cost Estimate. This contains cost reports at Task Order level, that reflect the different type of works being delivered as part of the programme.

Each Task Order outlines the scope, quantification, pricing, direct costs, indirect costs, assumptions & exclusions and benchmarking. In addition to the main document, Excel files were provided for the Cost Estimate element.

The Task Orders in the Cost Estimate cover all the works necessary for the Preferred Masterplan to be delivered. Arcadis has considered the following for review in **Step 0**:

- Earthworks;
- Utilities;
- Enabling Works;
- Rivers, Roads; and
- Runways & Taxiways and Landscaping.

In addition to the documents compiled by HAL Arcadis has also referred to the Independent Fund Surveyor's (IFS) report dated March 2019.

5.2.2 HAL Approach to Cost Estimate

HAL has set out their approach to the Cost Estimate in the following presentations and documents:

- █
- █
- █

The Cost Estimate is based on the M4 Preferred Masterplan and is further derived from the steps of the Illustrative Masterplan, the 'Kit of Parts', which was developed by the IDT and describes the key elements of scope, and other design & scoping information.

The Cost Estimate is broken down at Task Order level into direct costs and indirect costs.

HAL's structure and approach is set out as follows:

Direct Costs

- Receive design documents, drawings, scope/specifications, assumptions;
- Quantify, measure, enumerate, understand assumptions, raise queries, prepare Cost Estimate. Quantities are based on data provided or confirmed by the HAL's Integrated Design Team (IDT) which have been spot checked by HAL;
- Assumptions & exclusions made at Task Order level;
- Price using either top down benchmarks, bottom up pricing, reach back to business, speak to supply chain. Rates based on facilities benchmarked or elemental/bottom up rates; and
- Finalise Direct Costs within Cost Estimate.

Indirect Costs (added to direct costs)

- Project Specifics – assess costs specific to location/operation of construction;
- Preliminaries – Percentage added to allow for cost of site establishment, contractor management and consumables during construction;
- Overheads & Profit – Percentage added to allow for margin made by Main Contractor;
- Design – Percentage added to allow for Architectural, Structural, Civil, M&E etc. fees;
- Leadership & Logistics – Percentage added to allow for Heathrow Management, Client PM/CM, Programme Logistics;
- Risk/Contingency – Percentage added to the base costs, project specifics, preliminaries, OH&P, L&L and design of each Task Order to allow for project and programme risks, supported by a cost risk analysis with derived probability confidence level; and
- Risk Reserve – Enhanced risk percentage added at Programme level.

Following the production of the Cost Estimate, HAL has then put in place the following assurance measures:

- Level 1 Assurance is defined as carried out by peers. The assurance is specific to the Task Order but includes the activities identified in the

HAL assurance check list this includes computation checks which Arcadis, in their previous reports, stated that HAL needed to address;

- Level 2 Assurance is a review undertaken by a Senior separate individual;
- Level 3 Assurance is Cost, Time and Scope review undertaken by the Development Director, supported by the Head of PMO and Head of Estimating and presented by the Task Order PM's (with Estimator and scheduling support);
- Each estimate is signed separately against the headings of prepared by, assured by, approved by and endorsed by. These signatories are the Estimator, Lead Estimator, Head of Estimating and HAL Project Manager respectively;
- External Review is undertaken by the IFS and a report has been provided – recommendations from the report are being worked through from HAL and the IFS to inform future estimates; and
- HAL held a series of engagement sessions with the IFS presenting the schedule and Cost Estimates.

This level of assurance should eliminate arithmetical errors, this was previously addressed and recommended by Arcadis when undertaking the review of the Purple Book which was HAL's previous iteration of the Cost Estimate.

Arcadis considers the structure, approach and assurance to be reasonable for the stage of the project.

Inflation

All costs within HAL's Cost Estimates are based on Q3 2014 prices, which aligns to the reviews undertaken by the Airports Commission.

In the period between 2014 and the time of this review, there has been a net positive inflation rate for both construction and general price levels in the UK and in London. Therefore, when HAL adjust the estimate to take account of this inflation, the total of HAL's Cost Estimate will increase.

HAL's approach has been to track the costs of a number of indexes against RPI, shown in Figure 21, including:

- Indices produced by the Office for National Statistics:
 - Construction Output Price Index (COPI); and
 - Infrastructure Output Price Index (IOPI) Enabling works.
- The Building Cost Information Service's (BCIS) Tender Price Index (TPI); and
- Indices produced specifically for HAL:
 - Heathrow Price Index (HPI); and
 - Heathrow Cost Index (HCI).

Indices are produced by Professional Consultants from the construction market. Due to the diverse nature of the scope of the Heathrow Expansion Programme, HAL is currently undertaking a review of the scope to identify the most appropriate indices to apply to specific areas of scope. For example, it may be appropriate to apply Building Cost Indices to some aspects of scope and Infrastructure Indices to others.



Arcadis consider this a reasonable approach to analysing and applying inflation, however, would expect HAL to have provided their Cost Estimates in real terms at this stage, making clear their assumptions on the appropriate indices for use by scope area. Furthermore, HAL should consider the impact of inflation on prices throughout the duration of the programme.

5.2.3 Step 0 Review

The overall Cost Estimate and its component parts are approximately made up of:

- Direct costs: [REDACTED]
- Indirect costs: [REDACTED]
 - Project specifics;
 - Preliminaries;
 - Overheads & profit;
 - Design;
 - Leadership & logistics; and
 - Risk.
- Other costs: [REDACTED]
 - Programme specific costs; and
 - Management risk reserve.

Each of these component parts have been reviewed through this report. A detailed review of the individual Task Orders is contained within Appendix C of this report.

The direct costs and indirect costs are attributed to Task Orders in the Cost Estimate. The Task Orders are not fully contained in any of the Steps of the Preferred Masterplan.

However, for the purposes on the **Step 0** review, Arcadis has selected the Task Orders where most of the cost falls within the timescale of **Step 0**. The Programme Specific costs also mainly fall within **Step 0**, so they are also considered in this report.

HAL has reached the total of [REDACTED] for **Step 0** by time-slicing the costs, based on assets that are in operation to deliver an operational runway. The sum of the sections for review will not directly equal the total for **Step 0**. Arcadis has considered as part of this review whether the costs are reasonable and reliable.

Any Cost Estimate can only be based on the scope, design, programme and data that is available at the point in time that the estimate is carried out and any assumptions and exclusions that are made.

The Cost Estimate is integrated with the other elements of the masterplan.

Arcadis has assessed the approach to the Cost Estimate and the inputs and outputs used to develop the estimate and consider these to be reasonable and reliable. However, the outcome is still subject to multiple influences, some of which are

highlighted in the Deliverability & Timing sections of this report.

The planned construction methodology and sequencing have been incorporated into the Cost Estimate. If the plan changes or there are any issues with activities that have interdependencies with others there will be an impact on the Cost Estimate.

The provision for risk in the estimate is designed to build in cost for uncertainties and takes a benchmarked and probabilistic modelled approach to cover risk events. It covers most likely eventualities rather than all eventualities.

5.3 Direct Costs

5.3.1 Introduction

Direct costs are the labour, material, sub-contractor, plant and equipment costs that can be directly attributed to creating an asset. They are typically activities that are quantified and priced for which allowances can be made that are directly related to the project scope.

Within HAL's Cost Estimate the direct works Task Orders considered in the **Step 0** report are:

- Earthworks;
- Utilities;
- Enabling works;
- Rivers;
- Roads;
- Runways & taxiways; and
- Landscaping.

Whilst reviewing the direct costs Arcadis has looked at each Task Order individually and address the items listed in the table below.

Area Assessed	Assessment Undertaken
Scope vs priced activities	Relative to design & Cost Estimate maturity
Key quantities analysis	IDT vs HAL quants check
Key rates analysis	View on rates; benchmarks
Key quantities sensitivity	What could change; impact
Key rates sensitivity	What could change; impact

Table 20 Arcadis' Assessments Undertaken

The review of the individual Task Orders is contained in Appendix C of this report.

5.3.2 Direct Costs Step 0 Overview

Scope vs Priced Activities

In general, Arcadis considers the priced activities are a reasonable reflection of the scope outlined.

The level of detail varies across each of the Task Orders which is reflective of the level of design development and maturity. The level of maturity for individual Task Orders is aligned with DCO and programme requirements.

Earthworks, roads and runways & taxiways have a high level of quantification and benchmarking whereas for utilities and landscaping is considerably lower.

Key Quantification Analysis

Across the Task Orders considered in this report, the overall level of quantified activities, by value of the direct costs, is [REDACTED]

The highest level is [REDACTED] for earthworks and the lowest level is [REDACTED] for utilities, which is reflective of the maturity of design. The levels of quantification are shown in the graph below.



The quantities used in the Task Order Cost Estimates come from several sources:

- Provided by the IDT;
- On screen quantification;
- Drawings;
- Design guidelines; and
- Google Earth.

The earthwork volumes have also been modelled by a leading earthworks contractor. This was stated by HAL at a presentation/review meeting on 6th June and adds to the level of assurance.

The level and methods of quantification are reasonable at this stage, however, could be improved significantly for utilities as the project develops. It would be better to have a higher level of quantification now, but it is not untypical for the level to be low at this stage as utilities are an 'open and see' item.

The reliability is good given that the quantities provided by the IDT have also been spot checked by HAL, Arcadis has not seen evidence of this but HAL has stated in meetings with Arcadis that spot checks have been carried out and the IFS report also states that HAL informed them the quantities have been spot checked. HAL's Level 1 Assurance requirements also includes major quantities checks for accuracy.

Pricing and Key Rates

The Cost Estimate has been priced using a combination of benchmarking, market testing, bottom up elemental estimating, calculated rates, historic rates including Purple Book 0.63, previous Heathrow projects, other UK projects, estimators experience and allowances.

In our earlier reports Arcadis commented on the source of HAL's benchmarking where HAL had only analysed previous Heathrow projects. HAL has now addressed this and incorporated benchmark data from other sources, namely:

- Environment Agency;
- Highways England;
- London Underground;
- Rail sector;
- Water sector;
- Utilities;
- International airports;
- Consultant databases; and
- Heathrow, T5 and T2A.

Arcadis considers that this approach is reflective of industry best practice.

Across the Task Orders considered the overall level of benchmarked, market tested or calculated activities by value of the direct costs is [REDACTED]. The highest level is [REDACTED] for earthworks and runways & taxiways whilst the lowest level is [REDACTED] for enabling works.

Arcadis considers the level is too low for enabling and HAL needs to benchmark, or market test these work activities to increase cost certainty. Currently there is a risk regarding the cost assurance of this Task Order.

The levels of pricing are shown in Figure 23.



Arcadis considers that the extent and coverage of the pricing and benchmarking is generally reasonable at this stage, however It could be improved for enabling works, landscaping, utilities and rivers as more detail becomes available as the design develops.

Cost Significant Items

Across the Task Orders considered, 85% of the cost is in 23% of the items.

The level of quantification for Step 0 increases to 75%, compared to 72% of all the cost.

The largest contributors to the cost significant items are

- Earthworks ([redacted])
- Roads ([redacted])
- Utilities ([redacted]) and ([redacted])
- Runways & taxiways ([redacted])

Earthworks, roads and runways & taxiways all have a high level of quantification and benchmarking so the cost significant items can be considered reasonably and reliably quantified and priced. Utilities is the least developed in both quantification and benchmarking and Arcadis considers that this would benefit the most from an increased level of detail to price against. Arcadis has not had the benefit a presentation/review meeting on Utilities so the level of information available is not fully known.

5.4 Indirect Costs

5.4.1 Project Specifics

Project Specifics are extensions of direct costs that are specific to a location or operation of construction. As a result, they are generally priced on an individual Task Order basis.

HAL set out in their Assessment of Cost Estimate Adjustments that at M4 estimate stage masterplan relevant project specifics will be individually

assessed and priced and this is demonstrated in each of the Task Order Cost Estimates.

Project Specific allocations have been added as a percentage at line item level in the Cost Estimates to allow for costs that have not been included in the direct costs i.e. not covered in the benchmark cost, market cost or allowance. Where they have been added it is generally in groupings of line items within each Task Order.

The allocations may include allowances for airside working, site specific complexities, temporary works, phasing or night-time working assumptions. These are reflective of the programme and HAL’s proposed methods for delivering the works.

The percentages applied appear higher than the overall percentage of direct costs for each Task Order as they are only applied to selected direct cost items.

Table 21 details the percentage for Project Specifics applied to each Task Order, column A. However, for some of the Task Orders this percentage has not been applied to all of the line items forming the base construction cost, therefore column B shows the total value of project specifics included expressed as a percentage of the total base cost.

This table highlights that the project specifics for Task Orders such as Utilities and Rivers may be low.

Task Order	Project Specifics % applied (Col A)	Project Specifics expressed as a % of base cost (Col B)	Description
Earthworks	[redacted]	[redacted]	Night-time working
Utilities	[redacted]	[redacted]	Airside working
Enabling Works	[redacted]	[redacted]	Asbestos removal
Rivers	[redacted]	[redacted]	River diversions
Roads	[redacted]	[redacted]	Complexity, interfaces, modifications, temporary works
Runways/ Taxiways	[redacted]	[redacted]	Night working, phased working, disrupted shifts
Landscaping	[redacted]	[redacted]	Interfaces

Table 21 Summary of Project Specifics included in HAL Cost Estimate
Source: [redacted]

Task Orders

Earthworks – Project specifics have been applied to line items in the Cost Estimate where HAL's programme shows night-time working is required. These are generally cut & fill activities where it has been assumed that [REDACTED] of work will be done at night.

Utilities – Allowance applied to activities that are within the current airport boundary. Most of the utilities work is outside the current boundary and as such project specific items are not applicable.

Enabling – Allowance applied to items relating to building and properties demolition for asbestos removal which is the only area applicable to project specifics.

Rivers – Allowance applied to river diversions. This includes the requirement for temporary culverts under the A4, the requirement for temporary bridges at J14 & A4 and EA attendance during construction.

Roads – Multiple allowances have been applied at different locations to take account of airside working, traffic management, temporary works during construction and the complexity of works due to interfaces and modifications to existing road. The percentages that have been applied against line items in the Cost Estimate include:

- M25 alignment [REDACTED]
- Junction 14, [REDACTED]
- J14A [REDACTED]
- J14 Running Lanes [REDACTED]
- A4 Western [REDACTED]
- Emirates Junction [REDACTED]
- Western Perimeter Road [REDACTED]
- Northern Perimeter Road [REDACTED]
- Beacon Road Roundabout [REDACTED]
- Southern Access Tunnel [REDACTED] and
- Eastchurch Road & Southern Road [REDACTED]

Runways & Taxiways – Several separate allowances have been applied to active runway and taxiway safety zones. These include labour premiums for night working, allowances for phasing to align with runway alterations & operational restrictions and disrupted shifts. Percentages that have been applied include:

- Existing runway [REDACTED]
- Decommissioning [REDACTED]
- Taxiways 23.6% to [REDACTED]
- Relocation [REDACTED] and
- De-icing pads [REDACTED]

Landscaping – The airside working allowance is applied to cover possible interface of works required for the NE noise mitigation bund with other works.

5.4.2 Preliminaries

Preliminaries are added to the individual Task Order's direct costs and project specific costs to cover the cost required to deliver the works but not included in the rates, such as:

- Contractor's Project Management and Engineering team;
- Site accommodation;
- Scaffolding;
- Hoarding;
- Temporary services;
- Temporary works;
- Office equipment;
- Safety & security & environmental protection;
- Bonds, guarantees, warranties & insurances;
- Plant & equipment; and
- Maintenance of site records, completion and post-completion requirements.

Within HAL's Cost Estimate preliminaries have been applied at [REDACTED] for civils works and [REDACTED] for building works. Previously in the Purple Book HAL had applied a wider range of percentages with the majority of the works having between [REDACTED] applied to the equivalent **Step 0** Task Orders.

HAL's assessment of Cost Estimate adjustment states that at M4 stage there will be a review of preliminaries at an asset by asset level informed by clarity of project specifics. This is not how HAL has applied preliminaries within the Cost Estimate. Arcadis considers that this needs to be developed to assure the costs. This will be affected by the procurement strategy and how the works packages are structured. Arcadis consider that a bottom up estimate of the preliminaries needs to be undertaken for the next iteration of the Cost Estimate.

HAL has undertaken benchmark studies to review the percentages applied. They have reviewed 50 projects at Heathrow from the Q5 and Q6 programmes. The Q5 works at Heathrow were large scale projects with similar types of facilities to the Heathrow Expansion Programme. HAL has also reviewed 16 projects from rail, utilities, property sectors and other aviation projects.

The percentages applied in the M4 estimate are consistent with these benchmarks.

Task Orders

The earthworks, utilities, rivers, runways & taxiways and landscaping Task Orders all have [REDACTED] preliminaries applied to all Cost Estimate line items, in line with the [REDACTED] provision for civils works.

Enabling Works has [REDACTED] preliminaries applied to all items except for ground investigations and surveys where the works are in progress, so no further provision is required. Consolidation Centre's included in the estimate are allowances that are

deemed to already include preliminaries, so no further provision has been added. The overall percentage for preliminaries for Enabling Works is therefore expressed as [REDACTED]

Roads has [REDACTED] preliminaries applied to all items except for the commuted sum relating to Highways England works where the preliminaries are deemed to be already included. The overall percentage for Roads is therefore expressed as [REDACTED]

Arcadis considers the current percentage allowances to be reasonable.

5.4.3 Overheads & Profit

Overheads & Profit are added to the direct costs, project specific costs and preliminaries. Overheads & Profit reflect the operating expenses (or head office administrative costs) of running the main contractor companies that will implement the projects and the profit margin to be made by the main contractors after accounting for all costs and expenses.

Overheads & profit have been applied [REDACTED] in the HAL Cost Estimate.

HAL has undertaken benchmark studies to review the percentage applied. HAL has reviewed at least 49 projects at Heathrow from Q5 and Q6. HAL has also reviewed 37 projects from other sectors. The projects from rail, commercial, infrastructure, schools, facilities management & retail sectors. Whilst Arcadis has seen the results of this review we have not interrogated these results.

The percentage applied in the Cost Estimate falls in line with the average of all the benchmarks.

The benchmark for the Q5 works and the other sectors exceed the average. As the Q5 works is comparable with the Heathrow Expansion Programme it could be considered appropriate to apply a higher percentage for overheads & profit i.e. [REDACTED]. However, the Q6 works are more recent and are lower than the average, which could be indicative of the Heathrow market trend.

Arcadis considers that as Overheads & Profit are at company level rather than site level it would be more pragmatic to use a blend of the Q5 and Q6 data.

Previously HAL had generally applied a percentage of [REDACTED] however they did apply [REDACTED] to demolitions and earthworks.

Task Orders

The earthworks, utilities, rivers, runways & taxiways and landscaping Task Orders all have [REDACTED] overheads & profit applied to all Cost Estimate line items.

Enabling Works [REDACTED] overheads & profit applied to all items except for ground investigations and surveys where the works are in progress, so no further provision is required. Consolidation Centre's included in the estimate are allowances that are deemed to already include overheads & profit, so no further provision has been added. The overall

percentage for overheads & profit for Enabling Works is therefore expressed as [REDACTED]

Roads has [REDACTED] overheads & profit applied to all items except for the commuted sum relating to Highways England works where the overheads & profit is deemed to be already included. The overall percentage for Roads is therefore expressed as 7.2%.

5.4.4 Leadership & Logistics

Leadership and Logistics costs cover HAL's programme/project delivery management and programme wide logistics and overhead requirements.

HAL's definition of Leadership costs include:

- Central charges for accommodation;
- Utilities;
- Control posts;
- Staff costs for development;
- IT;
- Central resource;
- Insurance charges; and
- Commercial & control consultancy – including project management, cost management, project controls & risk management; delivery integration services – integration services including early construction/build advice & scheduling; programme design integration services – coordinating integrated schedule across the programme and commercial audit – across the programme.

Logistics costs include:

- Site security;
- Site accommodation for operatives;
- Waste management;
- Car parking and bussing;
- Catering; and
- Delivery strategy & escorting and traffic management.

HAL provides these services to contractors instead of the contractors providing them, with the costs coming through the preliminaries. This gives HAL the opportunity to benefit from economies of scale as well as guaranteeing consistency and compliance with security requirements.

Leadership & Logistics costs are added to the direct costs, project specific, preliminaries and overheads & profit at [REDACTED]. HAL has based this percentage on the Q6 model which was derived from Q5. The approximate split in the Q6 model is [REDACTED] leadership and [REDACTED] logistics.

The Assessment of Cost Estimate Adjustments states that at M4 stage there will be a review of Leadership & Logistics and improved understanding of Preliminaries to ensure no overlap in costs.

Arcadis has not seen any evidence that this has been undertaken and would expect to see this when bottom estimates for preliminaries and Leadership and Logistics are undertaken. We would expect to see this at M5.

A review of the Leaderships & Logistics costs has not been incorporated into the M4 estimate but HAL plan to carry out a review and test the model for the M5 estimate. It would be ideal for a review to be incorporated in the current Cost Estimate, but it is still a reasonable allowance and it should not adversely affect the outcome.

The IFS conducted a benchmarking study for Leadership & Logistics in Q6 and found it to be comparable with other programmes.

Task Orders

The earthworks, utilities, rivers, runways & taxiways and landscaping Task Orders all have [redacted] leadership & logistics applied to all Cost Estimate line items.

Enabling Works has [redacted] leadership & logistics applied to all items except for ground investigations and surveys where the works are in progress, so no further provision is required. Consolidation Centre's included in the estimate are allowances that are deemed to already include leadership & logistics, so no further provision has been added. The overall percentage for leadership & logistics for Enabling Works is therefore expressed as [redacted]

5.4.5 Design

Design costs have been accounted for within the estimate and include for architectural, structural, civil engineering, mechanical & electrical design and any other specialist design and consultancy fees required to deliver the HEP programme.

Design costs have been applied [redacted] in the Cost Estimate, this percentage has been applied to the direct costs, project specific costs, preliminaries and overheads & profit. The application of this percentage is consistent with industry standard best practice as recommended in the NRM2 which sets out guidelines for production of estimates.

HAL's Assessment of Cost Estimate Adjustments states that at M4 stage the design costs will be based on benchmarked percentages in accordance with the complexity of the works for all assets.

HAL has undertaken benchmark studies to review the percentage applied. HAL has reviewed 36 projects at Heathrow from Q5 and Q6 programmes. They have also reviewed 503 projects from other sectors.

The Q5 works at Heathrow is considered comparable with the HEP as it consisted of large high value and high-profile buildings such as T2A. The Q6 works were smaller scale projects, split between new build and refurbishment works. The projects from other sectors include water, rail, middle eastern airports, laboratory building and office building. The other sectors may not be directly

applicable, but they provide a useful sample for reference.

The percentage applied in the M4 estimate falls in between the Q5 benchmark and other sectors/Q6 benchmarks. This is representative of the location and type of works being carried out and takes account of all the benchmarks.

Arcadis consider that this might be slightly low as there will be other consultancy services associated with the DCO process and land acquisition which would probably not have been required in the Q5 or Q6 programmes.

Task Orders

The earthworks, utilities, rivers, runways & taxiways and landscaping Task Orders all have [redacted] design applied to all Cost Estimate line items.

Enabling Works has [redacted] design applied to all items except for ground investigations and surveys where the works are in progress, so no further provision is required. Consolidation Centre's included in the estimate are allowances that are deemed to already include design, so no further provision has been added. The overall percentage for design for Enabling Works is therefore expressed [redacted]

Roads has [redacted] design applied to all items except for the commuted sum relating to Highways England works where the design is deemed to be already included. The overall percentage for Roads is therefore expressed as [redacted]. Within this Task Order these are an allowance so Arcadis are unable to verify this.

5.4.6 Risk

Risk is added to the direct costs, project specific costs, prelims, overheads & profit, design and leadership & logistics to cover the cost of unforeseen circumstances or uncertainties in the project. It covers the cost of events that might happen but are not certain to happen.

Risk contingency has been applied at [redacted] to all Cost Estimate line items which is the same as the M3c estimate. This includes [redacted] for costs, uplifted by [redacted] for scheduling/finance.

Overall the M4 Cost Estimate includes [redacted] risk, as a risk reserve has been added. Between M3c and M4 significant scope re-assessment took place reducing the programmatic flexibility in execution, so further risk contingency was required which has been defined as Risk Reserve.

Risk Reserve has been added at a programme level and is therefore not directly seen in the Task Orders within the Cost Estimate. It is calculated by replacing the [redacted] provision at line item level with [redacted] for off airport infrastructure, [redacted] for on airport infrastructure and [redacted] for property.

The IFS M3c report quotes that the risk range applicable to this stage would be [redacted]. As the risk is now [redacted] this meets the IFS recommendation and is in line with industry benchmarks.

The Assessment of Cost Estimate Adjustments states that at M4 stage there will be a programme specific Quantitative Schedule Risk Analysis (QSRA) / Quantitative Cost Risk Analysis (QCRA).

HAL undertook a Cost Risk Analysis (CRA) to provide a bottom up view of whether the applied contingencies percentages were appropriate for this stage. This did not directly inform the contingencies applied in the estimate, but it does provide a countermeasure.

CRA Basis

The risk was modelled against the 142mppa scheme to Step 8 (inclusive of Step 0 and Step 3).

The risks were evaluated collaboratively by risk managers, project managers and commercial managers.

There were [redacted] risks and opportunities considered. Of these [redacted] risks & [redacted] opportunities were modelled discretely in the cost risk model. The risks and opportunities included in the CRA were derived from the programme level risk register, red risks from the task orders and risks and opportunities identified during interviews with the task order project managers and costs estimators i.e. programme wide employer risk and categories of risk by contract/area.

Some example risk drivers, applicable to Step 0 include:

- Property market forces;
- Southern Road tunnel construction;
- Impacts on airfield operations;
- Insufficient time given for businesses to relocate could result in extinguishment;
- Acceleration of compulsory property purchases;
- Increased Wider Property Offer Zone scope;
- 3rd party service diversions for utilities works;
- Ground slab required for M25 tunnel; and
- Reuse topsoil/aggregates on site.

Uncertainty ranges were derived from benchmarks or programme experts and used on direct costs at Cost Breakdown Structure (CBS) level 2 (approximately [redacted] items) for rates, quantities and design maturity. Going forward, design maturity will not be used when scheme progresses to M5 as the scheme will be more developed.

The risk contingency and risk reserve included in the M4 estimate were replaced by quantified uncertainties, risks and opportunities and a risk analysis was carried out using Monte Carlo analysis in MS Excel using @Risk to model the risks.

The CRA shows that [redacted] level of confidence aligns with the [redacted] risk provision in the M4 estimate. This means a [redacted] probability of completing the programme within the total Cost Estimate.

Historically, typical or standard probabilities used in programmes and projects are P50 and P80. [redacted] is a reasonable mid-point of these probabilities. If a

higher level of confidence is required, the risk contingency in the Cost Estimate would need to be increased.

At the M5 stage HAL is looking to increase the probability rating through improved development and knowledge of design, scope, quantities and/or rates without reducing the risk and contingency allowances.

Optimism Bias has not been included in the Cost Risk Analysis. If it had been the risk provision and overall Cost Estimate would increase, so the additional assurance it would give would come at a premium.

Stage Observations

The risk analysis was carried out for the whole programme and is not split between stages.

However, it can be derived from the M4 P50 contribution to total cost above base cost that the top 3 category contributors are Terminals, Piers & Satellites (Step 3), Property (Step 0) and Baggage (Step 8).

It is also possible to derive that just under half of the cost by category can be attributed to Step 0 and that there is a high number of low to medium cost categories in Step 0.

From the P90 percentage risk by CBS scope it can be derived that categories in Step 0 are typically lower than the overall average.

This could be in part due to the design for Step 0 categories being more developed than the later stages and more cost being in the base cost.

5.5 Programme Specific Costs

Introduction

Programme specifics capture the programme level costs that facilitate the delivery of the Heathrow Expansion Programme that can't be directly attributed to the Task Orders.

The scope for programme specifics includes property acquisition, noise insulation, development consent order (DCO) CAT B costs, T5+, T1 baggage prolongation and other operational and community spends.

HAL has engaged with specialist property consultants and HAL finance department to inform their preparation of the Cost Estimate.

Scope vs Priced Activities

The priced activities align with the scope summarised above and detailed in the Cost Estimate.

The Cost Estimate contains lump sums that are either calculated separately elsewhere or are allowances retained from Purple Book 0.63. Items calculated separately include the property cost forecasted and items within the Management Business Plan 2019.

Within the Programme Specific Costs HAL have included a section for Community mitigation scope which includes Section 106 payments and noise mitigation. Allowance for Community Infrastructure Levy (CIL) is also included. An assumption has been made that any additional community requirements will be funded from CIL and Section 106 payments. HAL have not made any specific inclusion or reference to an annual Communities Compensation Fund which was referenced as part of the National Policy Statement.

Key Quantities

There are no quantities provided in the Cost Estimate to review.

However, HAL states that there is quantification in the Management Business Plan (MBP)19 provided by HAL and the property costs provided by the specialist property consultants.

[REDACTED]

It should be noted that HAL has engaged specialist professional property consultants to develop this element of the cost plan. Due to the sensitivity of this data Arcadis has not had sight of the build up to this element of the cost plan and are therefore unable to comment and conclude on HAL's approach to quantification of this element. However, the fact that specialist consultants have been engaged infers that HAL's approach is reasonable as these consultants should have access to reliable sources of data.

Key Rates

There are no rates provided in the Cost Estimate to review due to the sensitivity of the data.

However, HAL states that [REDACTED] of the Cost Estimate has been market tested. This is mainly associated with property costs, noise insulation and DCO costs.

The remaining [REDACTED] of the Cost Estimate is based on allowances associated with T5+, T1 baggage prolongation and allowances retained from Purple Book 0.63.

[REDACTED] market testing would lead to good reliability in the Cost Estimate. Property costs are entirely dependent on the market so we can verify that the approach is reliable but can't verify the detail as we don't have the rates to review.

Indirect Costs

Indirect costs have been considered on a line by line basis and applied where applicable, which is reasonable for this level of Cost Estimate.

Project specific costs have not been applied to any of the line items.

Preliminaries, OH&P, Design have only been applied to building works.

Leadership & Logistics have been applied to buildings, resource efficiency and airfield vehicles.

Risk has been applied to all items except noise insulation, T5+ and T1 baggage prolongation.

Quantity/Rate Sensitivity

It is not possible to comment on individual quantities and rates as the detail is not included in the Cost Estimate.

The fact that cost forecasted data from specialist property consultants and HAL has been utilised by HAL increases confidence and should reduce sensitivity. Clearly any change in extent of provision or changes in market rates will impact the overall cost.

Items relating to programme specifics are included in the Cost Risk Analysis and risk allowance has been included in the indirect costs. There is not a direct correlation between the two but there is provision.

5.6 Summary

It is Arcadis' opinion that on balance, HAL's Cost Estimate for **Step 0** is reasonably and reliably costed.

HAL has taken on board Arcadis's comments, from earlier reports to the CAA reviewing the Purple Book, regarding the structure of the Cost Estimate and produced a comprehensive document capturing all the relevant Cost Estimate data in one singular document.

[REDACTED]

The above document also includes the detailed estimates for each individual Task Order. The build up to the estimate for each Task Order takes cognisance of the data provided by the IDT, HAL's programme and HAL's proposed methods of execution.

The structure of the Cost Estimate reflects industry best practice standards and forms a good baseline on which to move forward. This can now form the basis on which to monitor and implement a change control process.

The structure of the Cost Estimates for each Task Order provides a standard platform for approaching the estimate and reflects best practice with how HAL has approached the quantification and pricing of direct and indirect costs.

The level of quantification within the detailed estimates reflects the level of detail provided by the IDT. The extent of quantification has increased since the Purple Book and the reliance on

allowances reduced which leads to an increased level of certainty.

However, there are some Task Orders where the level of quantification is lower than we would expect at this stage. The most significant one being the utilities. This is partly reflective of the nature of the works and the reluctance for utility companies to engage on developments at such an early stage of the programme.

Arcadis considers that this could be progressed further and that this currently poses a risk to the Cost Estimate. There is also potential for this to impact the programme which would put further pressure on the Cost Estimate.

The level of benchmarked rates for **Step 0** accounts for an average of [REDACTED] which is a significant increase from Arcadis' review of the Purple Book, albeit that one would expect to see a higher level of benchmarking for **Step 0** as these works are the initial works in the programme and the design is more progressed for these Task Orders.

When analysing the Purple Book, the resultant [REDACTED] is the benchmarked percentage for the HEP as a whole. As previously recommended by Arcadis HAL has drawn on benchmark data from other large programmes of work in other sectors and brought this into their analysis with their own internal data.

Arcadis considers the [REDACTED] to be a reasonable percentage for the current stage however there are

two Task Orders, in particular where we would have expected the benchmarking to be further progressed, namely utilities and for enabling works, in particular the demolitions, hence these add a level of uncertainty to the Cost Estimate. These two elements account for [REDACTED] of the Step 0 total.

With regards to HAL's approach to indirect costs, this appears reasonable, however we would expect to see the assessments for preliminaries and project specifics moving away from benchmarked percentages and towards bottom up estimates. HAL has started to address this within the Project Specifics by reflecting specific items identified within the delivery reports.

HAL has applied a percentage for risk at Task Order level and at management reserve level, they have also undertaken a QCRA to verify this. Whilst this a reasonable iterative approach Arcadis would expect to see risk applied at TO level based on a fully managed risk structure with a further risk reserve being held at management level reflecting the outputs of a fully managed risk approach.

Whilst HAL has reflected schedule risks in their risk models Arcadis believes that due to the level of control HAL has on some of these elements, as discussed in Sections 3 and 4 of this report, there remains further risk on programme which will have an inherent risk on the Cost Estimate.

6 INTEREST OF CONSUMERS

Although not explicitly considered as part of the Step 0 report, Arcadis has continued to see examples where the interests of consumers are being tested through the development of the Preferred Masterplan.

This view has mainly been formed through and building upon a previous Arcadis report submitted in December 2018, *'An initial review of consumer interests in the development of the HAL Masterplan'*.

Arcadis's key findings are:

- HAL is seeking to ensure that the existing airport operation can function whilst this phase of construction is taking place;
- HAL is seeking to increase the flexibility of the airport and ensure there is sufficient resilience available to cope with operational challenges;
- HAL is seeking to minimise disruption for both consumers and the local community; and
- HAL has spent a significant amount of effort to develop its delivery programme in a logical sequence to reduce the impact the works will have on both these groups.

'Consumers' are defined as both passengers and cargo operators of the airport for the purpose of this report.

To review HAL's Preferred Masterplan with regards to the interest of consumers Arcadis has considered how HAL has acquired consumer insight and how well HAL has incorporated consumer insight into their masterplan development process.

Step 0 does not necessarily deliver infrastructure that consumers will directly identify with as assets as much of the work is enabling and 'making the space' for the construction of the 3rd Runway.

In Step 0, there are no direct infrastructure improvements being proposed to support cargo operations. However, there is evidence that HAL is

actively engaging with the cargo community to develop improvements that will be delivered in future steps of the masterplan.

The majority of infrastructure improvements will benefit the passenger consumers at Heathrow. The increase in runway capacity and on-going capacity improvements should contribute to delivering a scheme that is in the interest of consumers.

Our discussions with HAL have indicated that the interest of consumers is now embedded into their masterplanning thought processes and HAL can point to examples where the interests of consumers has informed the evaluation process and option appraisal choices for a number of different components of the Scheme.

APPENDIX A Layouts

The Airport layouts images below set out the main infrastructure changes that will be in place through the three Steps that Arcadis has been asked to review the Preferred Masterplan. The HEP construction phasing images set out the time slices in 6 monthly increments from DCO through to 2026.

AIRPORT LAYOUT AT STEP 0



AIRPORT LAYOUT AT STEP 3





Thanet District Council

Local Plan

Adopted July 2020



Foreword

This Local Plan has taken a long time to produce under quite difficult circumstances, but I am pleased that we have now been able to adopt a new Local Plan for the district. I would like to thank all those council officers, elected councillors, members of the public and stakeholders who have contributed along the way.

Our new Local Plan seeks to meet our housing needs, including affordable housing, but also to support the Thanet economy, including tourism and cultural industries, and ensure the provision of supporting services and infrastructure, such as schools, roads, health facilities and open space.

The Plan also aims to protect the best of our natural environment, and enhance biodiversity across the district - including the international wildlife sites at the coast - and our historic environment. Thanet has approximately 2,000 Listed Buildings and 27 Conservation Areas, as well as other local heritage assets. The council has declared a Climate Emergency, and the Plan recognises the impact of climate change on all of us.

Having an adopted Plan means that the council now has more control over the location, type and quality of development that happens in the District. Just as importantly, it will support the council's wider vision for the area over the next few years.

Of course, this is not the end of the story, and the council will soon need to embark on a review of the Plan. The year 2020 is now likely to be remembered as one of significant change, which we will need to take into account in that review. However, the aim remains the same - to meet the housing and other needs of local people, to protect the environment for the long term, and to address the impact of climate change. The adoption of this Plan marks a significant step forward in that endeavour.

Cllr Rick Everitt, Leader

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Strategy

What is the Local Plan?

- 1 The Local Plan is a key Council document that is required to guide and deliver the Council's plans and aspirations for growth. It is essential to shaping change in a form which is desired by the Council and Thanet's communities, and for the delivery of development projects and infrastructure.
- 2 The Plan must be prepared with the objective of contributing to the achievement of sustainable development, and be in accordance with national planning policy.
- 3 The Plan should be aspirational but also realistic and should provide sufficient flexibility to adapt to rapid change. The Plan must be based upon up-to-date, sound evidence. We have to be able to demonstrate that the Plan will be deliverable and therefore the proposals included within it must be viable and realistic. The Plan will be delivered by a number of partners, including the private sector.
- 4 The Plan sets out policies and proposals that will be used to guide decisions and investment on development and regeneration over the period to 2031. It sets out how and where the homes, jobs, community facilities, shops and infrastructure will be delivered and the types of places and environments we want to create. It also identifies land to be protected from development, such as open space. Once adopted, the Plan will form the statutory planning framework for determining planning applications and will replace the "saved" policies from the Thanet Local Plan 2006. The Cliftonville Development Plan Document (2010) still remains in force.

Why is the Council producing a Local Plan?

- The Council is required by Government to produce a Local Plan.
- The Council also wants to set out in advance how it wishes to see the district develop. This provides certainty to developers, businesses, the local community and others.
- The Plan provides a framework to help deliver the Council's Economic Growth Strategy
- The Plan will ensure that decisions on planning applications are made in accordance with local policy. Without a Plan the Council has less control over development in the area.

How has the Council decided what the Plan should contain?

- The National Planning Policy Framework and the National Planning Practice Guidance set out what the government expects local plans to cover.
- We have considered the specific issues and opportunities that are relevant to Thanet.
- We have considered key elements of the evidence base, and carried out key work in relation to Local Plan viability, Sustainability Appraisal and infrastructure delivery
- We carried out consultation on the Preferred Options for the Plan, and further Proposed Revisions to that Plan, and have considered the comments received.
- We have assessed the merits of the options in achieving sustainable development, including through the Sustainability Appraisal.
- We have and will continue to co-operate with our neighbouring authorities on cross-boundary strategic issues.

5 The options and assessment of their merits are documented in the Issues and Options Consultation Document, the Sustainability Appraisal and in Examination statements, which can be accessed on the Planning Policy pages of the Council's website.

How is the Plan structured?

6 The Plan is set out in three main sections.

Section 1 provides the introduction and sets the context for the Plan. It sets out the vision for Thanet that the Plan is seeking to achieve, and introduces the overall strategy behind the Plan, as well as setting out the strategic priorities and objectives which need to be achieved in order to deliver the vision and strategy of the Plan.

7 Section 2 sets out the strategic issues and policies of the Plan. These are the overarching policies which underpin the Plan's strategy. These include the strategies for delivering sustainable development and the overall levels of development and growth which are needed in Thanet, and the strategies for the economy, town centres, housing, environment, communities and transport, including strategic housing and employment site proposals.

8 Section 3 sets out district wide development management policies. These are detailed and wide ranging policies which may be relevant to all new development proposals in Thanet. The section is set out in topic areas, and covers issues including climate change, design and heritage.

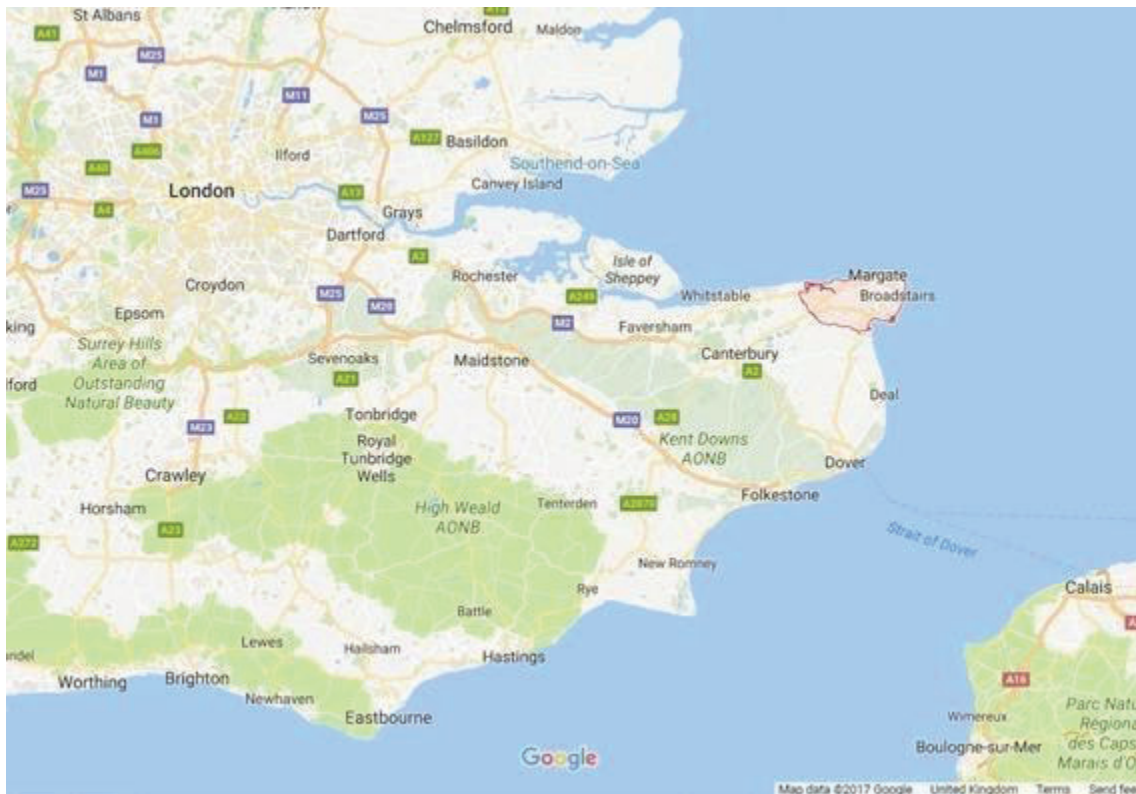
Thanet's Profile and Key Issues

9 In order to inform the Plan for the future, we must have a good understanding of the characteristics of Thanet today, and the opportunities and issues that it presents. These are set out in the evidence and background papers supporting this document.

10 The Local Plan seeks to maximize the opportunities available and deliver policy support to respond to the issues facing the area.

11 Thanet is located in East Kent, in close proximity to continental Europe. It has three main coastal towns of Margate, Ramsgate and Broadstairs. The built up area is densely populated and forms an almost continuous urban belt around the north east coast. This is separated by areas of countryside between the towns and providing relief in the built area. There are also attractive coastal and rural villages.

Map 1 - Map of Thanet



12 The district has an area of about 40 square miles (103,300ha) and a resident population of about 140,000. About 30% of the district is urban with 95% of the population living in the main urban area around the coast. Thanet is the fourth most populated district in Kent, and has the second highest population density. Thanet is a popular area for retired people to live, and has the highest number of over 65 year olds in the county whilst having a lower proportion of 16-64 year olds than the county average.

13 Thanet is a unique and vibrant coastal area, with an attractive environment and a number of unique features. There are 20 miles of coastline with attractive chalk cliffs and beautiful sandy beaches and bays, many of which have been awarded European Blue Flag status. Much of the coast is also recognised for its internationally important habitats, including coastal chalk and significant populations of coastal birds. This is reflected in the coast's designation under international and national legislation, including Sites of Special Scientific Interest, Special Protection Areas, Special Areas of Conservation, and a Marine Conservation Zone. These areas are protected by legislation to prevent harm to them from development change and other human activity. There are also areas of Thanet which have a functional relationship with the Special Protection Areas, and the Council recognises the importance of protecting that relationship in the longer term.

14 Thanet is also rich in history. This is recognised today in the identification of around 2,000 listed buildings and 27 Conservation Areas. Its historic landscape contains many archaeological sites dating back to pre-historic times.

15 Outside of the urban area, much of the land is high quality and intensively farmed agricultural land.

16 Thanet has some areas which are at risk from flooding. These are confined to the low lying areas of the countryside to the south west of the district, and along the very edges of the coast, affecting small areas of Margate and Ramsgate. It accounts for approximately 11% of the district area.

17 In 2005, a new town centre was established at Westwood. This brought many retailers not previously represented in Thanet, and in turn has significantly reduced the leakage of retail spend from the district. The centre continues to attract investment, with further development planned over the next few years. The area does however suffer from traffic congestion and accessibility around the centre, particularly on foot, is not convenient.

18 The district benefits from excellent road access to and from the M25 and London via the M2 and the A299 Thanet Way. Access to Dover and beyond is via the A256, with the East Kent Access Road providing dual carriageway for the majority of the route. Access to the nearby cathedral city of Canterbury and to Ashford is via the single carriageway A28. Thanet has regular rail links to London, Canterbury, Dover and Ashford. Since 2009 High Speed domestic rail services operate from Thanet to London St Pancras using HS1.

19 Ramsgate is a cross channel port with capacity for passenger and freight services to mainland Europe. It has also recently established itself as a base for servicing offshore wind farms.

20 The tourism sector has grown substantially over the last few years, compared to other parts of the South East and England, and there has also been significant growth in the creative sector. However, Thanet also has some economic challenges to deal with, and the Council's Economic Growth Strategy is one step in responding to those challenges. For example, Thanet's business parks have taken time to develop, and there remains a significant amount of undeveloped employment land. The Council is part of a partnership with KCC (East Kent Opportunities), seeking to accelerate the delivery of key sites. More recently, that area has seen growth in the number of start-ups, particularly in the cultural sector.

21 Nationally, "High Streets" face a range of challenges, particularly with vacancy rates. However, following a completed Townscape Heritage Initiative and alongside the opening of the Turner Contemporary Gallery in April 2011, Margate's Old Town and lower High Street have seen a significant number of new businesses opening.

22 The district has some significant difficulties. Average skills levels in the district are lower than the rest of Kent and England, with unemployment levels higher than the Kent average (KCC Business Intelligence publications). Wage levels are also lower than the national and regional average. However, the Council and a range of other organisations have a clear strategy to encourage both local business growth and inward investment and are working with industry partners to achieve this.

23 The overall quality of life of Thanet's residents is varied. Some residents enjoy a very high quality of life, including living in high quality residential environments. However, Thanet also has a number of highly deprived wards with many people with support needs. These areas are also characterised by pockets of urban decline and poor housing stock. A key challenge is to ensure that everyone has the same opportunities by reducing inequalities in the area and improving

quality of life for all. The Council and relevant other organisations are working to deal with these issues through different initiatives.

The Vision: the Council's aspirations for 2031

- Thanet has realised its growth potential as a location for business investment. Making the most of its close proximity to Europe and easy access to London, Thanet plays an important role in East Kent.
- It has benefited from sustained investment in skills, employment and infrastructure. Thanet successfully retains and attracts skilled people to live and work in the area.
- Health and educational attainment in Thanet are comparable with the county average, driven by good quality education and training.
- Thanet has a sustainable, balanced economy with a strong focus on advanced manufacturing, emerging technologies, tourism, culture and leisure, supported by the three thriving coastal towns.
- It has a well-established year round visitor economy, a destination of choice, having high quality accommodation and inviting public spaces. Thanet capitalises on its natural assets, the coastline and beaches, the heritage and culture, and these assets are protected and positively managed for the longer term.
- The coastal town centres have re-defined their roles, maximising their unique characteristics, with diverse commercial offers and independent places to shop, eat and stay. New and restored housing has been regenerated next to boutique hotels and art studios.
- Margate is a contemporary seaside resort based on its unique assets of a sandy beach, harbour and rich townscape. The creative industry, niche retail and educational sectors have diversified the economic heart of the town.
- Ramsgate's maritime heritage, the commercial function of the port, supporting renewable technology, its Royal Harbour, marina, beach and attractive waterfront, provide a vibrant mix of town centre uses, with a strong visitor economy and café culture.
- Broadstairs is a charming and attractive town and a popular location for visitors and residents, who enjoy the flavour of its historic associations, range of small shops and restaurants, beach and picturesque waterfront.
- Westwood has strengthened its position as a retail destination, as well as being firmly established as a town centre, and has developed as an integrated community, with housing, business, leisure, sport and recreation, and education. This has been supported by investment in transport infrastructure creating a safe and attractive pedestrian environment at its centre.
- High quality new homes, as well as the regeneration of Thanet's high quality historic housing, provide a choice of homes for Thanet's residents and for those who have invested in, or newly arrived in the area.
- Cliftonville has an economically independent, settled and mixed community structure, with the pride and confidence to invest in quality development and care for its local environment.
- The villages retain their separate physical identity, historic character and have vibrant communities with local facilities and services.
- The open countryside between the towns and villages remains essentially undeveloped, with a varied landscape, tranquility and distinctive views. Opportunity has been taken to increase public access and there is a diverse agricultural economic base, including green tourism.

The Local Plan Strategy

24 The following sections set out the key drivers for this Local Plan strategy, explains the overarching principles of the strategy and context of national planning policy, and the need to deliver sustainable development.

Sustainable Development

25 The Local Plan is prepared by Thanet District Council under the national planning policy system, whose central principle is to achieve “sustainable development”. This may be defined as “development that meets the need of the present without compromising the ability of future generations to meet their own needs”.

26 The National Planning Policy Framework (NPPF) sets out the Government’s view of what sustainable development in England means in practice for the planning system. The NPPF identifies the three dimensions of sustainable development; economic, social and environmental; giving rise to the need for the planning system to perform a number of roles:

an economic role – *contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;*

a social role – *supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community’s needs and support its health, social and cultural well-being; and*

an environmental role – *contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.’*

27 In pursuing sustainable development, this Plan positively seeks opportunities to meet the needs of the area, and economic, social and environmental gains are sought jointly and simultaneously. The Plan as a whole sets out what sustainable development means for Thanet.

28 A bold and positive strategy is needed in order to achieve the Council’s vision for Thanet. Realising the economic aspirations for the district and improving the quality of life for all Thanet’s residents will require investment in new job creation, new quality homes, open space and infrastructure, as well as maintaining and enhancing Thanet’s existing high quality built and natural environment.

29 Although Thanet has historically experienced social and economic problems, the Council has high aspirations for growth as set out in the Council’s Corporate Plan and Economic Growth Strategy. The Local Plan looks to support this by identifying, facilitating and helping to deliver the development required. The NPPF requires the Council to plan positively for economic growth and boost housing supply, which is what this Plan seeks to achieve.

30 Preparing this draft Local Plan has involved some complex decisions including the selection of key sites to accommodate new development.

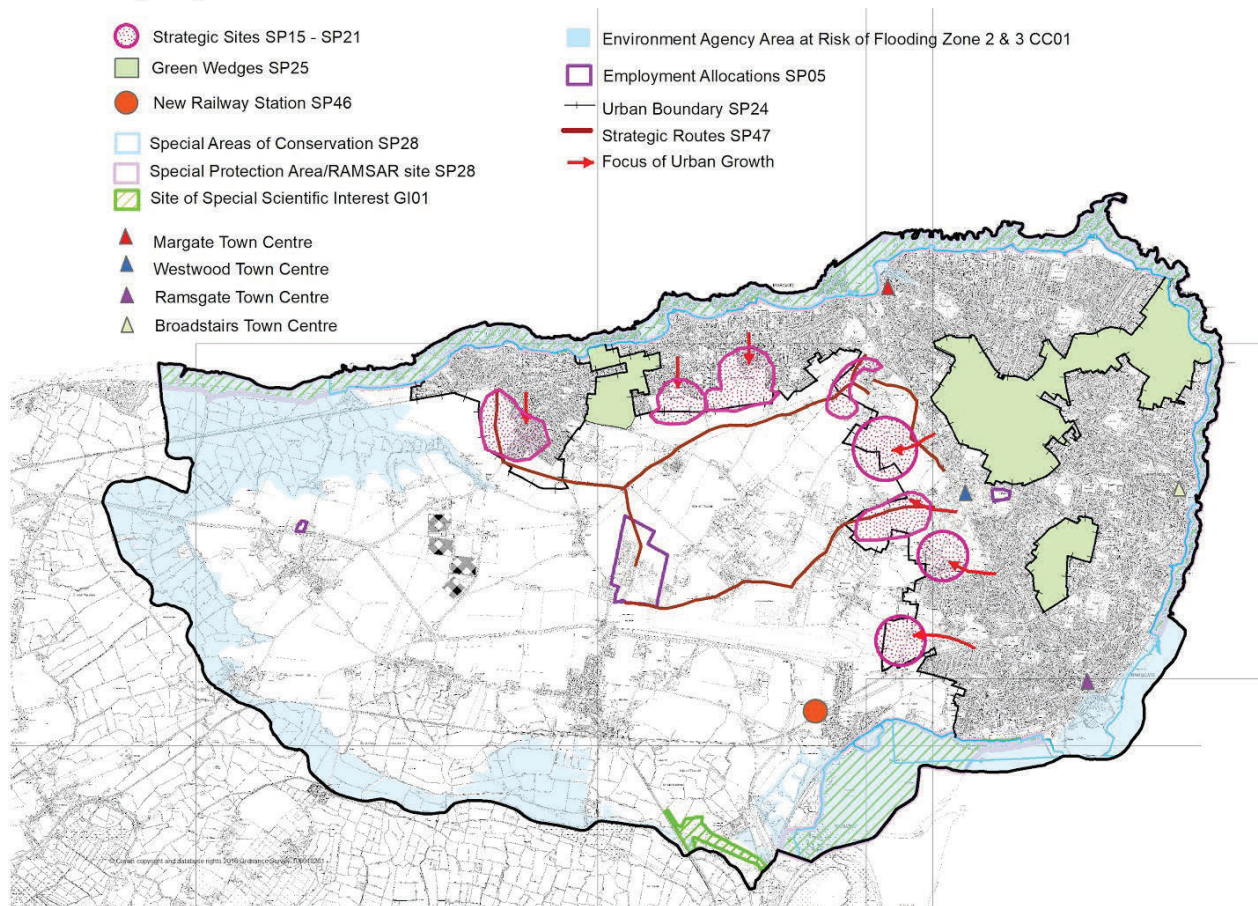
31 The levels of development proposed within the draft Plan are based upon robust and up to date evidence of the needs of the district. Thanet's population is expected to grow significantly over the next 20 years, and new homes and jobs are required to support this. The overall strategy aims for an optimistic and aspirational level of economic growth necessary to bring about the step change that is required in the district. It also aims to deliver the right number and mix of housing required alongside such growth, as well as delivering new open space, and protecting and improving the quality of Thanet's existing built and natural environment.

32 It is recognised that any growth in Thanet must be supported by the necessary infrastructure, such as roads, schools and health facilities. The Plan aims to take a co-ordinated approach to delivering such facilities alongside new development, and the Council has and will continue to work with other agencies, organisations and service providers to ensure that this is achieved. This is addressed in Policy SP02 and through the draft Infrastructure Delivery Plan.

33 The location of growth set out in this Plan is based upon a district settlement hierarchy and the key principle of focusing new development in locations that are highly accessible, and that can take advantage of and support Thanet's existing infrastructure and services. Thanet's established settlement pattern and transport links have evolved over a long period of time, and have been strongly influenced by its coastal location and peninsular geography. The hierarchy aims to inform and underpin policies in this Local Plan to facilitate growth in a manner sustainable in the local context.

34 A number of sites and proposals are of fundamental importance to delivering the objectives of the Local Plan. The locations of sites of strategic importance for the Plan are indicated on the Key Diagram, and the text of the Local Plan sets out the relevant specific policies.

Key Diagram



Strategic Priorities and Objectives

35 The following strategic priorities and objectives set out what this Plan is seeking to do in order to achieve the Council's vision and deliver sustainable development for the district. (No order of priority is implied)

Strategic Priority 1 - Create additional employment and training opportunities, to strengthen and diversify the local economy and improve local earning power and employability.

Objectives:

- Support the diversification and expansion of existing businesses in Thanet, with a focus on advanced manufacturing, emerging technologies, tourism, culture and leisure, and provide the right environment to attract inward investment.
- Retain and attract skilled people.
- Support the sustainable growth of Ramsgate Port.
- Support additional improvements to high speed rail links that will achieve further reduction of journey times.
- Provide a sufficient and versatile supply of land to accommodate expansion and inward investment by existing and new businesses.
- Facilitate the provision of accessible, modern and good quality schools, as well as higher and further education and training facilities to meet the expectations of employers and of a confident, inclusive and skilled community.
- Take advantage of the area's unique coast, countryside, its townscape and cultural heritage and potential of the coastal towns, while safeguarding the natural environment.
- Support a sustainable rural economy, recognising the importance of best and most versatile agricultural land.

Strategic Priority 2 - Facilitate the continued regeneration of the coastal town centres, developing their individual niche roles, while also consolidating the role and function of Westwood as Thanet's primary retail centre, ensuring retail expenditure is retained in the district.

Objectives:

- Guide investment in the coastal towns to support the tourism economy and provide for the needs of local communities.
- Reshape Margate town centre and seafront to achieve a sustainable economic heart celebrating its traditions as a place of relaxation, leisure and seaside fun and growing reputation as a cultural destination.
- Assist Ramsgate to achieve its full potential capitalising on its historical and nautical heritage and visitor economy.
- Enhance Broadstairs' role as a popular location for visitors and the local community.
- Enable Westwood to consolidate and evolve as an accessible, successful and sustainable residential and business community with an excellent range of homes, schools, leisure, sports, shops and other facilities in an attractive environment.

Strategic Priority 3 - Provide homes that are accessible to, and suited to the needs and aspirations of, a settled and balanced community.

Objectives:

- Plan for sufficient new homes to meet local community need so that, irrespective of income or tenure, people have access to good quality and secure accommodation.
- Meet the housing needs and demands of a balanced and mixed community and to support economic growth.
- Safeguard family homes and the character and amenity of residential areas.
- Increase the supply of good quality affordable homes.
- Improve the environment and the quality and mix of housing in areas needing revitalisation to restore mixed and confident communities.

Strategic Priority 4 - Safeguard local distinctiveness and promote awareness, responsible enjoyment, protection and enhancement of Thanet's environment, including the coast, countryside, rich seaside heritage, historic environment, diverse townscapes and landscape, biodiversity and water environment.

Objectives:

- Accommodate the development needed to optimise access to jobs, key services and facilities required to promote the physical and mental well-being, independence and quality of life of all sections of the community, and retain young people.
- Preserve and enhance Thanet's exceptional built historic environment and ancient monuments and their settings, and historic and designed landscapes.
- Safeguard and enhance the geological and scenic value of the coast and countryside, and facilitate its responsible enjoyment as a recreational and educational resource.
- Conserve and enhance the character of Thanet's landscapes, while meeting the area's social and economic needs
- Retain the separation between Thanet's towns and villages as well as their physical identity and character.
- Protect, maintain and enhance the district's biodiversity and natural environment, including open and recreational space to create a coherent network of Green Infrastructure that can better support wildlife and human health.
- Mitigate and adapt to the forecast impacts of climate change (including the water environment, air quality, biodiversity and flooding).
- Use natural resources more efficiently, increase energy efficiency, the use of renewable and low carbon energy sources, to reduce the district's carbon footprint.
- Facilitate improvements within areas characterised by poor quality housing, empty property and poor physical environment.
- Ensure that all new development is built to the highest attainable quality and sustainability standards and enhances its local environment.
- Reduce opportunities for crime and the fear of crime
- Ensure Thanet's community has access to good quality social and health services
- Broaden and improve the range of active leisure facilities to encourage greater participation within the local community.
- Support the social, economic and physical revitalisation of Margate and Cliftonville West in line with community aspirations and through partnership working.

Strategic Priority 5 - Deliver the infrastructure required to support existing communities and new development, including an efficient and effective transport system.

Objectives:

- Promote development patterns and behaviour that will minimise the need to travel or use private cars to access services and amenities.
- Facilitate the enhanced integration of the High Speed 1 network with the wider public transport and highway network by supporting infrastructure that would maximise its benefits
- Promote an efficient public transport system alongside expansion of larger scale transport infrastructure.
- Facilitate provision of direct walking and cycling routes to reduce potential congestion, noise and pollution.
- Deliver required improvements to the road network in order to reduce congestion and pollution, and to accommodate new development.
- Facilitate the provision of infrastructure required to support new development and communities.
- Ensure development safeguards public and commercial water supplies in the principal chalk aquifer

Development Strategy for Thanet

36 The development strategy for Thanet has been determined by a number of factors, namely;

- The size and geography of the District – Thanet is one of the smallest districts in Kent and is bounded by the sea on three sides. The largest settlements, including the main towns of Margate, Broadstairs and Ramsgate follow the coastline and form an almost continuous urban area, separated only by Green Wedges.
- Significant policy constraints – the Thanet Coast is the subject of multiple national and international wildlife designations, including Ramsar Sites, Special Protection Areas and Special Areas of Conservation. Extensive areas to the south and west of the District are also subject to high levels of flood risk associated with former marshland and the Wantsum Channel.
- Best and Most Versatile Agricultural Land - The rural hinterland beyond the urban area is predominantly Grade I agricultural land, with lower grade land only existing in small, isolated pockets, often subject to a high risk of flooding

37 Westwood is part of the wider urban area of Thanet, and is a major source of employment and retail facilities. In the previous Local Plan, a significant level of housing was proposed to encourage a more sustainable pattern of development and activity. That approach is continued in this Plan.

38 For these reasons the Plan does not set out a settlement hierarchy. Instead, it supports the principle of new development throughout the urban area as defined by the boundary on the Policies Map. Additional development is also supported on the edge of the urban area across a range of allocated sites consistent with the findings of the Sustainability Appraisal.

39 Beyond the urban area are seven rural villages of varying size, form and character. Minster is the largest of Thanet's rural villages and has a good range of services, and is therefore capable of accommodating a higher level of development, as set out in this Plan.

40 There are six smaller villages – Acol, Cliffsend, Manston, Monkton, Sarre and St.Nicholas – which possess a smaller range of local services and public transport connections.

41 Housing allocations have been made on a proportionate basis in the villages of Cliffsend, Monkton and St. Nicholas. However, Acol, Sarre and Manston only have very limited services and facilities required to meet the day-to-day needs of their residents. New development is therefore limited to proposals which fall within the confines of the village, and is expected to be small in scale, consistent with their form and character.

42 Development will be permitted within the identified confines of the rural villages, as defined on the Policies Map.

Policy SP01 – Spatial Strategy - Housing

The primary focus for new housing development in Thanet is the urban area as identified on the Policies Map.

Within the Thanet villages, housing development is allocated primarily in Minster, with limited development at Cliffsend, Monkton and St Nicholas. No housing development is specifically allocated in Sarre, Acol or Manston, but housing development of a size and scale commensurate with the size of the relevant settlement will be permitted within village confines, subject to other policy requirements of the Plan.

Plan Implementation and Infrastructure

43 The provision of infrastructure to support development is vitally important. The Council is working with the relevant agencies to ensure that it is fully informed about future infrastructure requirements and the timing of those requirements, and to make sure that this important social and physical infrastructure is provided in a timely manner alongside new development.

44 The Council has also prepared a draft Infrastructure Delivery Plan (IDP) in conjunction with those agencies, setting out the infrastructure requirements and the known costs; the phasing of the requirements and the body responsible for ensuring delivery. Some infrastructure would need to be provided directly by a developer on a given site; some would be off-site infrastructure funded by a developer and some would be funded by other mechanisms. The Council will also seek other forms of funding, as appropriate, to support the provision of key infrastructure identified in the working draft Infrastructure Delivery Plan.

45 The IDP addresses the full range of infrastructure required to support development and is the subject of ongoing independent viability assessment.

46 The Council is keen to ensure that the Local Plan is fully implemented, not just the housing and employment sites, but the full range of policies, so that the Plan is successful in supporting long- term economic growth and regeneration for the area, and meeting the strategic objectives of the Plan.

47 To this end, the Council has:

- Prepared a draft Infrastructure Delivery Plan, engaging with the relevant service providers

and others to ensure that new housing development in particular, is supported by the requisite social and physical infrastructure;

- Carried out viability assessments to ensure that key infrastructure can be delivered at the appropriate time;
- Undertaken various discussions with neighbouring authorities, to ensure that wider infrastructure is considered as part of the Plan process;
- Sought to develop initiatives, outside the planning process, to encourage and attract inward investment, and in particular development investment, to the area; such as maintaining and developing partnerships with various agencies (such as Homes England) and private developers groups (such as the Kent Developers Group); and
- Committed to the preparation of a robust monitoring framework.

47 The Council does not consider that the use of CPO powers will normally be required to implement the Plan, but it will give consideration to their use (subject to securing the appropriate indemnity arrangements with developers) if critical sites or infrastructure are delayed, to the detriment of implementing the provisions of the Plan.

48 The Council intends to monitor key elements of the Local Plan strategy, using the Annual Monitoring Report framework, to ensure that the overall strategy is delivered.

49 If monitoring through the AMR demonstrates that the implementation of the Plan is not proceeding as expected, the Council will review the implementation process and consider what measures need to be taken to progress implementation.

50 The Council will give due consideration to the viability of individual developments, in circumstances where independent viability appraisals indicate that a particular development cannot fully meet the infrastructure requirements set out in this Plan.

Policy SP02 - Implementation

All new development will be expected to fully meet its infrastructure requirements, whether directly on site and/or by way of a contribution to necessary off-site infrastructure, having regard to the provisions of the Infrastructure Delivery Plan. Provision should be made in accordance with a phasing and implementation plan where necessary. All such requirements will be secured by means of conditions, legal agreements, Community Infrastructure Levy or other appropriate mechanisms.

The Council will also, with partner organisations as appropriate, seek to obtain additional funding from other sources to support infrastructure provision including, the strategic provision of services and facilities

If necessary, the Council will give consideration to the use of other available mechanisms (such as compulsory purchase*, Article 4 Directions and so on) to ensure the effective delivery of the overall planning strategy for the district.

[*Footnote: subject to appropriate indemnity arrangements being in place]

51 The Council will undertake an early review of the Local Plan as set out in Policy SP03. There are several matters that need consideration, as a result of changing circumstances:

- To consider the implications of climate change;
- To review the provisions of the Plan in relation to Manston Airport in the light of a decision on the Development Consent Order;
- To assess the implications of the Local Housing Need Methodology on housing requirements for the district;
- To consider the provision of Gypsy & Traveller sites to meet the requirements set out in Policy HO22; and
- To ensure compatibility with the most recent National Planning Policy Framework.

52 There may be other issues that arise that need to be addressed through the review of the Plan.

Policy SP03 - Local Plan Review

Within six months of the adoption of the Local Plan, the Council shall undertake and complete a review of the Plan with information published as part of an updated Local Development Scheme setting out a timetable for the completion of the review and any update as may be required.

Monitoring and Review

53 The Council is committed to monitoring the implementation of the Local Plan and to undertaking what actions it can to support delivery of the strategic objectives of the Plan, and the individual development proposals.

54 Development monitoring takes place on a rolling annual basis through the housing and commercial information audits, and the preparation of the Annual Monitoring Report.

55 It is the Council's intention to monitor a focussed set of key indicators, which will give a clear indication of how successful the Local Plan Strategy is. These indicators will relate to key work areas; for example:

- Delivery of key housing and employment sites
- Delivery of key elements of the Infrastructure Delivery Plan
- Key environmental indicators, such as national and international wildlife sites; quality of development in conservation areas; maintenance of variety of beaches/seafronts
- Effectiveness of the mitigation scheme (Strategic Access Management and Monitoring strategy) for the Special Protection Area.

1 - Job Growth Strategy

1.1 The Local Plan's job growth strategy sets out how the Thanet's economy should grow, develop and create new jobs and prosperity over the Plan period. The strategy is based upon a positive and optimistic level of growth. The strategy explains where the growth is expected to take place, and what the Local Plan is doing to support this, alongside the Economic Growth Strategy for Thanet November 2016.

1.2 One of the core principles of the National Planning Policy Framework (NPPF) is to proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. It states that planning authorities should set out a clear economic vision and strategy for their areas which positively and proactively encourage sustainable growth, identify strategic sites to meet anticipated needs over the plan period, support existing business sectors and plan for new and emerging sectors. Policies should be flexible to accommodate needs not anticipated and to allow rapid responses to changes in the economy. It also states that clusters or networks of knowledge-driven, creative high-technology industries should be planned for, priority areas for economic regeneration and infrastructure provision, and environmental enhancement should be identified, and flexible working practices such as the integration of residential and commercial uses within the same unit should be facilitated.

1.3 It further states that plans should avoid the long term protection of sites allocated for employment use where there is no reasonable prospect of the site being used for that purpose. The Council has reviewed all allocated employment sites and has retained only those which are in accordance with the NPPF.

1.4 The NPPF states that plans should recognise town centres as the heart of their communities and support their vitality and viability, promote competitive town centres that provide customer choice and a diverse retail offer, retain and enhance existing markets and introduce new ones, and allocate a range of suitable sites to meet the scale and type of retail, leisure, commercial, office, tourism, cultural, community and residential development needed.

1.5 The NPPF also states that Local Plans should support the sustainable growth and expansion of all types of business and enterprise in the rural areas, promote the development and diversification of agricultural and other land based rural businesses, support sustainable rural tourism and leisure developments that benefits businesses in the rural area and promote the retention and development of local services and community facilities. The Plan's evidence base should assess the needs of the food production industry and any barriers to investment that planning can resolve.

1.6 Thanet has a diverse economy which is currently strong in the education and health sectors and traditionally has seen above average representation of retail and public administration. Evidence shows that the tourism is doing very well and is gaining momentum year on year. Green technology is currently doing well and advanced manufacturing technologies are expected to increase in the district.

1.7 Thanet's business parks have been slow to develop leaving a significant amount of land available which in itself is an opportunity. This land is beginning to be delivered which is positive but as evidence suggests that only 30% of future jobs will be in traditional office, industrial and warehouse (Class B) type uses that are often located on business parks and a more flexible approach to Thanet's employment land is required. A range of employment sites is needed to

cater for all types of employment generating development.

1.8 Thanet also benefits from an international port which offers significant potential to deliver job growth and connections to Europe. Ramsgate Port is a major infrastructure asset and potential catalyst for growth. It is important for the manufacturing and green sectors and as a wharf for the movement of minerals. The Council supports the growth of port related uses and would wish ultimately to see the reintroduction of a roll-on/roll-off passenger ferry service.

1.9 Tourism has historically been at the heart of Thanet's economy and continues to be a vitally important component of Thanet's economy along with retail and leisure which have been particularly strong. Thanet's strength in the visitor economy stems from the attractive sandy beaches in close proximity to London, the established successful tourist destination of Broadstairs, the development of the Turner Contemporary Gallery and the strong character of Thanet as a traditional tourist destination. Thanet also contains a wealth of heritage assets which are attractive to visitors with around 2,000 listed buildings.

1.10 The most recent tourism research commissioned by Visit Kent shows the total economic impact of tourism in Thanet was £293 million in 2015. A good visitor economy can also provide benefits for Thanet residents in terms of leisure facilities, attractive public realm and quality of life which in turn attract business to the area. It is therefore of primary importance to support the tourism economy.

1.11 In delivering growth in tourism, the main challenge is to increase visitor spend in Thanet, which can be achieved by encouraging the overnight visitor and developing more of a year-round offer. The Council is committed to addressing this and has adopted a Destination Management Plan (DMP) which focuses on individual projects bringing together a variety of stakeholders to improve beach management, facilitate coastal regeneration and develop a shared story to improve marketing for visitors.

1.12 In Thanet's town centres there is opportunity to capitalise on heritage assets and cultural and creative industries, creating vibrant hubs of innovation and entrepreneurship. This is increasingly the trend in Margate, particularly the Old Town which has a number of cultural and creative industries. The Heritage Action Zone in Ramsgate also looks to achieve economic growth by using the historic environment as a catalyst. Research from 2016 has found that creative businesses in Thanet have grown by 84% in four years. It is recognised that Thanet's developing cultural and creative industry is an important component of the district's economic and social profile. It is, therefore, also important that it is both supported and encouraged to grow.

1.13 Thanet's manufacturing base has traditionally been characterised by small scale business which are fundamentally important to Thanet's economy and it is imperative that existing and new micro businesses are supported. These smaller manufacturing firms require smaller industrial units and it is, therefore, important within the strategy to protect our existing fit for purpose sites. There also has to be consideration of grow on space as local businesses grow and require larger premises. This will keep successful businesses local to the area and provide economic sustainability.

1.14 30% of overall job growth is still likely to be from the development in B use classes found on business parks. Many existing businesses in Thanet need space for growth and the availability of suitable premises is a challenge to be overcome, particularly the availability of spec units which individual companies do not have the capacity to build.

1.15 There has been growth in low carbon goods and services, renewable energy, advanced manufacturing and service businesses. These sectors are likely to deliver some job growth over the Plan period. Thanet has already seen above average development of offshore wind farms, solar farms, anaerobic digesters and other renewable sources of energy production particularly located around the former Richborough Power Station site. Thanet Earth is a prime example of cutting edge "agritech" technology. It is important that sufficient employment land is available to facilitate any future growth.

1.16 Improving education and skills in Thanet in partnership with the private sector is an important part of growing the economy. The Plan seeks to support the provision of these facilities particularly the expansion and diversification of further and higher education.

1.17 Canterbury Christ Church University is pioneering the STEM agenda by operating as Kent & Medway STEM (Science, Technology, Engineering and Maths) providing information and links to STEM Enhancement & Enrichment (E&E) activities. This enables young people to make informed decisions about future career paths in and from STEM, provides teachers with impartial information and support to enable them to deliver STEM curriculum, support industry in reducing the STEM skills gap and raises the profile of science and engineering in the region. This is a significant opportunity for the area.

1.18 Thanet's current employment offer and relatively peripheral location combined with improving transport and communications infrastructure means that a certain level of commuting is expected. Currently the majority of working age people that live in Thanet work in Thanet but a significant number commute to the neighbouring districts of Dover and Canterbury, as well as further afield. Improved rail linkages in the future could expand this. This is not necessarily a harmful trend as it brings wealth to the area and better access to jobs which increases local consumer spend, further strengthening the retail and leisure professions. It is envisaged particularly that the Discovery Park Enterprise Zone established in Sandwich following the closure of the Pfizer pharmaceutical plant, will impact upon out commuting levels, but its close proximity to Thanet is beneficial in terms of retention of wealth in the area as well as potential relocation of firms to Thanet's nearby employment sites. The proximity of the Enterprise Zone to Thanet is positive for employment and Thanet's economic strategy takes account of this in order to complement Discovery Park and benefit from it.

1.19 Thanet has 7 rural settlements with a population of around 6,000 residents which make up just 4% of the population. The employment land review concludes that Thanet has quite a low representation of rural employment enterprises when compared to the rest of the south east with less than 10% of VAT registered premises being located in the rural areas. Nonetheless the Council wishes to support rural economic development of an appropriate scale.

1.20 Thanet currently has a high proportion of people who work from home. With anticipated growth in housing it is considered that with appropriate digital infrastructure and business support those sustainable enterprising communities can be created.

1.21 Given that Thanet has a diverse economy a flexible economic strategy is needed in order to accommodate all employment generating uses. Future job growth in Thanet is expected to remain strong in town centre uses, as well as in public administration and education. Thanet is a popular retirement area and this brings with it benefits to the economy particularly in terms of the health and caring professions which are expected to grow.

1.22 The Economic Growth Strategy for Thanet identified transformational initiatives to focus on

to deliver employment growth. These are:

- Developing the Port at Ramsgate
- Investing in high value manufacturing and engineering across Thanet and east Kent
- Position Thanet as a global agritech hub
- Promoting Thanet's broader cultural/leisure offer
- Cultivating the creative industries across Thanet
- Designing enterprise into new communities
- Long term feasibility modelling for Margate and Ramsgate

1.23 The overall target is to deliver a minimum of 5,000 jobs across the district during the Plan period to 2031 concentrating on the transformational initiatives coupled with improved transport and communications infrastructure.

1.24 Job growth in the district will be supported, promoted and delivered by;

- supporting the growth of port related uses at Ramsgate Port.
- allocation and retention of employment land and premises that are fit for purpose across the district;
- flexibility of uses on some employment land;
- allocation of vibrant town centres able to accommodate a wide range of compatible uses reflecting their individual characters and economies;
- recognising the important role of cultural and creative industries in the regeneration and reinvigoration of Thanet's towns;
- being flexible with regard to holiday accommodation reflected and supported by the Council's Destination Management Plan;
- providing for cultural and creative industries within the town centres
- providing suitable and sufficient employment land to support growth in advanced manufacturing; and
- nurturing workforce skills by supporting education and skills facilities.

1.25 It is not possible to predict or plan specifically for the needs of all significant job creating development proposals that may arise over the lifetime of the Plan and only 30% or employment growth is expected to be in the B use classes that are traditionally located on business parks. The Council wishes to plan positively for all kinds of employment generating development taking account of relevant environmental and countryside policies and the aspirations of the strategic priorities. Account will also be taken of prospective benefits arising from additional and better paid local employment.

The following policy sets out the Job Growth Strategy for this Plan.

Policy SP04 - Economic Growth

A minimum of 5,000 additional jobs are planned for in Thanet to 2031.

The aim is to accommodate inward investment in job creating development, the establishment of new businesses and expansion and diversification of existing firms. Sufficient sites and premises suited to the needs of business are identified and safeguarded for such uses. Manston Business Park is the key location for advanced manufacturing and large scale job creating development.

Land is identified and allocated to accommodate up to 53.5ha of employment space over the period to 2031. Land and premises considered suitable for continued and future employment use will be identified and protected for such purpose. Within the urban area, and the confines of villages as defined on the Policies Map, proposals for employment generating development on non-allocated sites will be supported in principle, subject to meeting the requirements of other policies in the Plan.

Thanet's town centres are priority areas for regeneration and employment generating development, including tourism and the cultural and creative industries which will be supported.

The growth of the Port of Ramsgate is supported as a source of employment and as an attractor of inward investment.

New tourism development, which would extend or upgrade the range of tourist facilities particularly those that attract the staying visitor, increase the attraction of tourists to the area and extend the season, will be supported.

Development is supported that enhances the rural economy subject to protecting the character, quality and function of Thanet's rural settlements and natural environments.

Employment Land

1.26 The employment land strategy sets out how the Council proposes to support job growth through the allocation of employment land for development, the safeguarding of existing premises and flexibility regarding the types of development considered appropriate. The supply of employment land is supported by the town centre strategy which also provides land for economic development and job growth.

1.27 The National Planning Policy Framework (NPPF) requires that local planning authorities set out a clear economic vision and strategy for their area which positively and proactively encourages sustainable growth, identify strategic sites to meet anticipated needs over the plan period, support existing business sectors and plan for new and emerging sectors. It also requires flexibility and states that the long term protection of sites with little chance of being used for employment purposes should be avoided.

1.28 In accordance with the NPPF an assessment of current and future growth sectors has been carried out along with an assessment of Thanet's employment sites and land available.

1.29 Forecasts show that Thanet will need in the region of 15 ha of employment land (B1, B2 and B8 uses) over the plan period. Methodology and discussion of this is contained in the employment growth topic paper and the Economic and Employment Assessment 2012.

1.30 There is a need to provide land for potential inward investment and for growing existing businesses to relocate to. There is also a need for affordable premises for the indigenous market and start up space also fulfills an important role.

1.31 Thanet needs to cater mainly for small to medium sized businesses and tourism related trade. Some land needs to be made available for larger businesses but some of these types of

businesses may be drawn towards Discovery Park Enterprise Zone and Thanet's employment allocations will complement this trend. Some larger established sites such as Pysons Road, Haine Road and Westwood Industrial Estate are in need of some investment to secure their renewal and/or upgrade. Good quality, popular sites that are within the urban and rural confines are retained and protected. Of particular importance are quality sites that support Thanet's small and medium enterprises such as Manston Green. As far as possible there is a balanced distribution of sites across the district.

1.32 There is a need to keep a range of sites for cheap premises and business start ups. Thanet also needs to retain some sites that can accommodate uses such as paint spraying and tyre recycling. The range of sites includes some in the rural area to support the rural economy. A "flagship" site for inward investment that can also accommodate growing indigenous businesses is provided for at Manston Business Park. There is also a need for "flexible" sites where alternative non Class B uses will be allowed. This reflects the current trend and ensures land is provided to meet all types of economic development. For the purposes of applying Policy SP05, flexible uses include leisure, tourism and other town centre uses which, due to scale and format cannot be accommodated within town centres. They also include uses known as sui generis which do not fall into a category in the Use Classes Order. These include uses such as car showrooms and crèches.

1.33 Thanet's portfolio of employment sites caters for all of these uses both in terms of new sites and existing sites protected for future employment purposes. The following policy identifies Thanet's employment allocations, where new employment generating development will be promoted and supported. These sites are shown on the Policies Map.

Policy SP05 - Land Allocated for Economic Development

The following sites are allocated for business and employment generating purposes:

	Total Site Area (ha)	Remaining employment allocation (ha)
Manston Business Park, Manston	75.2	42.53
Eurokent (part)*, Ramsgate	38.6	5.45
Thanet Reach Business Park, Broadstairs	9.74	3.7
Hedgend Industrial Estate, St Nicholas	2.46	1.61
TOTAL	126	53.29

At Manston Business Park and Hedgend Industrial Estate development will be restricted to use classes B1 (business), B2 (general industry) and B8 (storage and distribution). Eurokent is allocated for flexible business use in accordance with Policy SP09 (2)* Thanet Reach Business Park is also suitable for education related uses as well as B1 and B8 uses.

* **Eurokent is a flexible employment site, where a wider range of employment generating uses will be allowed in addition to B1, B2 and B8 uses. Development must be compatible with neighbouring uses. Proposals for main town centre uses over and above 2000sqm for which planning permission has already been granted should comply with Policy E05 - the sequential test. Flexible employment uses will be expected to contribute towards the Local Employment and Training Fund.**

Development proposals must provide for at least one electric vehicle charging point for every 10 spaces provided.

Manston Business Park

1.34 Manston Business Park is a prime business investment location, being strategically located at the centre of Thanet and adjacent to the former Manston Airport. It also has easy accessibility from the centres of population, the port at Ramsgate and excellent road links to the rest of Kent and the UK via the A299 and M2.

1.35 Approximately half of the site is owned by East Kent Opportunities which is a joint venture between Kent County Council and Thanet District Council. The aim for the joint venture is to bring forward economic growth and regeneration in Thanet. Manston Business Park is approximately half developed, and there is some infrastructure in place ready for the rest of the site to be developed. Whilst development on the site has been slow to come forward in the past, more recent developments have included speculative business units, and purpose built accommodation. The site provides a good opportunity for the relocation of existing growing business.

1.36 The focus for development of the site should be office, industrial and warehousing, whilst some mixed use including additional business support services and training facilities which demand a location outside of Westwood and of the coastal urban belt will be considered appropriate, where this would serve to attract new or support existing job creating development.

1.37 Development on this site will be expected to contribute to the delivery of the transport strategy particularly the extension of Columbus Avenue and improvements to Spitfire junction.

Policy SP06 - Manston Business Park

Manston Business Park is allocated and safeguarded for business purposes within classes B1 (business), B2 (general industry) and B8 (storage and distribution).

Development proposals will need to comply with all of the following criteria:

- 1) Provide Green Infrastructure to ensure that proposals take into account the location of the site and the rural character and appearance of the immediate surrounding area.**
- 2) Provide necessary on-site transport infrastructure and proportionate contributions to the improvement of the 'Spitfire Junction' and the Columbus Avenue extension.**

Manston Airport

1.38 The Council recognises that proposals are being put forward by River Oak Strategic Partners for an airport operation at the site, through a proposed development consent order (DCO), pursuant to the Planning Act 2008. The application is before the Secretary of State for consideration and the proposals are subject to thorough scrutiny as part of this process. A DCO, if granted, would give consent for the project in recognition of its national importance and may also include authorisation for the compulsory acquisition of land to assist in the achievement of its objectives.

1.39 If a DCO for Airport use is granted, the early review of the Plan will need to take this into account as well as its implications for other policies in the Plan and consequential land use considerations. In the event that the DCO is not granted or does not proceed, the Council will similarly need to consider the most appropriate use for the site as part of the early review.

Policy SP07 – Manston Airport

Manston Airport as identified on the Policies Map is safeguarded for airport related uses. Whether or not the DCO is confirmed, the future use and development of Manston Airport and/or other policies affected by the outcome of the DCO process will be determined through the early review of the Plan.

2- Town Centre Strategy

2.1 The town centre strategy sets out how Thanet's town centres will develop, the inter-relationship between them, and how the towns' commercial functions will support and contribute to the overall economic strategy for the district.

2.2 The National Planning Policy Framework states that planning policies should be positive and promote competitive town centre environments and set out policies for their management and growth over the plan period. Plans should recognise town centres as the heart of the community and pursue their vitality and viability. A network of centres should be defined that reflects the relationship between them in order to guide future development.

2.3 The strategy for Thanet's town centres seeks to reinforce the different but complementary roles of the primary centre at Westwood and of the coastal town centres of Margate, Ramsgate and Broadstairs. The objectives of the hierarchy are to:

- Safeguard and sustain Westwood's role in preventing retail expenditure leaking outside the district.
- Enable the coastal towns to achieve and maintain a viable, diverse and sustainable commercial base.
- Ensure the scale of development at the District and Local Centres is sufficient to serve local catchments but not harmful to the function of the town centres.
- Allow residential development in locations that support the function of the town centres.

2.4 The Council is required to set out a network and hierarchy of centres. Identifying the existing hierarchy provides an understanding of the role and function of the town centres and their inter-relationship. A major factor in determining the role of the centres is the catchment which they serve. Canterbury is the pre-dominant centre in the wider sub region of East Kent. Thanet's hierarchy of centres is set out in Policy SP08 below:

2.5 The retail hierarchy demonstrates an understanding of how town centres interact with one another at district and sub-regional levels. It is not designed to favour one centre over another and does not in itself direct investment decisions.

2.6 Thanet currently retains 84% of retail expenditure within the district and given this healthy retention rate there is no need to increase Thanet's market share within the sub region. However, in order to maintain the current market share the following growth will be required over the plan period:

- 24,567 square metres of floorspace selling comparison (high street style) goods. The majority of this is needed at Westwood which requires 16,787 square metres.
- 1,255 square metres of floorspace selling convenience goods and 4,338 square metres of A2-A5 floorspace is needed across Thanet.

2.7 Convenience retailing is currently skewed towards the large supermarkets clustered around the Westwood area and this trend is likely to continue. However, the Council would like to encourage more convenience provision within the coastal town centres.

2.8 In addition to this, an assessment has been made of other uses that are traditionally found in high street locations and support the retail function of centres - these include uses such as

banks, building societies, restaurants, take aways, and drinking establishments and are known in planning terms as the A2-A5 use classes. The assessment concluded that a total of 3,499 square metres of such floorspace is needed in the district to support the retail function of town centres. Much of this is shown to be needed at Westwood although uses such as restaurants would support the tourism appeal of the coastal town centres.

2.9 Town centres are hubs of the community and as such are not just retail areas. They contain a number of uses including leisure and tourism. Although no need for major commercial leisure facilities such as cinemas has been identified, there is a need to be flexible within the town centres in order to support the tourism economy.

Table 1 below sets out the retail need for Thanet's town centres (gross floorspace)

Table 1* - Indicative retail need for Thanet's town centres to 2031 (gross)

	Convenience sqm	Comparison (high street goods) sqm	A2-A5 uses sqm	Total Need sqm
Westwood	-	16,787	910	17,697
Margate	700	1,853	496	3,049
Broadstairs	1,650	2,143	1,161	4,954
Ramsgate	783	2,822	932	4,537

***This gives an indication of the quantitative level of retail need and shouldn't be applied rigidly. It should be regarded as a guide rather than a target.**

Policy SP08 - Thanet's Town Centres

Provision is made for main town centre uses reflecting the individual role, character and heritage of the town centres (as identified on the Policies Map), including provision for retail development as referred in Table 1 above (see policies SP09 to SP12 respectively).

Thanet's retail centre hierarchy is as follows:

Westwood - this centre sits at the top of the hierarchy as it caters for high order need, attracts the major national retailers and has a catchment that covers the whole of Thanet as well extending to areas outside of the district.

Coastal Town Centres - Margate, Broadstairs and Ramsgate. The catchments of these town centres are their individual town populations and tourist trade with a wide range of shops to cater for everyday need, special interest and tourism. These towns have traditionally attracted national retailers and services as well as local businesses.

District Centres - Cliftonville, Westgate, Birchington and Minster. These centres cater for local needs and services. They serve large residential and semi-rural locations but catchments are limited and these locations are not appropriate for large scale retail development.

Local Centres - Several across the district such as Westbrook and St Peter's (defined in Policy E06). These cater for a more restricted local need and tend to have a small

catchment. These centres provide services such as takeaways, hairdressers and small convenience stores.

Business is often local rather than the national multiples. These centres are not appropriate for large scale retail development.

Westwood

2.10 The key issues for Westwood are:

- developing it into a sustainable residential community;
- ensuring safe movement by pedestrians and cyclists within the commercial area;
- reducing current levels of traffic congestion.

2.11 Westwood Cross opened in June 2005 consolidating what had become piecemeal retail development in the Westwood area. Since its opening there have been a number of further developments such as the development of the leisure complex and numerous developments at and improvements to the surrounding retail parks. Westwood has proved highly successful in its aims of clawing back retail expenditure formerly lost to locations outside the district boundary. It has secured its place as the preferred location for the large format style of retailing favoured by the national chains. This style and scale of retail was never before available in Thanet.

2.12 Figures show that in the region of 17,000 square metres of retail floorspace is needed at Westwood to maintain the status quo. Some of this floorspace is already taken up by recent permissions, leaving no reason to significantly expand the boundaries of the town centre. The remaining floorspace need at Westwood to the end of the plan period can be accommodated amongst the existing town centre development by way of redevelopment and reconfiguration.

2.13 The adjacent housing allocation and flexible employment allocation at Eurokent supports tourism and leisure uses as well as B1 uses and will serve to add footfall to the town centre and increase its vitality, viability, accessibility and sustainability.

2.14 In addition to the 976 new homes under construction, Westwood is identified as a wider strategic housing allocation to enable its development as a sustainable mixed use business and residential community.

2.15 The area currently suffers from poor connectivity between sites, both vehicular and pedestrian. This is a challenge that needs to be addressed in the future development of Westwood.

2.16 A relief strategy is in development to address this issue, which the Council is implementing. This requires developer-led solutions. A fundamental objective of this strategy is to realign traffic routes to enable free movement by pedestrians between town centre facilities. The final element of the relief strategy that still needs to be delivered is a link between Margate Road and Westwood Road. The Council will continue to explore options which are available to delivering this link.

2.17 The piecemeal nature of the way Westwood has grown over the years means that it does not form a cohesive town centre as many of the individual component sites face inwards on each other leading to problematic pedestrian connectivity between sites. The Council now

seeks to ensure that any new development at Westwood addresses this problem and seeks to encourage active frontages on the intersections between the different retail parks and better pedestrian flows between sites. Ultimately the vision is for the whole area to look and feel more like a single town centre. A supplementary planning document will be drafted to seek to establish this aim following the adoption of the Local Plan. The SPD will consider short, medium and long term solutions and will be presented in three phases as follows:

- Phase 1 – Completion of Westwood Relief Strategy/Improved signage
- Phase 2 – General Pedestrian Improvements/ Pedestrianisation/Stopping up traffic
- Phase 3 – Remodelling the various component sites following redevelopment

In the interim period any new development will be expected to be consistent with these aims.

Policy SP09 - Westwood

The Council will seek to support the evolution and development of Westwood as a mixed use business and residential community in line with the following area based policies, indicated on the Policies Map.

Development proposals in the Westwood Area should have regard to the aims and objectives of the Westwood Area SPD and also the Westwood Relief Strategy once adopted.

1) Westwood Town Centre

Main town centre uses will be directed to the town centre area at Westwood in accordance with policies E04 and E05. Any development proposals should ensure there is no net loss in overall commercial floorspace unless permitted by other Local Plan policies.

2) Eurokent Mixed Use Area

Development of Eurokent will be for a mix of residential and business purposes, in accordance with a comprehensive masterplan linking and integrating the development into the wider Westwood community.

Land at Eurokent is allocated for:

- up to 550 new dwellings, and
- the development of up to 5.45ha of land for flexible business uses as identified in Policy SP05.

Proposals will be judged and permitted only in accordance with a masterplan as required below:

- A minimum of 3.4 ha of publicly accessible natural/semi natural open space in accordance with the requirements of Policy SP34.
- A range of community facilities in accordance with Policy SP14, including small scale convenience retail provision to serve the day to day needs of the community

- **Development will be expected to provide proportionate contribution to necessary offsite highway improvements in the form of the Westwood Relief Strategy, improvements to the A256 from Lord of the Manor and any other improvements identified in the Transport Assessment.**

All development proposals must include a phasing and implementation plan to include the phasing of development, infrastructure and landscaping.

Masterplanning will be informed by and address:

- **Liaison with service providers to investigate the need to upgrade the capacity of any utility services and infrastructure.**
- **Archaeological assessment and the need to preserve and enhance the setting of heritage assets adjoining the site.**

Proposals will be accompanied by a Transport Assessment which shall:

- **Assess the impact of the development on the local road network**
- **Identify measures to promote multi modal access including footway and cycleway connections, and an extended bus service accessible to the development, and rail linkages.**

3) Thanet Reach

In accordance with Policy SP05, part of Thanet Reach is allocated for employment and education uses. The southern part of the site is allocated for residential development (80 dwellings) in accordance with Policy HO1.

Margate

2.18 The vision for Margate is to build on its success as a fashionable seaside resort based on its unique assets of a sandy beach, harbour, rich townscape, and on the success of the Turner Contemporary Gallery and a revived Dreamland Heritage Amusement Park. Margate's economic heart will be diversified through creative and cultural development and the town will no longer suffer disproportionately high levels of deprivation, transience and poor quality accommodation.

2.19 Positive signs of this step change are beginning to emerge, with a 14% increase recorded in contacts to the Visitor Information Centre in May 2017 compared to May 2013. Margate has a rich heritage which is important to the vibrancy of the town and as an attraction for visitors.

2.20 Margate has a number of commercial areas such as the Old Town, College Square and the upper and lower High Street areas that perform different functions around the town. The upper and lower High Street along with the seafront have suffered from high vacancy rates although this is now beginning to improve.

2.21 The Old Town area is a vibrant part of the town which contains many restaurants, cafes, gift shops and galleries. This area is popular with tourists and local people alike. This area of the town lends itself to tourism and leisure uses.

2.22 Dreamland Amusement Park is synonymous with Margate as a seaside resort. The park closed after the 2006 season. Since its closure the Council has worked, alongside partners to re- open Dreamland as an amusement park. The Council has compulsorily purchased the site and a comprehensive phased development scheme is in place, maximising its potential to contribute to the economic well-being and attractiveness of Margate as a visitor destination.

2.23 The run down Lido complex is situated close to the Margate Winter Gardens and Turner Contemporary and, given its coastal location, provides an ideal opportunity for a leisure/tourism related development with uninterrupted sea views. The site is also an important heritage asset but is in need of significant restoration and repair, which the Council considers should be the main focus for any redevelopment proposals.

2.24 Strategic Local Plan designations that are expected to help deliver the continued regeneration of Margate include Margate's Town Centre and Old Town area, Margate's seafront area, and Dreamland.

2.25 Margate has a number of sites which present the opportunity for mixed use redevelopment that potentially include residential. These will also contribute to the overall vibrancy and energy of the town. These sites include Arlington House, the Rendezvous site, the Centre, the Cottage car park and Bilton Square.

2.26 The Arlington House site is a highly prominent site in Margate and has permission for a supermarket. Should this development not commence, the Council considers that this site is suitable for mixed use redevelopment.

2.27 The strategy for Margate's core area is to support retail uses including banks, restaurants and drinking establishments in the primary shopping frontage centred around the upper and lower High Street. The Old Town area will provide a range of town centre uses including cultural and creative industries. There will also be a designated Margate Seafront and Harbour Arm area that supports and encourages seafront leisure uses that are sympathetic to the surrounding seafront architecture. Evidence shows that in Margate there is a need for an additional 3,049 square metres of retail floorspace to the end of the plan period. Current vacancy levels and the wider town centre designations can adequately accommodate this need.

2.28 Seafront areas are important to the vitality and viability of the coastal town centres as they attract tourists and provide a natural leisure focus for the towns in close proximity to the High Streets and main shopping areas. As such, it is important that leisure and tourism uses are encouraged here that are complementary to the town centres and encourage economic growth.

2.29 The District Council recognises the need for a new Lifeboat station in the Margate area, capable of accommodating the latest class of lifeboat. It is recognised that there are limited opportunities for such a facility, and the Council will work with the RNLI to identify a suitable location to meet their operational requirements. Key issues that need to be considered as part of that process would be the potential impact on heritage assets (Policies SP36 and HE01 – HE03 apply) and national and international wildlife sites (Policies SP28 and GI01 apply).

Policy SP10 - Margate

The Council will seek to support the continued regeneration and development of Margate as a contemporary seaside resort in line with the following area based proposals, indicated on the Policies Map.

1) Margate Town Centre

Main town centre uses will be directed to the town centre area at Margate in accordance with policies E04 and E05.

2) Margate Old Town

Margate's Old Town area will continue in its complementary role, contributing to the vitality and viability of Margate's town centre, increasing footfall and enhancing quality and choice of facilities in the town centre. It will be a focal location for creative and cultural industries.

Residential development will be permitted above ground floor level and the Council will resist the loss of existing commercial premises in the area unless it can be demonstrated that there has been a consistent and genuine but unsuccessful attempt to market the premises for a period of 12 months prior to an application being made at an open market value that reflects its existing commercial use and condition.

3) Margate Seafront and Harbour Arm

Within the seafront area of Margate and the Harbour Arm as indicated on the Policies Map, leisure and tourism uses will be permitted, including retail, where they enhance the visual appeal of these areas and protect the seafront character and heritage. Residential development above ground floor will be permitted.

4) Dreamland

Dreamland will be developed as an amusement and/or theme park and will be a significant attraction supporting the regeneration of the town.

Proposals that seek to extend, upgrade or improve the attractiveness of Dreamland as an amusement and/or theme park will be permitted. Development on site that would lead to the reduction in its attractiveness as a leisure or tourist destination, will be resisted, including the loss of the scenic railway.

Proposals would be required to be compatible with the context and proposals of the strategic urban design framework, and integration with appropriate proposals for redevelopment/refurbishment of neighbouring sites.

5) Opportunity Areas

There are Opportunity Areas identified on the Policies Map at Arlington, the Rendezvous site, The Centre, the Cottage car park and Bilton Square, which are considered suitable for mixed use town centre development. The ultimate goal of redevelopment of these sites is regeneration. Residential development will be considered acceptable where this does not conflict with the area based criteria above.

6) The Lido

Proposals for leisure and tourism related uses will be supported at the Lido. Any development must respect and restore the site's status as a significant heritage asset.

7) Lifeboat Station

The development of a new lifeboat station in the Margate area will be supported, subject to relevant Local Plan policies.

Development will only be permitted under this policy where it can be demonstrated that it will not adversely affect any designated nature conservation sites through any pathway of impact, including increased visitor pressure. Development proposals must comply with the requirements of SP28, SP29 and GI01.

Ramsgate

2.30 The vision for Ramsgate is to maximise its maritime heritage, Royal Harbour, marina, beach and attractive waterfront, and provide an economic base for its vibrant mix of town centre uses, visitor economy and café culture. The former surplus of small shops beyond the town's commercial core has been refurbished to provide quality residential accommodation and there is a viable balance and mix of residential and commercial use including specialist shopping.

2.31 Ramsgate has been adversely affected by the decline of the traditional resort holiday. However, with its rich heritage adding vibrancy to the town, Ramsgate has been quick to recover. A café culture has developed around the harbour area and this needs to be further encouraged.

2.32 The key issue for Ramsgate town will be to maintain and improve the vitality, diversity and economic vibrancy of the town centre, secure enhancement of historic buildings, support development of the visitor economy including cultural creativity, attract more economically active residents and strengthen the range of local services.

2.33 Ramsgate contains many separate commercial areas. As well as at the traditional focal point of the High Street, commercial development has stretched to the upper High Street and the length of King Street. Over recent years as with all high streets, Ramsgate has seen an increase in vacancies and commercial development has become somewhat sporadic and in some cases run down. The strategy of the Council has been and continues to be to draw commercial development back to the commercial heart of Ramsgate and allow the more peripheral areas of the town centre to revert to residential use. This strategy has been showing results and Ramsgate is benefitting from an improved public realm and so it is appropriate for this policy approach to be continued.

2.34 Ramsgate has a need for an additional 4,537 square metres of retail floorspace. The current vacancies and scale of the town centre boundary can adequately accommodate this in the plan period.

2.35 Retail development will be focused in Ramsgate's core area with complementary town centre uses accommodated within the wider town centre boundary. Leisure and tourism uses will

be particularly encouraged around the marina area.

2.36 Land at and adjacent to Ramsgate harbour is identified for a mix of uses including leisure, tourism, retail and residential purposes. Any proposals should have regard to the Ramsgate Maritime Plan or any future plan for the port and Royal Harbour.

2.37 The Royal Harbour and historic waterfront are important for both leisure and commercial users which is important for the vibrancy of the town. The seafront area already has a thriving café culture. The Royal Harbour is a Grade II* listed structure and is at the heart of Ramsgate Conservation Area. The regeneration of Ramsgate depends on the continued attractiveness of the Royal Harbour and new development in this area will need to preserve and enhance its character and appearance. It is a tourism and leisure attraction with significant potential and already offers much to smaller pleasure craft. Commercial fishing and ship repair are also carried out in the Royal Harbour.

2.38 The growth of the Port of Ramsgate is supported as a source of employment and as an attractor of inward investment. The Kent Minerals and Waste Local Plan 2013-2030 safeguards the port for the importation of minerals into Kent (Policies CSM6 and CSM7 apply). In addition to the potential growth of port trade including passenger ferry operations, there is additional employment associated with marine engineering, including the use of the port as a base to assemble and maintain offshore wind turbines, and other businesses benefiting from a port location.

2.39 Further development will be permitted at Ramsgate Port that supports the aims of the Ramsgate Maritime Plan or any future plan which the Council as Port Authority adopts. The Maritime Plan is a non-statutory operational plan that seeks to set out the strategy for the Port and is updated from time to time. Any business plans and supplementary guidance will have regard to the need to make optimum use of the existing port land to protect and support diversification of its function.

2.40 Recognising the proximity of the port to the Sandwich Bay and Thanet Coast SSSIs, SPAs, Ramsar Site, Marine SAC and Thanet Marine Conservation Zone (MCZ), development proposals for growth would be subject to the Habitat Regulations and will need sensitive consideration in relation to nature conservation and landscape. Proposals would need an acceptable environmental assessment of their impact on the Harbour, its setting and surrounding property, and the impact of any proposed land reclamation upon nature conservation, conservation of the built environment, the coast and archaeological heritage, together with any proposals to mitigate the impact.

Policy SP11 - Ramsgate

The Council will seek to support the continued regeneration and development of Ramsgate focusing on its maritime heritage and developing leisure role, in line with the following area based proposals, indicated on the Policies Map.

1) Ramsgate Town Centre

Main town centre uses will be directed to the town centre area at Ramsgate in accordance with policies E04 and E05.

2) Ramsgate Waterfront and Royal Harbour

Land at and adjacent to Ramsgate Royal Harbour, as indicated on the Policies Map, is identified for development for a mixture of leisure, tourism, retail and residential purposes.

Any such proposals should have regard to the Ramsgate Maritime Plan or any subsequent plan adopted by the Council. The following activities and development will be supported:

- Eastern Undercliff - mixed leisure, tourism and residential uses; and
- Ramsgate Royal Harbour - continued development of mixed leisure and marina facilities, in particular at the Military Road arches.

All proposals must:

- Take particular care in the design, location, use of materials and relationship of land-based facilities with open water, such as to protect important views and preserve or enhance the historical character of the Royal Harbour and seafront.
- Ensure that the integrity of nature conservation interests within the adjacent SSSI, SPA, SAC, Ramsar, Thanet MCZ site is maintained.

3) Opportunity Areas

There are Opportunity Areas identified on the Policies Map at Staffordshire Street car park and Eastern Undercliff, which are considered suitable for mixed use town centre development. The ultimate goal of redevelopment is regeneration.

Residential development will be considered acceptable where this does not conflict with the area based criteria above.

4) Ramsgate Port

The Council supports further development at Ramsgate Port which would facilitate its improvement as a port for shipping, increase traffic through the port, and introduce new routes and complementary land based facilities including marine engineering, subject to:-

- a demonstrable port-related need for any proposed land based facilities to be located in the area of the port, and a demonstrable lack of suitable alternative inland locations; and
- compatibility with the character and function of Ramsgate waterfront and the Royal Harbour as a commercial leisure facility; and
- an acceptable environmental assessment of the impact of the proposed development upon the harbour, its setting and surrounding property, and
- the impact of any proposed land reclamation upon nature conservation, conservation of the built environment, the coast and archaeological heritage, together with any proposals to mitigate the impact.

Land reclamation will not be permitted beyond the western extremity of the existing limit of reclaimed land.

Development will only be permitted under this policy where it can be demonstrated that it will not adversely affect any designated nature conservation sites through any pathway of impact, including increased visitor pressure. Development proposals must comply with the requirements of SP28, SP29 and GI01.

Broadstairs

2.41 Broadstairs is an attractive town with a thriving town centre and is a popular location for visitors and residents who enjoy its heritage, Dickensian past, beaches, local events and picturesque waterfront. Broadstairs has a strong commercial and visitor economy and has been resilient during the economic downturn. It is important to maintain and enhance the town's attractive character and economic base.

2.42 Broadstairs is a popular shopping destination characterised by small independently owned shops. The town has many independent shops interspersed with cafes, restaurants and drinking establishments that have enabled the town to buck the trend of high vacancy rates. The town has a particular demand for retail premises selling high street style goods (comparison goods).

2.43 There is a need for 4,954 square metres of additional retail floorspace to the end of the plan period. The prime focus for retail is centered around the High Street but with supporting town centre uses along Albion Street and the upper end of High Street towards the railway station. The town centre is largely linear in character and there is little scope for physical expansion and development. In order to accommodate retail need in the future it will be necessary to be flexible and allow some development on the edge of the town centre as close as possible to the High Street.

2.44 Broadstairs promenade and beach front is an important part of the town and is an attraction in itself, drawing families to the area. It contains a mix of cafes, restaurants and drinking establishments as well as residential uses and areas of open space. It is important that existing commercial premises are retained in order to maintain the commercial function of this area as a link between the beach and the High Street. Development in this area should contribute to and support the vibrancy of the town centre but also respect its peaceful and unique character.

2.45 The town is linear in style with separate beachfront and town centre areas and the town would benefit from improved pedestrian connectivity between these two areas.

Policy SP12 - Broadstairs

The Council will seek to support proposals that maintain and enhance the role and character of Broadstairs as a popular attractive small seaside town in line with the following area based proposals, indicated on the Policies Map.

1) Broadstairs Town Centre

Main town centre uses will be directed to the town centre area at Broadstairs in accordance with policies E04 and E05.

New retail development will be acceptable on the edge of Broadstairs town centre, subject to Policy E05. Proposals will be required to provide direct pedestrian links to the High Street, be well related to the retail core, centres of population and be accessible by a range of means of transport.

2) Broadstairs Promenade and Beach Front

Opportunities to enhance the use and attractiveness of the promenade, seafront and beach are welcomed, particularly where they achieve improved connectivity between the town centre and beach front. Within this area, small scale leisure and tourism uses will be permitted, including retail, where they do not harm the character and heritage interest of the surrounding area. Within Victoria Gardens, open space policies will prevail. The Council will resist the loss of existing commercial premises in the area unless it can be demonstrated that there has been a consistent and genuine but unsuccessful attempt to market the premises for a period of 12 months prior to an application being made at an open market value that reflects its existing commercial use and condition.

Development will only be permitted under this policy where it can be demonstrated that it will not adversely affect any designated nature conservation sites through any pathway of impact, including increased visitor pressure. Development proposals must comply with the requirements of SP28, SP29 and GI01.

3 - Housing Strategy

3.1 The Plan's housing strategy sets out how the Local Plan seeks to meet the housing needs of Thanet alongside other partners, including the Council's housing regeneration, empty property and strategy functions. The Local Plan proposes to do this by

- identifying sufficient and suitable land for expected population growth
- requiring the right types of homes, including affordable homes and self-build and custom-build housing, to be provided to support economic growth and to meet the needs of the local community
- supporting the re-use of empty properties and restricting the loss of existing residential property; and
- supporting area specific regeneration objectives.

3.2 The Local Plan must allocate enough land to accommodate the amount of housing needed by 2031. This amount of housing is known as the Objectively Assessed Need (OAN) and is calculated based on a number of factors including population growth, population change market signals and in-migration (including from London) and out migration. This Local Plan allocates sufficient land to meet the housing target over the plan period.

3.3 The National Planning Policy Framework (NPPF) aims to boost the housing supply and expects Local Plans to meet the full objectively assessed needs for market and affordable homes.

3.4 The assessment of development needs is presented in the Thanet Strategic Housing Market Assessment (SHMA) January 2016 and update January 2017. Neighbouring Councils and other key stakeholders were invited to participate in workshops on the methodology and findings of the SHMA and subsequent review. In identifying this need it is important to consider key functional linkages between places where people live and work - this is known as a Housing Market Area and comprises the districts of Thanet, Canterbury and Dover. (There is also some overlap with parts of other adjoining authorities - Faversham in Swale, Chilham in Ashford and Folkestone in Shepway). The Council has worked closely with neighbouring authorities in addressing strategic housing needs and other cross-boundary issues. The Council intends to meet its housing need within the Thanet district.

3.5 The key driver of housing growth in Thanet has been the number of in-comers choosing to live in the district. Further in-migration will be needed to provide an adequate labour supply to deliver the economic strategy.

3.6 The Council's Housing Strategy seeks to create sustainable communities, recognising the need for Thanet's residents to have access to high quality housing which they can afford.

3.7 In particular it recognises the need for a greater emphasis on provision of family homes, that need for affordable housing outweighs supply, the importance of bringing empty property back into use to provide new homes, and the need to work with the private sector to drive up standards in the private rented sector. Its main objectives are to: -

- Deliver a range of homes to meet the local housing need which residents can afford;
- Make better use of the existing housing stock across all tenures and improve housing conditions;

- Enable vulnerable people to access good quality housing and to live independently;
- Provide an accessible housing options service for Thanet residents;
- Deliver housing in support of our regeneration and economic development objectives

3.8 Reflecting this, an imperative of the housing strategy of the Local Plan will be to facilitate delivery of the type and quality of homes that will meet the needs of settled and mixed communities including in particular those aspiring to take advantage of and generate new employment opportunities.

Amount of Housing

3.9 Housing provision is made for 17,140 additional homes over the 20 year period to 2031. This reflects forecasts based on an updated assessment of migration trend based population projections (2014) and the labour requirements supporting the Council's aspirations for economic and employment growth. The NPPF requires local authorities to be able to demonstrate that the sites in its housing land supply are deliverable. The Council is taking a "stepped" approach to delivering the housing target ie. a lower target is set for the first five years, with higher targets for the following 10 years to make good the total housing requirement for the Plan period. This is for two main reasons:

- There are significant infrastructure requirements that need to be delivered to support new development. If the Council were required to allocate more sites to cover average requirement for the first five-year period, this might undermine the delivery of that infrastructure, and therefore the wider Local Plan strategy; and
- Thanet has an emergent development market, but there is a real possibility that driving high levels of requirement in the early years might undermine the viability of some sites, or result in lowered viability, which again could affect the delivery of services and infrastructure, as well as affordable housing

3.10 Taking a "stepped approach" to meeting the housing target means that the Council can ensure that developments are supported by the necessary services and infrastructure, and reflects the expected trajectory of housing delivery from the strategic sites.

3.11 The Council is also seeking to work with the market to encourage higher rates of house-building and recently achieved accreditation to the Housing Business Ready Programme, run by the Housing & Finance Institute (HFI). This involvement of the Homes & Communities Agency (HCA) in development in the district, and their purchase of sites for development, is an indicator of commitment to delivery in the area. The Council has been demonstrating its commitment to the delivery of housing, both to meet local housing need and to support economic regeneration, by granting planning permission for residential development on sites proposed for housing allocations, and non-allocated sites.

Policy SP13 - Housing Provision

Provision is made for at least 17,140 additional homes in the period to 2031, with notional delivery across the period as indicated below. The Council will review the provisions of this policy as part of the wider Local Plan review set out in Policy SP03

Period	2011-16	2016-21	2021-26	2026-31
Additional Homes	1555 311pa	3000 600pa	6000 1200pa	6585 1317pa

Location of Housing

3.12 Thanet is a relatively small district surrounded on three sides by the coast. The three main coastal towns of Margate, Ramsgate and Broadstairs, and the central island development of Westwood form the main urban areas. Outside of the urban areas is open countryside including high quality farm land and seven rural settlements. Thanet's Green Wedges serve an important function by maintaining the physical separation between, and identity of, the Thanet towns and have been consistently protected from development by local plan policies. Thanet currently has an under provision of all 5 typologies of open space identified in the Open Space Strategy (2017). These limitations restrict the availability of sites that are appropriate for housing allocations. In considering appropriate site options to accommodate the housing target as required in the NPPF, the Council has also had to take into account a number of environmental issues including internationally and nationally important nature conservation designations, local wildlife designations, areas at risk of flooding and archaeology/designated heritage assets.

3.13 Identification and allocation of housing land has been informed by assessment of the sustainability of individual sites through the Strategic Housing Land Availability Assessment alongside the strategy for the planned location of homes whose key principles are to:-

- optimise use of capacity from sites in the built up areas of the coastal towns;
- focus provision at sites abutting those areas; and
- make modest provision at rural settlements to meet identified need for affordable homes and to provide locational choice at a scale compatible with their character and access to services and facilities.

3.14 A number of allocated sites are of strategic importance for delivering the quantity and type and variety of homes required to deliver the strategy. These are identified as Strategic sites. The distribution of allocated housing land is illustrated in Table 2.

3.15 Within the total housing provision shown below the Strategic Housing Land Availability Assessment suggests capacity to deliver some 3017 dwellings exists by way of sites which have already received planning permission. In addition some 1555 dwellings have already been delivered since the start of the Plan period.

Table 2 - Total Housing Distribution

Period	2011-2031
Strategic Sites (sites of 500+ dwellings)	
Westwood	1,450
Birchington on Sea	1,600
Westgate on Sea	2,000
Manston Green	(planning permission granted so not counted in allocations)
Land at Manston Court/Haine Road	1400
Land north and south of Shottendane Road	550
Other Housing Sites/Areas	1,691

Table 3 - Total Housing Supply

Local Plan requirement	17,140
Completions from 01/04/11 to 31/03/19	2704
Residual requirement	14,436
Total allocations supply	8691
Planning permissions supply	4713
Empty Homes 27 pa (27x12)	324
Windfall allowance 225x9*	2025

*Windfall allowance discounted for the first 3 years to avoid any potential double counting.

Area Specific Objectives

3.16 Reflecting the make-up of the housing stock and specific issues in different parts of Thanet, the Council has identified, and will seek to achieve, the following area based objectives. It will expect applications for residential development to demonstrate that full account has been taken of these.

Table 4 - Area Specific Objectives

Area	Area specific housing objectives
District wide	<p>Increase the proportion of houses (non flatted homes) within the overall dwelling stock. Safeguard and increase the stock of family homes.</p> <p>Increase the stock of affordable homes</p> <p>Safeguard and enhance the character and amenity of existing residential neighbourhoods.</p>
Westwood	<p>Transform the neighbourhood into a mixed business and residential community benefiting from mutual proximity, accessibility and supporting amenity infrastructure.</p> <p>Contribute a significant addition to the district's stock of non-flatted accommodation including family sized houses and of affordable homes.</p>
Coastal town centres	<p>Contribute to area regeneration objectives expressed in policy or supplementary guidance, and, where appropriate, in line with specific site development briefs.</p>
Cliftonville West & Margate	<p>Establish a mixed, inclusive and settled community through improvements to the quality and configuration of residential accommodation and its environment and diversity of tenure.</p> <p>Apply public sector intervention and finance to pump-prime private sector investment.</p>
King Street, Ramsgate	<p>Improve the visual appearance of the area and provide good quality housing that is affordable and well managed.</p>
Newington & Millmead	<p>Establish a mixed, inclusive and settled community through improvements to the quality and configuration of residential accommodation and to the local environment and diversity of tenure.</p>
Rural settlements	<p>Accommodate additional homes to provide locational choice at a scale compatible with the size and character of the settlement and in light of accessibility of services and community facilities.</p> <p>Increase the stock of affordable housing at a scale commensurate with any outstanding local need.</p>

Strategic Housing Site Allocations

3.17 The existing built up areas of the district will continue to deliver additional housing. However, a significant amount of greenfield housing land is required to meet the housing target. Assessment has revealed that some of the suitable and sustainably located greenfield sites identified are large and some are adjoining or in mutual proximity. These sites provide the opportunity to deliver development at a scale that will serve both to facilitate a step change in

delivering the type of homes required to meet need and secure the infrastructure required to support them. Such large and clustered sites have been identified as strategic housing allocations that will be of particular importance in delivering the Plan's housing objectives.

3.18 The geographical extent indicated for individual strategic site allocations represents the anticipated maximum land requirement. Proposals will be expected to consider, and where possible accommodate, notional maximum dwelling capacities indicated together with all other relevant policy requirements within a lower level of greenfield land take. This section identifies, and sets out policies for, housing sites of strategic significance to the Local Plan strategy.

3.19 The sites listed below are identified as Strategic Housing Sites. Applications to develop such sites shall be accompanied by a detailed development brief including an illustrative site masterplan featuring all elements of the proposal and indicating phasing of development and supporting infrastructure. Applications will be determined in light of the following site specific policies:

SP15 Manston Green
SP16 Birchington on Sea
SP17 Westgate on Sea
SP18 Westwood
SP19 Land fronting Nash and Haine Roads
SP20 Land at Manston Court/Haine Road
SP21 Land north and south of Shottendane Road

General Housing Policy Requirements

3.20 There are a number of policy requirements relating to residential development that will apply to all of the site specific policies and land allocated for housing. The following policy applies to all sites allocated in this Local Plan for residential development. NB There are other policies in the Local Plan that would also apply to new residential developments - the plan must be read as a whole.

3.21 One of the “transformational initiatives” identified in the Council’s Economic Growth Strategy (EGS)(November 2016) is “designing enterprise into communities”. This is particularly important in Thanet, where a significant proportion of jobs growth is expected in the SME and micro-business sector. As well as supporting working at home with good-quality broadband as provided in policies E02 and E03, the provision of active working space and networking opportunities for the self-employed and sub-contractors is seen as a means of enhancing this aspect of Thanet’s employment profile. This is the basis for seeking “community business space” within the strategic housing allocations. The intention is for community buildings to be provided which make provision in whole or in part for small, fully serviced and flexible spaces suitable for use by small businesses and sole traders to support business activity. This approach is also supported by Policy CM01, which makes provision for broadband in community facilities.

Policy SP14 - General Housing Policy

Proposals for residential development on sites allocated in this plan must:

- 1) Provide one electric car charging point for every 10 parking spaces provided in**

- communal areas, or one charging point to be provided for every new dwelling with parking provision within its curtilage;
- 2) Retain existing boundary features where possible;
 - 3) Provide a connection to the sewerage system at the nearest point of adequate capacity, in collaboration with the service provider;
 - 4) Allow future access to the existing water supply infrastructure for maintenance and upsizing purposes;
 - 5) Provide for the installation of digital infrastructure;
 - 6) Provide for the installation of Fibre to the Home (FTTH);
 - 7) Contribute towards the Strategic Access Management and Monitoring Plan to meet the requirements of SP29.

Additionally, all proposals for 10 or more units must:

- 1) Provide an appropriate mix of dwellings (including care and supported housing) to meet the requirements of Policy SP22;
- 2) Include an element of self-build properties where there is a demonstrable demand from persons included in the Council's self-build register;
- 3) Provide affordable housing to meet the requirements of Policy SP23;
- 4) Provide accessible homes to meet the requirements of Policy QD05; and
- 5) Include an assessment of the development's effect on 'functional land' that may be used as a roosting or feeding habitat by wintering and breeding birds identified by the Thanet Coast and Sandwich Bay Special Protection Area citation, and provide mitigation where necessary. All development must comply with policies relating to the Protection of International and European Designated Sites and associated Mitigation Strategy.

In addition to the timely delivery of education, health and transport infrastructure, proposals for the development of strategic sites under Policies SP15 – SP21 must include an assessment of the need for community facilities as part of the masterplanning process. Where required to create sustainable, mixed-use communities the Council will expect such facilities to include community business space having regard to the Economic Growth Strategy.

A Heritage Impact Assessment will be required at the masterplanning stage for the strategic sites to assess any cumulative impacts of the site allocations and highways infrastructure on heritage assets and archaeological resources.

Strategic Site Policies

Policy SP15 - Strategic Housing Sites - Manston Green

Land is allocated for up to 785 new dwellings with an approximate average density of 35 dwellings per hectare (net) at land known as Manston Green. Proposals will be judged and permitted only in accordance with a masterplan for the whole site which should include:

- 1) a minimum of 6.3 ha of open space;
- 2) a fully serviced area of 2.05 ha (to be provided at the cost of the developer) to accommodate a new two-form entry primary school and its construction in a location

- and in a form agreed with the County Council;
- 3) a range of community facilities in accordance with Policy SP14, including small scale convenience retail provision to accessibly serve the day-to-day needs of the residents;
 - 4) linkages to new and existing public transport infrastructure, including bus and rail services;
 - 5) improvements to the roundabout at the junction with A256 Haine Road/B2050 Manston Road and approach roads; and
 - 6) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47.

Masterplanning will be informed by and address the following:

- 1) built development will be focused at the northern part of the site;
- 2) a pre-design archaeological assessment taking account the presence of any significant and sensitive remains;
- 3) the preservation of the setting of listed buildings at Ozengell;
- 4) the integration of development and landscaping to enable a soft edge between the site and open countryside and minimise impact on long views southwards toward Pegwell Bay;
- 5) the provision of sustainable urban drainage taking account of the site's location in the Groundwater Source Protection Zone;
- 6) the capacity of any utility services and infrastructure, and any need and provision for improved or additional infrastructure (as may be advised or reasonably required by service providers).

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) assess the impact of development on the local road network;
- 2) identify measures to promote multi-modal access, including footway and cycleway connections and an extended bus service accessible to the residential development and rail linkages.

3.22 Westgate-on-Sea and Birchington, along with Garlinge and Westbrook form part of the continuous urban coastal belt of Thanet, located to the west of Margate.

3.23 Westgate comprises, in the main, high quality residential environments and was originally developed as a seaside resort for the upper and middle classes. It has a small commercial centre which serves the surrounding residential community, and a train station with routes to Margate and the rest of Thanet, as well as Faversham and London. Between Westgate and Margate are the smaller suburbs of Westbrook and Garlinge, both of which also have small commercial centres that serve the local community.

3.24 Birchington is a large village with an existing population of approximately 10,100. It has a good sized and well-functioning commercial centre which serves the surrounding residential community. The village has a train station with routes to Margate, and the rest of Thanet as well as Faversham and London, with regular bus services running to Canterbury. Birchington Square lies on the main route to Margate for those travelling into the district from the west, and as such at peak times suffer from traffic congestion. This has also resulted in the area suffering from

higher levels of air pollution.

3.25 These settlements are considered to be sustainable locations for new development, with good access to local services, including schools and other community facilities, as well as convenient transport options to the rest of Thanet and locations outside of the district. Developers will need to work with relevant health care providers to ensure adequate provision is made in these locations.

Policy SP16 - Strategic Housing Site - Birchington

Land is allocated for up to 1,600 new dwellings with an approximate average density of 35 dwellings per hectare net at Birchington. Proposals will be judged and permitted only in accordance with a masterplan for the whole site which should include:

- 1) a minimum of 12.8 ha of open space;
- 2) a fully serviced area of 2.05 ha (to be provided at the cost of the developer) to accommodate a new two-form entry primary school and its construction in a location and in a form agreed with the County Council;
- 3) a range of community facilities in accordance with Policy SP14, including small scale convenience retail provision to serve the day-to-day needs of the residents;
- 4) provision for the expansion of medical services at the Birchington Medical Centre to cater for the additional needs created by the development;
- 5) linkages to new and existing public transport infrastructure, including bus and rail services;
- 6) a new link road to serve the development and extending from Minnis Road and the A28, and A28 to Manston Road including new junctions on A28/Minnis Road and Acol Hill/ Manston Road;
- 7) access on to Park Lane and a footway connection to the entire frontage to connect to the existing footway in Park Lane near to the access with Brunswick Road; and
- 8) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47.

Masterplanning will be informed by and address the following:

- 1) measures to preserve the listed buildings Gore End Barn and Upper Gore End Farmhouse and their setting, including the setting of Quex Park;
- 2) measures to integrate the development within the landscape to enable a soft edge between the site and the open countryside;
- 3) pre-design archaeological evaluation;
- 4) noise mitigation for any development near the northern edge of the site which is adjacent to the railway line;
- 5) The capacity of any utility services and infrastructure and any need (and provision of) improved or additional infrastructure (as may be advised or reasonably required by service providers).

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) assess the impact of development on the local road network;
- 2) identify measures to promote multi-modal access, including footway and cycleway connections and an extended bus service accessible to the residential development and rail linkages.

Policy SP17 - Strategic Housing Site – Westgate-on-Sea

Land is allocated for up to 2,000 new dwellings with an approximate average density of 35 dwellings per hectare (net) at land to the east and west of Minster Road, Westgate-on-Sea.

Proposals will be judged and permitted only in accordance with masterplan for the whole site which should include:

- 1) a minimum of 16 ha of open space to include functional green space(s) between existing urban edge and new development;
- 2) a fully serviced area of 2.05 ha (to be provided at the cost of the developer) to accommodate a new two-form entry primary school, and its construction in a location and in a form agreed with the County Council;
- 3) a range of community facilities in accordance with Policy SP14, including small scale convenience retail provision to serve the day-to-day needs of the residents;
- 4) provision of serviced 1 ha of land suitable for a new medical centre to cater for the additional needs created by the development;
- 5) linkages to new and existing public transport infrastructure, including bus and rail services;
- 6) vehicular access from Minster Road and Dent-de-Lion Road;
- 7) the provision of a link road between Dent de Lion Road and Minster Road (including necessary junctions) and the provision of a new signal controlled junction at High Street Garlinge/A28;
- 8) improvements at Dent-de-Lion Road/High Street, Garlinge junction;
- 9) an assessment to identify necessary measures to manage on-street car parking in Dent-de-Lion Road and Garlinge High Street, between the site and the A28, and potential methods of delivery;
- 10) the upgrade of Shottendane Road to Local Distributor standard; and
- 11) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47.

Masterplanning will be informed by and address

- 1) an archaeological evaluation;
- 2) the preservation and/or enhancement of the setting of scheduled ancient monuments and the listed Dent de Lion Gateway, and the measures to be undertaken;
- 3) the capacity of any utility services and infrastructure and any need (and provision of) improved or additional infrastructure (as may be advised or reasonably required by service providers);
- 4) appropriate arrangements for surface water management/sustainable drainage schemes in line with Margate Surface Water Management Plan,
- 5) Landscape and Visual Impact Assessment to address any visual impact on views to and

from the adjacent Green Wedge and protecting wide open landscapes and strategic views; and

- 6) the integration of development and landscaping to take account of public rights of way and the provision of a soft edge between the site and open countryside.**

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) assess the impact of development on the local road network and address any implications for on-street car parking arrangements in Dent-de-Lion Road and Garlinge High Street, between the site and the A28; and**
- 2) identify measures to promote multi-modal access, including footway and cycleway connections, and an extended bus service accessible to the residential development and rail linkages.**

3.26 Westwood was originally allocated as a new town centre in the 2006 Thanet Local Plan and is a significant area for retail and commercial developments. The land fronting Nash and Haine Roads as identified on the Policies Map (Policy SP19 refers) already has the benefit of various planning permissions. Outline planning permission was granted in 2008 for a mixed use urban extension comprising residential use (total of 1020 units), community facilities, commercial and employment uses and associated infrastructure including a new link road and associated alterations to existing junctions and new access arrangements. Development is well advanced with most phases of the development having been completed. The delivery of the proposed school and medical centre have been negotiated through various stages of the planning application process, and remaining phases 3c, 4 and 5 (providing a total of 770 residential units) of the development are expected to be completed within this local plan period.

Applications for strategic sites at Westwood identified in this plan should have regard to previous planning permissions to ensure a cohesive and comprehensive delivery of infrastructure and community facilities is provided to serve the existing and wider allocations.

Policy SP18 – Strategic Housing Site - Westwood

Land is allocated for up to 1,450 new dwellings with an approximate average density of 40 dwellings per hectare (net) at Westwood.

Proposals will be judged and permitted only in accordance with a masterplan for the whole site which should include:

- 1) a minimum of 11 ha of open space;**
- 2) a fully serviced area of 2.05ha (to be provided at the cost of the developer) to accommodate a new two-form entry primary school and its construction in a location and in a form agreed with the County Council;**
- 3) a range of community facilities in accordance with Policy SP14, including small scale convenience retail provision to serve the day-to-day needs of the residents;**
- 4) linkages to new and existing public transport; infrastructure, including bus and rail services;**
- 5) highway improvements including widening of Nash Road and links to Nash Road and Manston Road, to local distributor standard between the southern extent of the site**

- and Star Lane; and
- 6) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47.

Masterplanning will be informed by and address:

- 1) pre-design archaeological assessment;
- 2) the preservation of the setting of listed buildings at Nash Court Farm;
- 3) the capacity of any utility services and infrastructure and the provision for any necessary improvements or additional infrastructure (as may be advised or reasonably required by service providers);
- 4) arrangements for surface water management in line with the Margate Surface Water Management Plan;
- 5) a layout that responds to the existence of overhead power lines;
- 6) measures to integrate the development within the landscape to enable a soft edge between the site and the open countryside.

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) assess the impact of development on the local road network;
- 2) identify measures to promote multi-modal access, including footway and cycleway connections, an extended bus service accessible to the residential development and rail linkages.

Policy SP19 - Strategic Housing Site - Land fronting Nash and Haine Roads

Land is allocated for up to 1020 new dwellings at land fronting Nash and Haine Roads.

Proposals will be judged and permitted only in accordance with a masterplan for the whole site which shall include:

- 1) a minimum of 1.75 ha as local open space (including an equipped play area and casual/informal play space) together with an area of usable amenity space as an integral part of the design of the development. Where feasible, the area of local open space should be larger than the minimum indicated above;
- 2) a fully serviced area of 2.05 ha (to be provided at the cost of the developer) for a new two form entry school as an integral part of the development;
- 3) a minimum of 2 ha to enable provision of a medical centre and provide a community assembly facility.

Masterplanning will be informed by and address the following:

- 1) landscaped buffer zones adjacent to any new road infrastructure and along the boundaries to adjacent to open farmland;
- 2) provision and maintenance of appropriate equipment for continuous monitoring of local air quality to inform the Council's ongoing air quality review and assessment programme.

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Applications for successive phases of development will have regard to the need to integrate as far as feasible with any approved masterplans relating to neighbouring areas addressed in this policy and with the Thanet Transport Strategy.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) Provide for any highway improvements identified as necessary in a traffic assessment and the development masterplan. Individual phases of development will be required to make provision pro-rata towards such improvements;
- 2) incorporate and provide for connections and improvements to footpath and cycle networks facilitating walking, cycling and public transport to, from and within the site, including provision of or contribution to improvements to public transport services.

Policy SP20 -Strategic Housing Site - Land at Manston Court Road/Haine Road

Land is allocated for a mixed use development, comprising up to 1400 new dwellings with an approximate average density of 35 dwellings per hectare (net), and leisure uses at land at Manston Court Road/Haine Road

Proposals will be judged and permitted only in accordance with a masterplan for the whole site which should include:

- 1) A minimum of 11.24ha of open space;
- 2) Provision on site of a serviced site of no less than 8ha for a 6-form entry secondary school and its construction in a location and in a form agreed with the County Council;
- 3) linkages to new and existing public transport infrastructure, including bus and rail services;
- 4) the provision of an internal spine road laid out in accordance with the requirements of the draft Transport Strategy
- 5) junction improvement at A256 Haine Road/New Haine Road and Star Lane/Haine Road (including a dual lane link between them) and;
- 6) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47

Masterplaning will be informed by and address:

- 1) pre-design archaeological evaluation;
- 2) the capacity of any utility services and infrastructure and any need and provision for improved or additional infrastructure (as may be advised or reasonably required by service providers).

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) assess the impact of development on the local road network
- 2) identify measures to promote multi-modal access, including footway and cycleway connections, an extended bus service accessible to the residential development and rail linkages.

Policy SP21 – Strategic Housing Site – Land north and south of Shottendane Road

Land is allocated for up to 300 dwellings at land north of Shottendane Road, and up to 250 dwellings at land south of Shottendane Road, with an approximate average density of 35 dwellings per hectare net.

Proposals will be judged and permitted only in accordance with a Masterplan for the whole site which should include:

- 1) a minimum of 4.4 ha of open space – this may be spread over both sites but must be readily accessible to both sites;
- 2) linkages to new and existing public transport infrastructure, including bus and rail services;
- 3) a local distributor link road between Shottendane Road and Manston Road, including new roundabouts on Shottendane Road and Manston Road and a new junction with Hartsdown Road;
- 4) the reconfiguration of the Coffin House Corner signal controlled junction and the Manston Road and Shottendane Road junction;
- 5) Provision for the retention and/or upgrading of designated footpath TM14;
- 6) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47.

Masterplanning will be informed by and address:

- 1) pedestrian and cycle access between the two sites;
- 2) appropriate landscape treatment in order to provide an appropriate transition between the development and the adjacent open countryside;
- 3) A Heritage Impact Assessment to assess effects on St Johns Cemetery and sites/memorials within it and consideration of the setting of Shottendane Farm House;
- 4) an assessment of potential implications of policies CSW16 and DM8 of the Kent Minerals and Waste Local Plan (or subsequent revision) and the need (if any) to mitigate any potential impacts on waste management capacity;
- 5) the capacity of any utility services and infrastructure and any need (and provision of) improved or additional infrastructure (as may be advised or reasonably required by service providers).

All development proposals must be planned and implemented in a coordinated manner and accompanied by an infrastructure delivery and phasing plan.

Proposals will be accompanied by a Transport Assessment which shall:

- 1) assess the impact of development on the local road network;

- 2) identify measures to promote multi-modal access, including footway and cycleway connections, an extended bus service accessible to the residential development and rail linkages;**

Type and size of dwellings

3.27 The Strategic Housing Market Assessment 2016 (SHMA) identified as a critical challenge tackling the impact of an ageing population, and forecast loss of younger age groups with the resultant potential loss of working age population.

3.28 Subsequent economic and population forecasts based on the economic aspirations and housing provisions in this Local Plan also predict for Thanet an increase in the ageing population (especially those above retirement age). However, they do also predict that there will be an increase in younger age groups.

3.29 Both the SHMA and the subsequent forecasts referred to above show that single person households are expected to increase in number. The SHMA notes however that there is a greater supply of smaller units than of family homes and houses, and that this demographic trend should not dictate policy. Indeed it notes that in aiming to deliver substantive regeneration and economic strategies the housing role in turning round economic performance is both to provide appropriate and attractive housing for higher earners and facilitate retention of local young families.

3.30 The SHMA notes that the housing stock is characterised by a combination of dense provision, overprovision of smaller flats and flatted buildings, and a shortage of larger homes of three bedrooms and more. It states that it is important that future development policy prioritises a rebalancing of stock to incentivise the provision of family homes and control the expansion of "flating" of larger homes, while at the same time recognising solid demand for smaller homes including from young single people and increasing numbers of older single people.

3.31 Cliftonville West and (part of) Margate Central wards have had particular issues relating to the availability of cheap properties that have been converted into small residential units and resultant transient community. Due to the severity of the issues in these areas, evidence is available to support planning policies to resist the conversion of buildings to 1-bedroom flats, and provide more family housing. These policies are included in the Cliftonville Development Plan Document (adopted 2010)

3.32 In assessing housing needs the SHMA considers information about aspirations, economic development plans for the sub-region, opportunities to attract mature working households that new rail links will bring and priority need for affordable housing. It recommends broad proportions of the sizes and types of market and affordable homes that should be provided. This is shown in tables 5 and 6.

3.33 In applying Policy SP22, the Council will have regard to the relevant conclusions of the Strategic Housing Market Assessment (2016) or any relevant evidence serving to refresh or update it. On sites of 10 units or less the Council will take a flexible approach to the application of the SHMA recommendations, taking into account the nature and location of the site.

Table 5 - Mix of market housing by dwelling type (built form)

	Detached	Semi-detached	Terraced	Flat
Thanet	25-30%	25-30%	20-25%	20-25%

The SHMA recommends the following sizes of dwellings needed for market housing (including a higher requirement for 2 bedroom homes, reflecting the result of a growing older population and younger households living in smaller households).

- 1-bed properties: 10-15%
- 2-bed properties: 40-45%
- 3-bed properties: 30-35%
- 4-bed properties: 10-15%

Table 6 - Mix of affordable housing by dwelling type (built form)

	Detached	Semi-detached	Terraced	Flat
Thanet	0-5%	25-30%	20-25%	45-50%

The SHMA recommends the following sizes of dwellings needed for affordable housing

- 1-bed properties: 35-40%
- 2-bed properties: 30-35%
- 3-bed properties: 20-25%
- 4-bed properties: 5-10%

3.34 Previous dwelling completions in Thanet have included a large share of flatted accommodation. Consequently, in line with the SHMA recommendations it is important to increase the proportion of houses in the overall stock. The SHMA recommends a mix of 20-25% flats and 75-80% houses for market housing, and 45-50% flats and 50-55% houses for affordable housing. Accordingly proposals will be expected to deliver at least the proportion of houses (as opposed to flats) in line with Policy SP22. It is recognised that in some instances there may be reasons such as configuration of buildings contributing to townscape quality why only flatted accommodation will be feasible. Schemes proposing a higher proportion of flats will need to be accompanied by a supporting justification.

Policy SP22 - Type and Size of Dwellings

Proposals for housing development will be expected to provide an appropriate mix of market and affordable housing types and sizes having regard to the SHMA recommendations as may be reviewed or superseded.

The Council will encourage proposals for residential development to incorporate a higher

ratio of houses to flats (as recommended in the SHMA as may be reviewed or superseded). Proposals for developments incorporating a higher proportion of flats will need specific justification.

Proposals to convert properties currently used as flats to use as single family or single household accommodation will be permitted where a satisfactory standard of accommodation can be provided.

Development proposals involving the net loss of single family dwelling houses will only be permitted where the subdivision or redevelopment of the site continues to provide accommodation suitable for occupation by families.

Providing affordable homes

3.35 Affordable housing is defined as social rented, affordable rented, intermediate housing, provided to eligible households whose needs are not met by the market. The Strategic Housing Market Assessment's (SHMA) analysis is that tackling the backlog of need is an enormous task. The SHMA also sets out the requirement for a proportion of starter homes (homes for first time buyers under the age of 40 at a discount of at least 20% below the open market value) to be delivered on all suitable reasonably-sized housing developments.

3.36 Through its functions as housing and planning authority the Council will aim to maximise the number of decent affordable homes that can viably be delivered alongside market homes in order to meet need. Negotiating elements of affordable housing in new schemes will contribute valuably to meeting local need.

3.37 Reflecting economic viability considerations in general the Council will negotiate for an element of 30% affordable housing in residential development

3.38 In applying the following policy, site specific considerations will be taken into account in relation to the element of affordable housing that will be expected. The presumption is that the affordable element will be delivered on the application site, unless robust justification exists for provision on an alternative site in the developer's ownership and control, or for a financial contribution in lieu of on-site provision which will help to deliver strategic housing objectives. It is accepted that on sites comprising a total of 10 dwellings or less and which have a maximum combined floorspace of no more than 1,000 square meters, a financial contribution should not be sought.

3.39 Developers will be required to demonstrate how any affordable housing will be made available to households unable to obtain adequate housing through the private market and will be expected to engage with registered providers. (The Council can provide a list of provider partners). This may be secured by entering into a planning agreement. The developer will be required to demonstrate that enjoyment of the affordable housing as such can be guaranteed for successive as well as initial occupiers for the foreseeable future. However, eligibility of owners to acquire/ progress to full ownership is acknowledged as an exception.

Policy SP23 - Affordable Housing

Residential development schemes for more than 10 dwelling units, including mixed use developments incorporating residential and developments with a combined gross floor

area of more than 1,000 square meters shall be required to provide 30% of the dwellings as affordable housing.

The affordable housing shall be provided in proportions set out in the Strategic Housing Market Assessment or successive documents.

The above requirements will only be reduced if meeting them would demonstrably make the proposed development unviable.

4-Environment Strategy

Protecting the Countryside

4.1 The National Planning Policy Framework (NPPF) states that local plans should take account of the roles and character of different areas, promoting the vitality of our main urban areas and recognising the intrinsic character and beauty of the countryside.

4.2 Thanet's open countryside is particularly vulnerable to development because of its limited extent, the openness and flatness of the rural landscape and the proximity of the towns. Thanet's countryside provides important landscapes that contribute to its sense of place, as well as making Thanet an attractive place that people want to come to. Much of the countryside is classified as 'best and most versatile agricultural land'. The countryside also supports a variety of habitats and species, particularly a number of important species of farmland birds which have declined in numbers over the last few decades.

4.3 There is a presumption against development in the countryside as the sites allocated in this plan meet the development needs of the district. The Council has assessed all of the sites put forward, and some have been allocated in rural settlements where this has been considered appropriate to meet the needs of sustainable development

4.4 The Council considers that it is essential to protect the countryside through planning policy in view of its vulnerability to sporadic forms of development and will locate all but essentially rural development in the Thanet towns. The only exception to this will be proposals for development that meet the criteria set out in paragraph 55 of the NPPF:

- The essential need for a rural worker to live permanently at or near their place of work in the countryside; or
- Where such development would represent the optimal viable use of a heritage asset or would be appropriate enabling development to secure the future of heritage assets; or
- Where the development would re-use redundant or disused buildings and lead to an enhancement to the immediate setting; or
- The exceptional quality or innovative nature of the design of the dwelling.

Such a design should:

- Be truly outstanding or innovative, helping to raise standards of design more generally in rural areas
- Reflect the highest standards in architecture
- Significantly enhance its immediate setting; and
- Be sensitive to the defining characteristics of the local area

The following policy seeks to achieve the objective of safeguarding the geological and scenic value of the coast and countryside.

Policy SP24 - Development in the Countryside

Development on non-allocated sites in the countryside will be permitted for either:

- 1) the growth and expansion of an existing rural business;**
- 2) the development and diversification of agricultural and other land based rural businesses;**
- 3) rural tourism and leisure development;**
- 4) the retention and/or development of accessible local services and community facilities;**
or
- 5) the redevelopment of a brownfield site for a use that is compatible with its countryside setting and its surroundings.**

Isolated homes sites in the countryside will not be permitted unless they fall within one of the exceptions identified in the National Planning Policy Framework.

All development proposals to which this policy applies should be of a form, scale and size which is compatible with, and respects the character of, the local area and the surrounding countryside and its defining characteristics. Any environmental impact should be avoided or appropriately mitigated.

Green Wedges

4.5 The coastal towns of Thanet are separated by three particularly important areas of open countryside which are known as the Green Wedges indicated on the policies map.

4.6 The Green Wedges are significant in shaping the character of Thanet which has historically been a 'horseshoe' of built development wrapping around the coast. The Green Wedges provide a clear visual break when passing between the towns, giving a recognised structure and identity to Thanet's settlements. The Green Wedges are distinct from other types of open space as they provide a link between the open countryside and land which penetrates into the urban areas. The Green Wedges also make a valuable contribution to green infrastructure for the District.

4.7 The three Green Wedges differ in size and character. The largest is the one that separates Margate and Broadstairs. Substantial areas of this Green Wedge consist of high quality agricultural land in large open fields without fences or hedgerows. Other parts have isolated belts of woodland. The other two Green Wedges which separate Birchington and Westgate, and Broadstairs and Ramsgate are considerably smaller but perform a very significant function and, due to their limited extent are also potentially more vulnerable to development pressures.

4.8 There is very limited built development within the Green Wedges. The areas have level or gently undulating landform and generally sparse vegetation. The public perception of space, openness and separation is largely gained from roads and footpaths that run through or alongside the Green Wedges in undeveloped frontages. These factors allow many extensive and uninterrupted views across open countryside, enabling people to find the recreational, scenic or amenity resources they require without having to travel long distances. This is important as it adds to the quality of life and well-being perceived by people in the community.

4.9 The aesthetics of the Green Wedges are varied, and they are not always accessible to the public. There is an opportunity to enhance the Green Wedges by creating and enhancing wildlife habitats, for example working with landowners to encourage farmland birds, and to make the areas more accessible, potentially for recreation use. This may require changing farming activities. Funding may be available for environmental land management through Natural England's Stewardship Schemes.

4.10 Local Plan policies have historically been used to prevent urban sprawl, maintain the separation of the Thanet towns and prevent their coalescence, preserving their unique identities. The Green Wedge policy has been consistently and strongly supported at appeals. Inspectors' comments in appeal decisions, and the Inspector's Report to the Thanet Local Plan Inquiry, highlight the significance of the open countryside between the Thanet Towns, in providing visual relief in a highly urbanised area.

4.11 Some areas of the Green Wedges are vulnerable to development pressures, and some sites within them have been suggested as housing allocations. The Council has assessed the sites put forward in the Green Wedges and found that the allocation of some sites proposed in the Green Wedges would cause less harm than others. However, although allowing some small scale development may not significantly diminish the Green Wedge, the cumulative impact of several small scale developments could be of detriment to the Green Wedges and cause new development pressures where there are currently none. It could also set a precedent of releasing Green Wedge sites and result in further development within the Green Wedges which would diminish their functions.

4.12 The Council considers the Green Wedges still perform a highly significant function which overrides the need for development, and should continue to be protected through planning policy and meet the strategic objective of retaining the separation between Thanet's towns and villages with the following policy.

4.13 Policy SP25 sets out the policy approach in the Green Wedges. The Policy recognises that there may be circumstances where it is essential for development to be located in the Green Wedges, where there are no other suitable, available sites. This may include development to support agriculture, where agricultural units are located wholly or largely within the Green Wedges; or schemes to provide essential infrastructure. Applicants will need to demonstrate that it is essential for the proposed development to be within the Green Wedges, and in the case of agricultural development, to demonstrate that the development is required as part of the business plan for the unit.

Policy SP25 - Safeguarding the Identity of Thanet's Settlements

Within the Green Wedges new development (including changes of use) will only be permitted if it can be demonstrated that the development is

1) not detrimental or contrary to the following aims to:

- **Safeguard areas of open countryside in order to maintain physical separation and avoid coalescence of the towns, retaining their individual character and distinctiveness (for example by the expansion of isolated groups of houses or other development).**

- **Conserve, protect and enhance the essentially rural and unspoilt character, and distinctive landscape qualities of the countryside that separates the urban areas, for the enjoyment and amenity of those living in, and visiting, Thanet.**
- **Increase access and usability without compromising the integrity of the Green Wedges.**

Or is

2) essential to be located within the Green Wedges.

Open sports and recreational uses will be permitted subject to there being no overriding conflict with other policies, the wider objectives of this plan and the stated aims of this policy. If granted, any associated built development must be kept to a minimum, essential, small in scale and be necessary to support the open use. It should also be well related to adjacent urban edge and sensitively located to retain openness of the area.

Proposals for policy compliant development that include measures that will create or enhance wildlife habitats and biodiversity within the Green Wedges, or will improve the quality of the Green Wedges by providing high quality public amenity space will be supported.

Views and Landscapes

4.14 The National Planning Policy Framework (NPPF) states that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes.

4.15 Thanet has historically been recognised for its distinctive wide, simple and unrestricted views and dramatic chalk cliffs along parts of its coastline. The Thanet Coast is the longest continuous stretch of coastal chalk in the UK and is one of the reasons for its designation as Special Area of Conservation (SAC). Useful resources and guidance for the interpretation of landscape are the Natural England National Character Areas, the Kent Historic Landscape Characterisation (2001) which has identified the broad historic character of the landscape of Kent, and the Thanet Landscape Character Assessment. In addition KCC commissioned a Seascape Character Assessment for the Dover Strait (2015) which identifies the character areas associated with the Dover Strait from North Foreland to Dungeness.

4.16 Thanet has a distinct landscape area defined by the Wantsum Channel which gave Thanet its "island" identity by separating it from the mainland. The Channel silted up around 1,000 years ago, and is characterised by former shoreline and port settlements and irregular fields bounded by roads, tracks and paths. The Wantsum has a history of reclamation and usage stretching back to at least the 12th and 13th centuries in connection with the considerable ecclesiastical estates in the region.

4.17 The contribution Thanet's landscapes make to Thanet's sense of place and island characteristics is very strong, as well as providing economic benefits in making the district an attractive place to settle and visit. Tourism and recreation uses compatible with Thanet's historic landscapes would be encouraged. Development would be expected to respect the diverse landscape characteristics of the countryside and coast. The character of the landscape within Thanet's countryside is varied, ranging from the distinctive sweep of Pegwell Bay, the flood plains of the River Stour and former Wantsum Channel, the open slopes of the former Wantsum

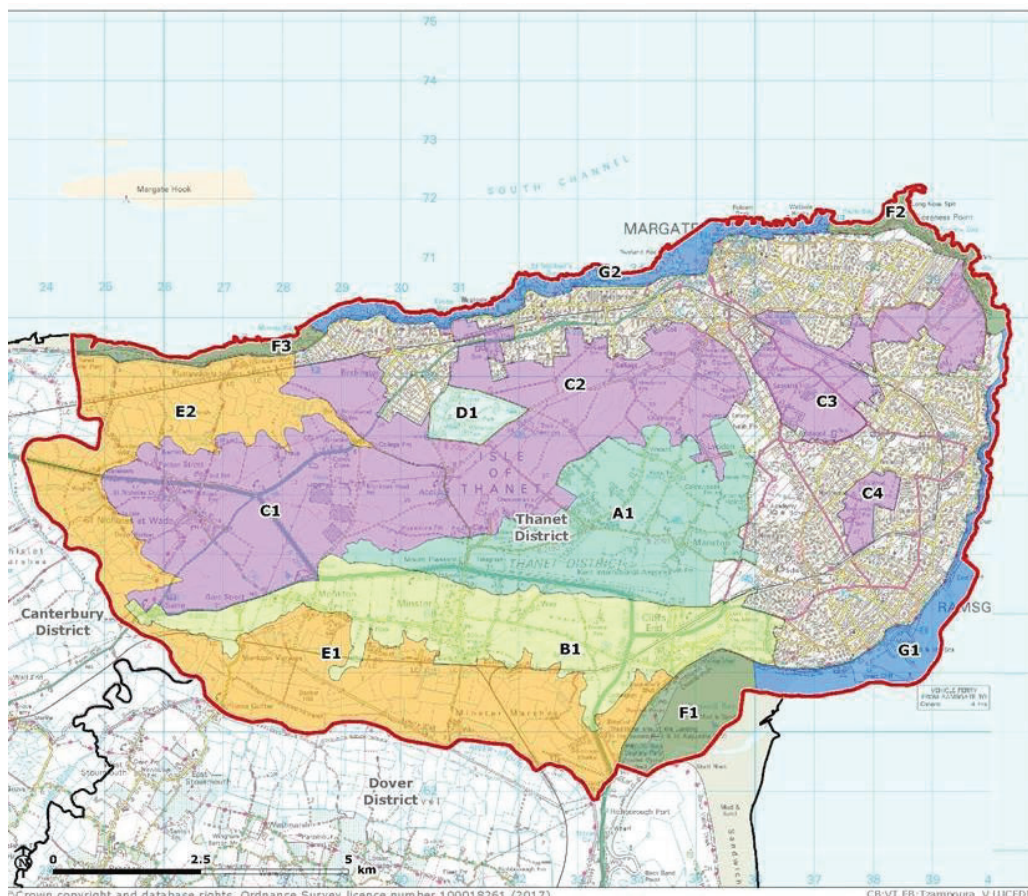
Channel, the level to undulating Central Chalk Plateau, the wooded parkland at Quex and the urban coast. Landscape does not stop at administrative boundaries and two of the broad areas associated with Pegwell Bay and the Wantsum, continue into neighbouring districts of Dover and Canterbury. Developers may be required to submit a Landscape and Visual Impact Assessment (LVIA) with planning applications that are likely to have a significant impact on the landscape. The LVIA should identify the nature, scale and magnitude of landscape and visual effects, and also help to identify ways of avoiding, reducing and mitigating any adverse effects. The Landscape Institute provides guidance on carrying out such an assessment.

4.18 Thanet sits within the Natural England's National Character Area (NCA) number 113 the North Kent Plain, which sits between the outer Thames Estuary and the Kent Downs. This describes Thanet as a 'discrete and distinct area' within this NCA, characterised by its unity of land use. The Thanet Landscape Character Assessment (2017) refines this character area at the local level by identifying 7 broad landscape character types - chalk plateau, chalk slopes, undulating chalk farmland, parkland and estates, marshes, undeveloped coast and developed coast. These are further refined into 13 landscape character areas as set out below in table 7. The assessment sets out the key characteristics which are evaluated through key sensitivities and qualities leading to a landscape strategy setting out guidelines for each character area. These guidelines should be taken into consideration when considering development proposals within these areas. It is the Council's intention to adopt the Landscape Character Assessment as a Supplementary Planning Document which will provide a framework for future development when drawing up masterplans particularly for the strategic sites.

Table 7 - Landscape Character Areas

Landscape Character Type	Landscape Character Area
A: Chalk Plateau	A1: Manston Chalk Plateau
B: Chalk Slopes	B1: Wantsum North Slopes
C: Undulating Chalk Farmland	C1: St Nicholas-at-Wade Undulating Farmland
	C2: Central Thanet Undulating Farmland
	C3: St Peter's Undulating Farmland
	C4: Newlands Farm
D: Parkland and Estates	D1: Quex Park
E: Marshes	E1: Stour Marshes
	E2: Wade Marshes
F: Undeveloped Coast	F1: Pegwell Bay
	F2: Foreness Point and North Foreness
G: Developed Coast	G1: Ramsgate and Broadstairs Cliffs
	G2: North Thanet Coast

Map 2 - Landscape Character Areas



The Chalk Plateau

4.19 The central part of the district is characterised by A1: the Manston Chalk Plateau, a generally flat or gently undulating landscape, with extensive, unenclosed fields under intensive arable cultivation. This open landscape is fragmented by the location of large scale developments such as the former airport, Manston Business Park and a sporadic settlement pattern to the north of the airport. The character of this area is also defined by the proximity of the edges of the urban areas. This character area contains the highest point on the island at Telegraph Hill. The elevated plateau results in long distance panoramic views to the south over Minster Marshes and across Pegwell Bay and, in the west, across the Wantsum. The elevated central chalk plateau also forms a skyline in many views back from lower landscapes in Thanet, including the coast and marshlands.

The Chalk Slopes

4.20 This area largely comprises the distinctive and often quite steep hill slopes leading down from the Central Chalk Plateau to the former Wantsum Channel - B1: Wantsum Northern Slopes. The landscape is very open with few features and the former shoreline is more distinct in some places than in others, with the variation in the contour pattern. From the upper slopes it affords extensive views across the whole of the former Wantsum Channel to the slopes on the

opposite banks and in many places to the sea. The former shoreline is more distinct in some places than in others, with the variation in the contour pattern. However, it also provides the unique setting of the former channel side villages of Minster, Monkton, Sarre and St Nicholas, and the smaller, originally farm based, settlements of Shuart, Gore Street and Potten Street. These elements provide important visual evidence of the growth of human settlement, agriculture and commerce in the area.

4.21 The openness of this landscape provides wide and long views of the former Wantsum Channel area and Pegwell Bay. The area also possesses a large number of archaeological sites (including scheduled ancient monuments); numerous listed buildings (including Minster Abbey, the churches at Minster, Monkton and St Nicholas, and Sarre Mill); and the historical landing sites of St Augustine and the Saxons, Hengist and Horsa.

Undulating Chalk Farmland

4.22 The undulating chalk farmland is a particular landscape feature in Thanet and consists of four landscape character areas: C1: St Nicholas-at-Wade Undulating Farmland, C2: Central Thanet Undulating Farmland; C3: St Peter's Undulating Farmland; and C4: Newlands Farm. Some of these character areas are important for their long distant views to the marshes and sea while in others the agricultural land performs a settlement separation function. These areas of high quality agricultural land are of value for farmland and roosting coastal birds. The openness and undeveloped character of the farmland contributes to the essentially rural character and relatively dark skies.

Parks and Estates

4.23 Quex Park (D1) is unique within the Thanet context, comprising a formal and extensive wooded parkland and amenity landscape within an otherwise open intensively farmed landscape. It possesses a formal landscape structure and gardens that act as an effective setting to Quex House Grade II listed. The parkland is intensively cultivated between the tree belts, with limited grazing pasture remaining. Two important historic features of the Park are the Grade II listed Waterloo Tower and a round castellated brick tower to the north of the main House.

Marshes

4.24 The two marshland landscapes of E1: Stour Marshes and E2: Wade Marshes formerly separated the Isle of Thanet from the mainland and formed part of the former Wantsum channel. The former channel stretches from Reculver (in Canterbury District) to Richborough (in Dover district) marked by the remains of Roman forts at these locations. These Roman forts guarded the two entrances of the channel and the area is potentially rich in archaeology. Therefore this is a sub regionally important landscape as it extends into the neighbouring districts of Canterbury and Dover and includes the flood plain of the River Stour. Both areas are characterised by a vast, flat, open landscape defined by the presence of an ancient field system, defined by an extensive ditch and dyke system, the sea walls and isolated groups of trees. These elements provide important visual evidence of the physical evolution of the Wantsum Channel and, like other marsh areas in Kent, produce huge open skies. The former grazing land has been improved and managed as arable farmland, however, it still retains its network of ditches which provide biodiversity interest. In both of these landscapes it is important to conserve the long distance views to the Thames Estuary to the north and Pegwell Bay to the south.

Undeveloped Coast

4.25 There are two stretches of undeveloped coast with the most extensive being Pegwell Bay (F1) which stretches into Dover District at Sandwich. The other is F2: Foreness Point and North Foreness to the north east of Thanet.

4.26 Pegwell Bay is an extensive area of mixed coastal habitats, including mudflats, saltmarsh and coastal scrub stretching from Ramsgate in the north to Sandwich in the south. These habitats form an open and relatively unspoilt landscape, with a distinctive character. The area possesses a sense of remoteness and wildness despite the relative proximity of development. Among its most important features in the area is the unique sweep of chalk cliffs viewed across Pegwell Bay from the south. This landscape creates large open skies. This is also of more than district significance as it stretches into the neighbouring district of Dover. The bay is of significant nature conservation interest which is reflected by its International, European and national designations.

Developed Coast

4.27 The long coastline is one of Thanet's main assets. There are two character areas associated with the developed coast G1: Ramsgate and Broadstairs Cliffs and G2: North Thanet Coast. The distinctive east facing low chalk cliffs of Thanet and the open seascape create a dramatic contrast to the almost continuous urban area of Ramsgate and Broadstairs located on the cliff top. The North Thanet Coast extends from the western edge of Birchington along the northern edge of Margate. The North Thanet Coast is characterised by a series of sandy bays with chalk reefs, mudflats and rock pools backed by a line of low white chalk cliffs.

4.28 With the exception of the Green Wedges, this area is heavily urbanised. The coastal strip is characterised by the presence of traditional seaside architecture, active harbour areas and beaches and some extensive public open clifftop areas. The pattern of bays and chalk headlands provides long sweeping and panoramic views of the coast, which are often complimented by a positive relationship with adjacent built development.

4.29 The Thanet Landscape Character Assessment provides the more detailed guidance for development proposals in each of the local landscape character areas and will be adopted as supplementary planning guidance. The following policy aims to safeguard and enhance the open and historic characteristics of Thanet's countryside and landscapes.

Policy SP26 - Landscape Character Areas

The Council will identify and support opportunities to conserve and enhance Thanet's landscape character and local distinctiveness.

Development proposals should demonstrate how their location, scale, design and materials will conserve and enhance Thanet's local distinctiveness, in particular:

- 1) Its island quality surrounded by the silted marshes of the former Wantsum Channel and the sea;**
- 2) A sense of openness and 'big skies', particularly in the central part of the District;**
- 3) Its long, low chalk cliffs and the sense of 'wildness' experienced at the coast and on the marshes;**

- 4) Gaps between Thanet's towns and villages, particularly those areas designated as Green Wedges;
- 5) Long-distance, open views, particularly across the Dover Strait and English Channel, North Sea and across adjacent lowland landscapes; and
- 6) Subtle skylines and ridges which are prominent from lower lying landscape both within and beyond the District.

Development proposals should demonstrate how they respect and respond to the character, key sensitivities, qualities and guidelines of the relevant landscape character areas, as detailed in the Landscape Character Assessment (LCA) and summarised below.

All development should seek to avoid skyline intrusion and the loss or interruption of long views of the coast and the sea, and proposals should demonstrate how the development will take advantage of and engage with these views.

Development should generally be directed away from the Stour Marshes (E1), Wade Marshes (E2) and Pegwell Bay (F1) character areas (as detailed in the LCA), as these are largely undeveloped and key to retaining the island character of Thanet. The undeveloped character of Landscape Character Type F: Undeveloped Coast should also be maintained.

Proposals on the coast (within landscape character types F: Undeveloped Coast and G: Developed Coast and the surrounding area) should respect the traditional seafront architecture of the area, maintain existing open spaces and should ensure that recreational and wildlife opportunities are not compromised by development. Proposals should maintain and enhance the setting of sandy bays, low chalk cliffs and associated grassland and long sweeping views of the coastline.

The rural-urban boundary is distinctive in some parts of Thanet, particularly where there is an abrupt urban edge and where the countryside extends into the urban areas as Green Wedges. The distinction between town and countryside should be retained.

Development proposals that conflict with the above principles will only be permitted where it can be demonstrated that they are essential for the economic or social well-being of the area. In such cases, landscape impacts should be minimised and mitigated as far as possible.

Green Infrastructure Network

4.30 The National Planning Policy Framework (NPPF) states that local plans should plan positively for the creation, protection, enhancement and management of networks of biodiversity and Green Infrastructure. It states that local ecological networks should be identified and these should include the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors, stepping stones that connect them, and areas identified by local partnerships for habitat restoration or creation.

4.31 Planning policies should promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species.

4.32 The NPPF also states that international, national and locally designated nature conservation sites should be protected, with appropriate weight given to the importance of their

designation.

4.33 The NPPF states that existing open space, sports and recreational buildings and land (including playing fields) should not be built on unless it can be demonstrated that the land is surplus to requirements or if it would be replaced by equivalent or improved provision. Planning policies should also protect and enhance public rights of way and access.

4.34 Thanet boasts a wealth of natural features which contribute to the green infrastructure network, including internationally and nationally designated sites and associated species, a magnificent coastline, chalk cliffs, geological features, river and marshland systems and areas of open countryside with distinctive landscapes and views. It is important that these are maintained and enhanced, and better linked to provide a comprehensive Green Infrastructure network.

4.35 Natural England defines Green Infrastructure (GI) as:

'a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types.

Green infrastructure includes established green spaces and new sites and should thread through and surround the built environment and connect the urban area to its wider rural hinterland. Consequently it needs to be delivered at all spatial scales from sub-regional to local neighbourhood levels, accommodating both accessible natural green spaces within local communities and often much larger sites in the urban fringe and wider countryside.'

4.36 Green infrastructure does not necessarily stop at District boundaries and so the District Council will work the other East Kent Councils to ensure that any Green Infrastructure strategy is compatible with adjacent studies. The various components that make up Thanet's existing Green Infrastructure is shown on policies map.

4.37 There are various Green Infrastructure projects being progressed by the Council and other organisations, and also a number of community projects. These include Dane Valley Woods, Westbrook Undercliffe Nature Park, Friends of Mocketts Wood, Montefiore Woodland and the Windmill Community Allotments. All large development sites will be expected to contribute to Thanet's Green Infrastructure in line with Policy SP27 which should include an appropriate mix, compatible with the surrounding landscape and habitats. The Government has recently published its 25 Year Environment Plan (2018) which seeks to connect people with the environment to improve health and wellbeing through the creation of new green infrastructure. At the local level further guidance on the provision of green infrastructure including provision of new rights of way and cyclepaths can be found in Kent Design.

4.38 The Council seeks to continue increasing and enhancing Thanet's Green Infrastructure network, and will encourage new community Green Infrastructure projects by working with relevant organisations. The Council will produce a Green Infrastructure Strategy in consultation with relevant groups and organisations following adoption of the Plan. The Plan sets out the strategic approach to Green Infrastructure in Policy SP27 which aims to deliver the strategic objectives by protecting, maintaining and enhancing biodiversity and the natural environment

and creating a coherent network of Green Infrastructure. More detail will be added in the forthcoming Green Infrastructure Strategy. Provision of new infrastructure in new developments, particularly for informal recreation and dog walking can help to reduce the impact of visitor pressure on the nature conservation interest at the coast. It can also aid restoration of the landscape, improve biodiversity and improve connectivity between habitats or habitat features such as hedgerows. Good Green Infrastructure can have additional benefits to the wider ecosystem services including healthy water and nutrient cycles, improved air quality, managing flood risk and water pollution and minimising the effects of climate change. There are more direct benefits to local communities including the enjoyment of the natural environment and improved health and wellbeing.

4.39 Development proposals should consider the example list below which is not exhaustive, when considering the inclusion of green infrastructure within their proposals. Not all of these measures may be appropriate in all cases as they need to be applicable to the conditions of the site:

- create new wildlife and biodiversity habitats;
- integrate Sustainable Drainage Systems (SuDs);
- plant hedgerows and trees;
- provide green roofs;
- create ponds;
- create urban green corridors;
- create roadside verges;
- provide and manage new accessible open space including linear routes, for informal recreation/walking and dog walking and provide linkages between areas of open space;
- provide private gardens and play space;
- conserve and enhance the character of historic green spaces;
- provision of off-site enhancements;
- contribute to the enhancement of Thanet's Biodiversity Opportunity Areas or the enhancement of the Green Wedges including the introduction of linear features such as native hedgerows and water bodies where appropriate;
- reinforce and/or restore landscape character in line with the relevant landscape character assessment guidelines;
- Planning new Green Infrastructure assets to maximise their provision of ecosystem services including, but not limited to, improved air quality, natural flood management and climate change adaptation where appropriate;
- Other suitable planting schemes to provide biodiversity opportunities

Policy SP27 - Green Infrastructure

All development proposals should, where possible, safeguard Thanet's Green Infrastructure network and enhance it by integrating new multifunctional Green Infrastructure provision in the design of developments. Opportunities to improve Thanet's Green Infrastructure network by protecting and enhancing existing Green Infrastructure assets and the connections between and providing new Green Infrastructure assets should be identified early in the design process for major developments, together with consideration of how they will be managed and maintained in the long term.

Development should make a positive contribution to Thanet's Green Infrastructure network wherever possible and appropriate, by the incorporation, provision or fulfilment

of those matters and objectives set out in paragraph 4.39 above.

Biodiversity: International and European Sites

4.40 International and national legislation provide statutory protection for the most important nature conservation sites. These are Ramsar sites, Special Protection Areas (SPA) and Special Areas of Conservation (SAC) which form a network of Natura 2000 sites across Europe designated for their important habitat and/or birds. Most of the Thanet coastline is designated and is important for its intertidal chalk, caves, species (such as blue mussel beds and piddocks), dunes and mudflats, and certain migratory and breeding bird species.

4.41 Ramsar sites have been designated as Wetlands of International Importance as a Waterfowl Habitat under the Ramsar Convention. This requires signatory governments to conserve wetlands and designated sites. Special Protection Areas are designated under Article 4 of the Birds Directive (Directive 2009/147/EC on the Conservation of Wild Birds), which requires member states to take "appropriate steps to avoid pollution or the deterioration of habitats or any disturbance affecting the birds". Special Areas of Conservation have also been designated under the EU Habitats Directive (Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) to provide increased protection to a variety of species, plants and habitats of importance to biodiversity both on a national and international scale.

4.42 There are currently six internationally designated sites within or adjacent to the District:

- Thanet Coast and Sandwich Bay Special Protection Area (SPA)
- Thanet Coast and Sandwich Bay Ramsar site
- Thanet Coast Special Area of Conservation (SAC)
- Sandwich Bay Special Area of Conservation (SAC)
- Margate and Long Sands SAC
- Outer Thames Estuary Marine SPA

4.43 Designations do not stop at the District boundary, nor do the nature conservation interest of the sites. For example the Thanet Coast and Sandwich Bay Special Protection Area and Ramsar extend into adjacent Districts. There are a number of other sites within or abutting East Kent which are located in neighbouring districts such as Stodmarsh (SAC, SPA, Ramsar) and the Blean Complex (SAC) and development proposals will need to consider their impact on these in line with Habitat Regulations. Thanet District Council and Canterbury City Council are working co-operatively to deliver a joint approach to mitigation.

Policy SP28 - Protection of the International and European Designated Sites

Sites of International Nature Conservation Importance will receive the highest level of protection.

Proposals likely to have a significant effect on an SPA, SAC or Ramsar site, either alone or in-combination, will be required to undergo appropriate assessment as per the Conservation of Habitats and Species Regulations 2017 (as may be amended). Where possible applicants should incorporate measures to avoid or mitigate any adverse

impacts. Where, despite all possible avoidance and mitigation measures being put in place, a proposal is still shown to have an adverse effect on the integrity of an International site, planning permission will only be granted in exceptional circumstances, where there are no less ecologically damaging alternatives, there are imperative reasons of overriding public interest and damage can be fully compensated.

Where proposals are considered likely to have a significant effect on an International site, early consultation with Natural England, the Council and any other appropriate statutory consultees is recommended.

Strategic Access Management and Monitoring Plan (SAMM) and the Thanet Coast Project

4.44 Recreational pressure at the European sites, particularly the SPA, has given cause for concern from Natural England and the Kent Wildlife Trust regarding the impact of disturbance to over-wintering birds. There is further concern regarding the impact of increased recreational pressure as a result of population increases.

4.45 Evidence suggests that any new housing development in Thanet has the potential to increase the recreational impacts on the SPA resulting from the increase in population. This may have an adverse impact on the species for which the SPA has been designated. The actual level of impact from individual developments may not be significant, however the in-combination effect of all housing developments proposed in the district cannot rule out a significant impact.

4.46 As a result of this impact the Council appointed specialist consultants to produce a Strategic Access Management and Monitoring Plan (SAMM) (2016) to address any potential impact. The Thanet Coast and Sandwich Bay SPA is used by a large number of migratory birds particularly over-wintering Turnstones and European Golden Plover. Much of the coast is accessible for walking and cycling and the large stretch of promenade along the coast bring the Turnstones very close to users and potential disturbance. Recent surveys have revealed a decline in their population eg a 50% drop in Turnstone numbers in 2013, subsequent years also show a decline in numbers. Evidence shows that recreational activity causes disturbance to birds, particularly dog walking. This type of recreational activity is most likely to increase with increased housing and it is this activity that the mitigation strategy seeks to address.

4.47 The zone of influence around a European designated site, is the geographical area within which people will travel to visit it. To keep it to a manageable extent a zone of influence is usually set so as to capture the majority of visits or visitors, rather than every single one. Within this zone, any potential impacts need to be avoided or mitigation provided. The whole of the District falls within a 6km radius of the SPA boundary and evidence has shown the zone of influence for the site to extend further than this. Therefore residents from all new housing in Thanet have the potential to increase recreational pressure on the SPA and the mitigation approach set out in the SAMM strategy applies to the entire District.

4.48 The mitigation package will include measures such as a wardening service to provide on-site presence throughout the SPA for the peak overwintering period - October and April. A co-ordination role will be required to manage the wardening and co-ordinate activities throughout the year such as education and awareness activities such as signage and interpretation. Other measures could include limited access management. Regular monitoring of birds and visitors will also be required. This list is not exhaustive and other appropriate activities may be put in

place. The SAMM will be reviewed no later than 10 years or sooner if monitoring and surveys reveal issues which are not being addressed by the mitigation package. The mitigation package will be delivered by the SAMM Project, in collaboration with the Thanet Coast Project.

4.49 The Thanet Coast Project was established in 2001 and is tasked with much of the delivery of the North East Kent Marine Protected Area (NEKMPA) Action Plan and therefore delivery of the majority of the objectives of the Thanet Cliffs and Shore Biodiversity Opportunity Area (BOA) within Thanet. The main aims of the project are to:-

- Raise awareness of the important marine and bird life, and how to avoid damaging them.
- Work with local people to safeguard coastal wildlife and implement the Management Scheme Action Plan.
- Encourage and run wildlife related events and make links with wildlife, green tourism, coastscape and the arts.
- Be a focal point for enquiries and gathering information on coastal wildlife and environmental issues.
- Keep everyone informed with progress through various means, including newsletters, articles and stakeholder workshops.

4.50 The Thanet Coast Project has been very successful with the following activities and projects set up to deliver these objectives:-

- 10 coastal codes of conduct formulated with stakeholders to alleviate the impacts of human activities on the European sites.
- One scientific research code formulated by The North East Kent Scientific Coastal Advisory Group.
- A twice yearly Thanet Coast newsletter.
- Educational activities and resources for all ages.
- Volunteering opportunities from volunteer wardens to participation in ecological research.

4.51 The SAMM has developed a tariff (revised 2017 in light of the new housing requirement of 17,140 units) that will apply to all new housing according to the number of dwellings built within the district. The tariff is inextricably linked to the housing requirement for the District for the plan period and will be reviewed if this requirement changes. The current tariff is set in table 8.

Table 8 - SAMM Tariff

Development type	Tariff per dwelling - including requirement for in-perpetuity funding
1 bedroom unit	£202
2 bedroom unit	£320
3 bedroom unit	£424
4+ bedroom unit	£530

Policy SP29 - Strategic Access Management and Monitoring Plan (SAMM)

All proposals for new residential development will be required to comply with the Strategic Access Management and Monitoring Plan (SAMM) in order to mitigate against the in- combination effects of new development, through the pathway of recreational pressure on the Thanet Coast SPA and Ramsar site. A financial contribution based on the current tariff in table 8 and any subsequent amendments, is required towards an in-perpetuity access management scheme. This will be collected via a S106 payment.

Developments for other uses that would increase recreational activity causing disturbance to qualifying species will be assessed on a case by case basis under the Habitat Regulations and may be required to make full or partial contributions towards the SAMM Plan if appropriate.

Protection, Conservation and Enhancements of Biodiversity Assets

4.52 Species protected under the Wildlife and Countryside Act, the Protection of Badgers Act, the Habitats Directive or listed in the Natural Environment and Rural Communities Act (Section 41) may be present on sites and would be a material consideration in the assessment of development proposals. Natural England have produced Standing Advice for protected species in relation to planning applications which provide details of the potential existence of protected species, advice on whether survey reports are required, guidance on the survey requirements for protected species and advice on mitigation proposals. Developers should have regard to this advice as appropriate.

4.53 The principle of net gain is set out in national planning policy. For the purposes of Policy SP30 it applies to all developments that result in a loss of, or degradation of habitats including buildings. Net gains in biodiversity can be delivered in a variety of ways ranging from avoiding the loss of high quality habitats, to on or off site habitat creation or enhancement, or a tariff system to invest in strategically important habitats.

4.54 The open countryside within Thanet is known to support a number of important species as is recognised in the international and national designations. In addition, Thanet is also important for farmland birds due to its large areas of farmed countryside. Farmland birds have declined over the last few decades and so it is important to ensure that remaining populations are protected and allowed to increase. The Green Wedges which are a largely arable landscape, provide a dispersal route for migratory bird species which are present on the coast, especially during the winter season. Changing farming practices within the Green Wedges would help to increase populations of farmland and migratory birds by enabling more ecologically diverse habitat to be created.

4.55 The following policy seeks to protect, maintain and enhance biodiversity and wildlife, by recognising that important species should be protected and requires this to be considered in determining planning applications for development.

Policy SP30 - Biodiversity and Geodiversity Assets

Development proposals will, where appropriate, be required to make a positive contribution to the conservation, enhancement and management of biodiversity and geodiversity assets resulting in a net gain for biodiversity assets through the following measures:

- 1) the restoration / enhancement of existing habitats,**
- 2) the creation of wildlife habitats where appropriate, by including opportunities for increasing biodiversity in the design of new development**
- 3) the creation of linkages between sites to create local and regional ecological networks,**
- 4) the enhancement of significant features of nature conservation value on development sites,**
- 5) protect and enhance valued soils,**
- 6) mitigating against the loss of farmland bird habitats.**

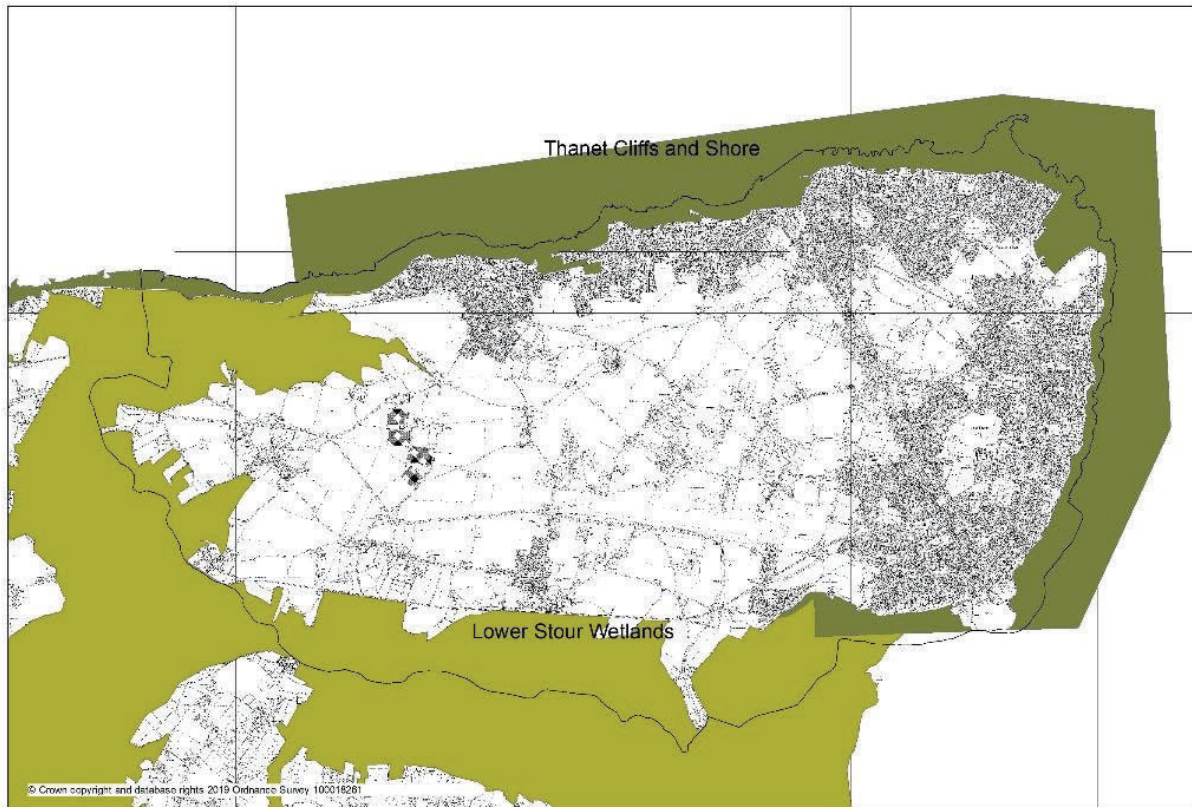
Sites should be assessed for the potential presence of biodiversity assets and protected species. For sites where important biodiversity assets, including protected species and habitats including SPA functional land, or other notable species, may be affected, an ecological assessment will be required to assess the impact of the proposed development on the relevant species or habitats. Planning permission will not be granted for development if it results in significant harm to biodiversity and geodiversity assets, which cannot be adequately mitigated or as a last resort compensated for, to the satisfaction of the appropriate authority.

4.56 The Natural Environment and Rural Communities Act 2006 places a duty on public authorities to conserve biodiversity. The Council has been working with the Kent Nature Partnership to identify Biodiversity Opportunity Areas (BOAs) within the district in response to those priority habitats and species identified through the Kent Biodiversity Action Plan.

4.57 The Biodiversity Opportunity Areas identify where the maximum biodiversity benefits can be achieved and the greatest gains can be made from habitat enhancement, restoration and recreation. These areas offer the best opportunities for establishing large habitat areas and/or networks or wildlife habitats. Thanet has two BOAs:

- Thanet Cliffs and Shore - covers the majority of the internationally and nationally designated coastal habitats, extending through Thanet as far as Whitstable.
- Lower Stour Wetlands - The Lower Stour wetlands extend from the mouth of the old Wantsum channel across reclaimed marshland to the former mouth of the river Stour, and then continue around the coast to the Sandwich mudflats and sand dunes and the Lydden Valley.

Map 3: Biodiversity Opportunity Areas Map



4.58 As well as these identified sites, there is potential for habitat creation and enhancement in the Green Wedges, and sites designated for nature conservation. The Council will work with landowners, developers and other appropriate organisations to improve the opportunity for biodiversity. Developments should take into account their contribution to wildlife and seek to improve habitat connectivity in the wider area where appropriate through suitable landscaping schemes and new provision which can help to address the issues associated with the impact of climate change.

4.59 The following policy aims to meet the strategic objective of protecting, maintaining and enhancing biodiversity.

Policy SP31 - Biodiversity Opportunity Areas

The Council will support proposals that enhance, maintain and protect the identified Biodiversity Opportunities Areas, particularly where proposals increase the biodiversity value of the site.

Protection of Open Space and Allotments

4.60 Thanet's urban areas are interspersed with a variety of areas of open space. These include parks, informal recreation green space, natural and semi-natural green space, amenity

green space, outdoor sports facilities, play areas, cemeteries and allotments. These form part of Thanet's Green Infrastructure network and are shown on the Policies Map.

4.61 The National Planning Policy Framework (NPPF) states that existing open space, sports and recreational buildings and land (including playing fields) should not be built on unless it can be demonstrated that they are surplus to requirements, the loss would be replaced by equivalent or better provision or the development is for alternative sports and recreation provision. The NPPF also states that planning policies should protect and enhance public rights of way (PROW) and access. Kent County Council's Countryside and Coastal Access Improvement Plan identifies the need for planning policies to protect or enhance PROW.

4.62 Open space is a scarce commodity within Thanet's urban areas. Once such areas are lost to development, it is very difficult to provide satisfactory replacements within the immediate vicinity. Open spaces can provide for a wide variety of activities from organised sport to simple relaxation and opportunities for walking. Open space and amenity areas are vital for people's health and quality of life and their visual importance can often contribute to the quality of the local environment. Smaller areas of informal open space on residential estates can provide important local resource, particularly in the more built up areas where there is less opportunity for larger open spaces. Sometimes these areas are too small to be identified on the policies map for protection, therefore any proposed development on open space areas of this nature will need to be justified.

4.63 The Open Space, Indoor and Outdoor Sports Facilities Strategy 2018 (Open Space Strategy) has been carried out and includes recommendations and action plans to be implemented corporately. The draft strategy identifies an under provision in the 5 typologies of open space - amenity greenspace, provision for children and young people, allotments, natural and semi-natural greenspace and public parks and gardens - at 2016 and also by 2031. The figures are set out in table 12 and are based on population figures of 141,00 at 2016 and 161,500 by 2031.

4.64 In line with the draft recommendations, the Council will expect all new developments to make provision for new open space in line with the Fields in Trust Guidelines for provision, accessibility and equipped play space. Table 12 sets out the provision guidelines, table 10 sets out the accessibility criteria and table 11 sets out the Quantity Benchmark Guidelines for equipped/designated play space. This is set out in Chapter 12.

4.65 For the strategic sites the relevant policies set out the general open space requirements, for the specific typologies of open space the Council will expect developers to apply the Fields in Trust guidelines to determine the precise requirements.

4.66 For other developments, where provision cannot be made on site, or where an existing play space lies within the walking distance guideline of a proposed development the Council will seek a financial contribution either towards new provision or improvement of an existing facility. Applicable schemes may include the improvement of facilities at Hartsdown and improved provision at Jackey Baker's sports ground and proposed expansion.

4.67 Allotment sites are a statutory requirement for the Council but are usually managed by town or parish councils. Allotments serve not only local residents by offering them a chance to grow their own fruit and vegetables but also by offering them physical activities, a healthy diet, and general well-being. Allotments can also be important for their contribution to biodiversity. The overall benefits of allotments include:

- Providing a sustainable food supply
- A healthy activity for people of all ages
- Fostering community development and cohesiveness
- Acting as an educational resource
- Providing access to nature and wildlife and acting as a resource for biodiversity
- Providing open spaces for local communities
- Reducing carbon emissions through avoiding the long distance transport of food

4.68 The following policies meet the objectives of promoting physical and mental well-being, safeguarding and enhancing the geological and scenic value of the coast and countryside, retaining the separation between Thanet's towns and villages and enhancing biodiversity and the natural environment.

Policy SP32 - Protection of Open Space and Allotments

Proposals which would result in the loss of protected open space or allotments as shown on the policies map either through built development or a change of use will only be permitted if:

- 1) in relation to open space it is for an open recreation or tourism use and is of appropriate scale and design for its setting. Any related built development should be kept to the minimum necessary to support the open use, and be sensitively located; or**
- 2) in relation to both open space and allotments there is an overriding a need for development that outweighs the need to protect the open space or allotment which cannot be located elsewhere. In this case provision of alternative open space or allotment of at least an equivalent size and quality must be provided in a suitable nearby location; or**
- 3) an assessment has been undertaken which clearly shows that the open space or allotments are no longer required; and**
- 4) in all cases, there would be no material harm to the contribution the protected open space makes to the visual or recreational amenity of the area.**

New development that is permitted by virtue of this policy should make a positive contribution to the area in terms of siting, design, scale, use of materials and biodiversity.

Local Green Space

4.69 Local Green Spaces can be designated by communities through the local or neighbourhood planning processes. As set out in the NPPF, once designated, a Local Green Space will be afforded the same protection as Green Belts and new development will not be permitted other than in very special circumstances. The NPPF sets out the circumstances under which Local Green Spaces can only be designated:

- The green space is in reasonably close proximity to the community it serves.
- The green area is demonstrably special to a local community and holds a particular local significance.
- The green area concerned is local in character and is not an extensive tract of land.

4.70 The Local Plan designates 19 Local Green Spaces which are protected under policy SP30. This follows an assessment of 49 proposals submitted by local groups, individuals, town and parish councils during the Revisions to Preferred Option consultation in 2017, and only those listed below were found to satisfy the criteria. Details of the assessment can be found in the report on Local Green Space. The Local Green Spaces designated in the Local Plan are:

- Kitty's Green, Broadstairs
- Culmer's Amenity Land Broadstairs
- Holmes Park, Broadstairs
- Pierremont Park, Broadstairs
- Memorial Recreation Ground, Lawn Road Broadstairs
- St Peter's Recreation Ground, Broadstairs
- Mocketts Wood, Broadstairs
- Westover Gardens, Broadstairs
- Village Green, Foads Lane, Cliffsend
- Meadow, Cliffs End Road Cliffsend
- Playground Foads Lane, Cliffsend
- Earlsmead Crescent, Cliffsend
- Dane Valley Woods, Margate
- Windermere Avenue, Ramsgate
- Adrian Square, Westgate
- Ethelbert Square, Westgate
- Playing Field, Minster Road, Westgate
- Recreation Ground, Lymington Road, Westgate
- Local Park, Victoria Avenue/Quex Road, Westgate

Policy SP33 - Local Green Space

The sites identified on the Policies Map as Local Green Space, and identified in paragraph 4.70, will be protected from development in accordance with the requirements of the National Planning Policy Framework.

Provision of accessible natural and semi-natural green space

4.71 The provision of larger areas of open space will be delivered most appropriately through strategic allocations and should be considered integral to the masterplanning of development proposals.

4.72 The Open Space Strategy (2018) identifies an under provision of natural and semi-natural green space based on the fields in trust guidelines of 1.8ha per 1,000 population, of 190.19ha by 2031. New developments will be required to make provision in line with the Fields in Trust guidelines.

4.73 It can also help to relieve some of the recreational pressure on the coast, although this is in addition to any mitigation that may be required through the SAMM.

4.74 The following policy seeks to ensure the recommended provision of natural and semi natural green space, parks, gardens and recreation grounds is provided for and will contribute to Thanet's Green Infrastructure network.

Policy SP34 - Provision of Accessible Natural and Semi-Natural Green Space, Parks, Gardens and Recreation Grounds

The Council will require suitably and conveniently located areas of usable amenity space, adequate to accommodate the demands for passive recreation generated by residential development. New greenspace provision should, where possible, be linked to existing greenspace, Green Wedges and/or the wider countryside and public rights of way network, away from the coast, to maximise its value. Such provision should seek to enhance the opportunities for biodiversity.

Sites allocated as Strategic Housing Sites will be required to provide natural and semi natural green space and local parks, formal gardens, allotments and recreation grounds to meet the standards set out in Table 12. Natural and Semi-natural green space will be expected to improve the biodiversity potential of the area

The Council will expect appropriate arrangements for maintenance and management to be made. The responsibility for which will be vested in a particular individual, or, subject to commuted payment to meet such costs, in the district, town or parish council. Such arrangements will be secured by entering into a planning agreement.

Any areas of accessible natural and semi natural green space, parks, gardens and recreation grounds created by virtue of this policy will be protected from development by Policy SP32 - Protection of Open Spaces and Allotments.

Quality Development

4.75 The National Planning Policy Framework (NPPF) places high importance on good design, stating that pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life. Planning should seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings. Permission should be refused for development of poor design that fails to take the opportunity to improve the character and quality of an area.

4.76 Thanet's towns, villages, coast and countryside enjoy a diverse and rich built heritage which contributes significantly to Thanet's unique sense of place and identity. There are 21 conservation areas and around 2,000 listed buildings (a large proportion of which are in the historic town centres) - the highest concentration of listed buildings for a local authority in the South East. However there are some areas in the district where the townscape quality needs improvement and the Council is seeking developments of a higher quality. The urban areas have been developed to a high density, with high numbers of flats - largely due to the availability of large properties formerly used as hotels which lend themselves to conversion to flats, and the subdivision of larger family homes. Some of the urban areas boast a rich architectural heritage including attractive Victorian terraces and Regency squares and large and attractive art deco properties along the coasts. Some suburbs and the rural villages are characterised by lower density development, with large, well- spaced properties and a number of tree lined streets.

4.77 Good design can help improve and enhance areas by ensuring high quality developments,

encourage regeneration and can help reduce the opportunities for and the fear of crime. The NPPF re-iterates and reinforces the role of Design Review in ensuring high standards of design. Design Review is an independent and impartial evaluation process in which a panel of experts on the built environment assesses the design of a proposal. The projects that Design Review deals with are usually of public significance, and the process is designed to improve the quality of buildings and places for the benefit of the public.

4.78 Developers proposing projects of public significance (such as urban extensions or town centre mixed use developments) will be required to seek a Design Review by an independent design panel. This should be carried out at an early stage in the process. The South East Regional Design Panel, (Design South East) can be contacted at Kent Architecture Centre_ www.architecturecentre.org.

4.79 Developers proposing projects that are of national significance or that will have a profound impact on the regional and local environment will be required to seek a National Design Review with the CABE team at the Design Council, www.designcouncil.org.uk. A design review may be required for developments in significant locations such as prominent seafront locations or as part of large strategic allocations.

4.80 This objective of this policy is to ensure that new development is built to the highest attainable quality thereby improving the quality of life for residents and aiding investment and regeneration. More detail on the design considerations for good quality development are set out in Policies QD01 and QD02.

Policy SP35 - Quality Development

New development will be required to be of a high quality and inclusive design as set out in Policies QD01 and QD02. Developers may be required to seek an independent Design Review for all major development proposals, and any proposals regardless of size in prominent locations or which are likely to have a significant visual impact.

Heritage

4.81 The National Planning Policy Statement (NPPF) states that local plans should set out 'a positive strategy for the conservation and enjoyment of the historic environment'. It places emphasis on putting heritage assets to viable uses, the wider benefits that can be achieved by the conservation of the historic environment and the desirability of new development in making a positive contribution to local character and distinctiveness. It also includes criteria which would need to be fulfilled for a proposed development which would lead to substantial harm or loss of a heritage asset.

4.82 Thanet's historic and natural environment defines the character and setting of the district, and contributes significantly to residents' quality of life. It is important to maintain and enhance the historic and natural environment against the background of a successful, growing district encouraging investment and regeneration.

4.83 The district's rich historic environment can trace its origins to pre-historic activity with the remains of all periods from the Palaeolithic to Modern recorded within the area, consisting of

both burial and settlement archaeology. Within the area there are about 2000 listed buildings, 27 conservation areas, 13 scheduled monuments, 1 national registered park and garden of special historic interest, and a wealth of nationally and locally significant archaeological remains. In addition, there are numerous other heritage assets that, whilst not designated, are considered to be nationally, regionally or locally significant.

4.84 It is this rich heritage and the close proximity to the sea that gives the district its special character and distinctiveness; this is emphasised by the large number of highly graded designated heritage assets, often connected to the strong relationship with the sea either in the form of commerce, health or leisure. For example the Winter Gardens, Margate built in 1911 is the only known example of a winter Gardens constructed with a chalk cliff and is Grade II listed. In addition the Lido complex Cliftonville has various elements which are Grade II listed, including the Clifton baths which are one of the earliest surviving seawater bathing establishments in the Country being constructed between 1824-8 and is the only known example of one being dug out of the cliffs. The Lido complex has been vacant for a number of years and its restoration provides an important investment opportunity for this part of Cliftonville, see policy SP10.

4.85 Dreamland has seen significant renovation of and investment in its listed structures - cinema Grade II*, Scenic Railway Grade II - and is an important cultural and historic asset to the Margate seafront. The recent renovation of the Grade II menagerie enclosures and cages that once housed lions, is an important asset to the park. These early animal cage structures are listed for their rarity and exceptionality.

4.86 Ramsgate Royal Harbour, designated in 1821, has a number of Grade II and Grade II* listed buildings and structures ranging from the Customs House and Clock tower, harbour inner basin walls and Jacob's Ladder to rare seaside structures such as the East Cliff lift.

4.87 Thanet can be described as a district with a diverse and vibrant character. The character of the coastal areas owes much to the juxtaposition of grand seafront developments and the smaller scale domestic 'vernacular' buildings associated with working harbours and holiday resorts.

4.88 The character of the rural areas owes much to the strong links with early Christianity with the landing of St Augustine in 597 at Ebbsfleet, and the ensuing development of medieval parishes centred around the church.

4.89 Some of the special qualities of Thanet's historic environment include:

- The richness of 18th, 19th and 20th century development linked to the sea, including grand residential terraces, harbours, leisure and health facilities as well as defence.
- The strong associations with internationally recognised people and their significant legacies within the built environment. These include the renowned architect AW Pugin, the Victorian financier and philanthropist, Sir Moses Montefiore and the Victorian showman George Sanger, Bleak House Broadstairs Grade II listed and its associations with Charles Dickens
- The presence of significant historic technical innovation, including the Scenic Railway Grade II *, Clifton baths Grade II, Albion Place Gardens Grade II and the Waterloo Tower at Quex.
- The wealth of public and private historic open spaces including many planned squares,

- parks, cemeteries, chines, cliff top promenades, coastal topography and significant views
- The Victorian/Edwardian suburbs and post-war housing developments (including Westgate on Sea)
- Locally distinctive materials, flint, clinker brick, Kentish red bricks and Kent pegs
- 27 conservation areas which vary considerably in age, size, character and style.
- Around 2,000 statutory listed buildings in Thanet - the highest concentration in the South East.
- A number of highly significant Grade I or II* listed buildings, including St Augustine's and Sir Moses Montefiore Synagogue, Ramsgate; Scenic Railway, Margate.
- 13 Scheduled Ancient Monuments ranging from Anglo-Saxon cemeteries to Minster Abbey.
- A designated Registered Park and Garden; Albion Place Gardens in Ramsgate.
- A richness in archaeological remains. The remains of all periods from Paleolithic to Modern are recorded within the area and consist of both burial and settlement archaeology.

4.90 Thanet's heritage assets including the significant historic building stock and archaeological resource, are irreplaceable and require careful management as the area evolves and undergoes significant growth and regeneration.

4.91 The opportunities to retain, enhance and improve Thanet's historic environment include:

- Using the income generated from the growing local tourism economy to invest in the maintenance and upkeep of historic assets;
- Ensuring development schemes enhance the setting of heritage assets and do not detract from their character and the appearance of the area;
- Supporting proposals for heritage led regeneration, ensuring that heritage assets are conserved, enhanced and their future secured.

4.92 Where development is proposed that may affect a heritage asset (designated or non-designated) or its setting, the Council will require the provision of the following information, proportionate to the asset's significance, in line with policy SP36 (3):

- describe and assess the significance of the asset, including its setting, to determine its architectural, historical or archaeological interest; and
- identify the impact of the proposed works on the significance and special character of the asset; and
- provide clear justification for the works, especially if these would harm the significance of the asset or its setting, so that the harm can be weighed against public benefits.

A change of use of the heritage asset, is likely to be supported provided:

- the proposed use is considered to be the optimum viable use, and is compatible with the fabric, interior, character, appearance and setting of the heritage asset;
- such a change of use will demonstrably assist in the maintenance or enhancement of the heritage asset; and
- features essential to the special interest of the individual heritage asset are not lost or altered to facilitate the change of use.

4.93 A Heritage Strategy is being prepared for Thanet. It is proposed that the strategy will be developed alongside the Local Plan and we have started to develop

an evidence base to support this strategy and the Local Plan. The evidence includes assessing the significance of heritage assets in the area, including their settings, and the contribution they make to their environment. It also involves assessing the potential of finding new sites of archaeological or historic interest.

4.94 The preservation of Thanet's heritage is considered to be an economic asset, and its maintenance and protection plays an important role in the district's economy and aids in regeneration and investment. In recognition of the array of historic assets, Ramsgate has been named as Heritage Action Zone in 2016 by Historic England. This will provide necessary funding and investment to restore a number of heritage assets and regeneration of the area.

4.95 The Council aims to work with property owners and other stakeholders in the historic environment to both protect and enhance the historic environment and ensure its economic viability for future generations. One such scheme is the Townscape Heritage Initiative at Dalby Square, Cliftonville funded by the Heritage Lottery Fund and the Council. This aims to restore the built environment to its former grandeur which would then be seen as an asset and encourage further investment in this area. The following policy sets out how it intends to achieve this.

Policy SP36 - Conservation and Enhancement of Thanet's Historic Environment

The Council will support, value and have regard to the historic or archaeological significance of Heritage Assets by:

- 1) protecting the historic environment from inappropriate development;**
- 2) encouraging new uses where they bring listed buildings back into use, encouraging their survival and maintenance without compromising the conservation of the building or its historical or archaeological significance;**
- 3) requiring the provision of information describing the significance of any heritage asset affected and the impact of the proposed development on this significance;**
- 4) facilitating the review of Conservation Areas and the opportunities for new designations;**
- 5) recognising other local assets through Local Lists;**
- 6) offering help, advice and information about the historic environment by providing guidance to stakeholders, producing new guidance leaflets, reviewing existing guidance leaflets and promoting events which make the historic environment accessible to all;**
- 7) issuing Article 4 Directions which will be introduced and reviewed as appropriate;**
- 8) supporting development that is of high quality design and supports sustainable development.**

All reviews and designations will be carried out in consultation with the public in order to bring a shared understanding of the reasons for the designation and the importance of the heritage asset.

Climate Change

4.96 The National Planning Policy Framework (NPPF) expects a pro-active approach against climate change and states that adapting to, and mitigating against, the effects of climate change are core planning principles. This can be achieved by planning for new development in locations and in ways which reduce greenhouse gas emissions, actively support energy efficiency improvements to existing buildings, and where appropriate, support standards for sustainable construction. The NPPF lists expectations to improve energy efficiency in new development in terms of decentralised energy and sustainable design, and ways of increasing the use and supply of renewable and low carbon energy. It stresses the importance of addressing longer term factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape.

4.97 Climate change is a change in weather patterns caused by the increased levels of carbon dioxide in the atmosphere produced by the use of fossil fuels. Planning can help increase resilience to climate change impact through the location, mix and design of development.

4.98 The effects of climate change are already being seen in Kent, and include:

- more erratic weather conditions including an increase in the number of 'hot weather' events, storms and also freezing temperature events;
- increase in sea levels and wave crest;
- increase in coastal water temperature;
- length of growing season has extended by one month since 1990; and
- increases in flooding and droughts.

4.99 The Climate Change Act 2008 sets a target to reduce the UK's greenhouse gas emissions by at least 80% in 2050 from 1990 levels. There are many opportunities to integrate climate change mitigation and adaptation. Planning can mitigate climate change through reducing emissions by reducing the need to travel and providing sustainable modes of transport; providing opportunities for renewable and low carbon energy technologies; providing opportunities for decentralised energy and heating and promoting low carbon design approaches to reduce energy consumption in buildings such as passive solar design.

4.100 The Council has adopted the Climate Local Kent commitment for Thanet. Climate Local is a Local Government Association initiative to drive, inspire and support council action on a changing climate. The initiative supports councils' efforts both to reduce carbon emissions and also to improve their resilience to the effects of our changing climate and extreme weather. The Climate Local Kent Commitment sets aims which include:

- 34% reduction in emissions by 2020 (2.6% reduction per year).
- Retrofitting to existing homes.
- Reduce water consumption from 160 to 140 litres per person per day by 2016.
- Increase renewable energy deployment in Kent by 10% by 2020.

4.101 The following policy aims to ensure new development minimises the impacts of climate change through mitigation and adaptation measures, and reduce Thanet's carbon footprint.

Policy SP37 - Climate Change

New development must take account of the need to respond to climate change:

- 1) by minimising vulnerability and providing resilience to the impacts of climate change through the use of up to date technologies, efficient design and appropriate siting and positioning of buildings;**
- 2) mitigating against climate change by reducing emissions and energy demands through the use of up to date technologies;**
- 3) realise and make best use of available opportunities to reduce the impact of climate change on biodiversity and the natural environment by providing space for habitats and species to move through the landscape and for the operation of natural processes, particularly at the coast.**

5 - Community Strategy

Healthy and Inclusive Communities

5.1 The National Planning Policy Framework (NPPF) acknowledges the link between planning and healthy communities and states that the planning system should support strategies to improve health and cultural well-being, promote healthy communities and identify policies that will deliver the provision of health facilities. It encourages policies that will facilitate social interaction and healthy inclusive communities.

5.2 Greener neighbourhoods and improved access to nature will improve public health and quality of life and reduce environmental inequalities. Urban green spaces will provide varied ecosystems and will contribute to coherent and resilient ecological networks.

5.3 The NEA & Marmot Review (2010) demonstrate the positive impact that nature has on mental and physical health. High quality natural environments foster healthy neighbourhoods; green spaces encourage social activity and reduce crime. The natural environment can help children's learning. Health issues are addressed in this plan in the following policy areas:

- Housing quality and design
- Transport
- Economic development, employment skills and training
- Access to and provision of local services
- Community safety and crime
- Access to fresh food
- Access to the natural environment

5.4 The following policy sets out how the Plan will contribute towards a healthier community. Further detail on active design is set out in paragraph 13.13

Policy SP38 - Healthy and Inclusive Communities

The Council will work with relevant organisations, communities and developers to promote, protect and improve the health of Thanet's residents, and reduce health inequalities.

Proposals will be supported that:

- 1) bring forward accessible community services and facilities, including new health facilities;**
- 2) safeguard existing community services and facilities;**
- 3) safeguard or provide open space, sport and recreation;**
- 4) promote healthier options for transport including cycling and walking;**
- 5) improve or increase access to a healthy food supply such as allotments, farmers' markets and farm shops;**
- 6) create social interaction and safe environments through mixed uses and the design and layout of development;**
- 7) create greener neighbourhoods and improve biodiversity and access to nature.**

QEQM Hospital Margate

5.5 Land is identified on the policies map for the future expansion of the hospital to meet future needs to the south-east of the existing hospital. Part of this land was previously designated as Green Wedge land, but has been released exceptionally to meet the health and social needs of local people. However, in order to safeguard the Green Wedge in the longer term, new development at the hospital should involve the minimum fresh land-take necessary. Accordingly the Council will expect all elements of detailed expansion proposals to make the most efficient use of the existing and allocated site. This should include appropriate use of multi-storey development as far as is compatible with the effective working of the site and the creation of a pleasant environment for both patients and staff, and limiting visual impact on the Green Wedge.

5.6 To minimise the visual impact of new development on the Green Wedge, it would be desirable for open uses, such as car parking, to be located on this site rather than amongst the high-density development within the existing hospital. Existing tree screens along Ramsgate Road and along the footpath should be retained wherever possible. In the interests of sustainable pedestrian and cycle movement it is desirable that a route as direct as possible is retained for the existing footpath connecting Ramsgate Road with St Peter's Road.

5.7 The hospital has frontages to Ramsgate Road and St Peter's Road, both of which are Primary Distributors in the local road hierarchy and where it is important to maintain free flow of cross-town and longer distance traffic. In supporting improvement and expansion of the hospital it is essential that the opportunity be taken to rationalise and improve current access arrangements. Specific proposals will be required to reflect a traffic impact assessment of such proposals and to incorporate suitable access improvements to accommodate any resultant increases in traffic and appropriate access for 'Blue Light' vehicles.

5.8 The hospital is already a major generator of traffic in the area, and the Council will wish to see the implementation of a Travel Plan for the hospital, which can be implemented in parallel with development permitted by this Policy. An essential element of this Plan should be to encourage the greater use of public transport by staff and visitors. The creation of new staff accommodation on site should help to work towards this objective.

Policy SP39 - QEQM Hospital, Margate

Land to the south-east of the existing QEQM Hospital, Margate, is identified for release for expansion of the hospital. No other development will be permitted on this site. Development for hospital purposes should meet the following criteria:

- 1) proposals should be designed to involve the most efficient use of land, consistent with the need to provide a pleasant environment for patients and staff;**
- 2) development proposals should demonstrate how they will integrate with the hospital site as a whole;**
- 3) proposals should incorporate the retention of the existing footpath and provision of a substantial landscaping screen;**
- 4) proposals should incorporate a comprehensive review of access arrangements associated with the hospital and access provision should reflect the findings of a specific traffic impact assessment;**

- 5) **proposals should be supported by a travel plan;**
- 6) **the level of car parking associated with new development should be limited to the minimum necessary.**

5.9 In addition to the hospital allocation the Thanet Clinical Commissioning Group (CCG) has identified a need for a new medical centre at Westwood. There are a number of strategic allocations in the Westwood area and a new medical centre is required to meet the needs of the new community arising out of these developments.

Policy SP40 - New Medical Facilities at Westwood

New medical facilities are required at Westwood to meet the needs generated by the strategic allocations. The Council will work with the CCG, developers and other appropriate organisations to identify a suitable site.

Community and Utility Infrastructure

5.10 The National Planning Policy Framework requires local plans to make provision for infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change. It also requires the provision of health, community and cultural infrastructure, together with utility infrastructure such as gas, electricity, emergency services and fibre-optic cables.

5.11 It is important that there is sufficient community infrastructure to support new development. This includes provision of adult social services, education, health facilities, libraries, childcare and youth services. This is dealt with more fully in policy CM01 and supporting text.

5.12 Advanced high quality communications infrastructure is essential for sustainable economic growth. The development of high speed broadband technology and other communications networks also plays a vital role in enhancing the provision of local community facilities and services.

5.13 The Council is working with Kent County Council and other services providers to ensure sufficient infrastructure is provided for. An Infrastructure Delivery Plan has been prepared alongside the Local Plan to identify infrastructure requirements. Further guidance is set out in the implementation policy SP02.

5.14 The following policies seek to achieve the objectives of accommodating the development needed whilst providing and improving access to community and utility infrastructure.

Policy SP41 - Community Infrastructure

Development will only be permitted when provision is made to ensure delivery of relevant and sufficient community and utility infrastructure. Where appropriate, development will be expected to contribute to the provision of new, improved, upgraded or replacement infrastructure and facilities.

Provision of Schools

New and Expanded School provision

5.15 Kent County Council, as education authority, has identified from the population and growth forecasts set out in this plan that Thanet's primary and secondary schools will need to expand through both onsite expansion and new provision. The Council will work with KCC and developers to identify and safeguard land to accommodate any required expansions. There is a requirement for a new secondary school at Westwood to meet the needs of the strategic allocations. The Council will work with KCC and developers on the identification of a suitable site.

Policy SP42 - Primary and Secondary Schools

The Council will support the expansion of existing and development of new primary and secondary schools in Thanet to meet identified needs and will work with Kent County Council in identifying, allocating and safeguarding other sites as required .

As a result of identified future growth, provision is made in the plan for additional schools at:

- **Birchington: 2FE primary school (Policy SP16)**
- **Westgate: 2FE primary school (Policy SP17)**
- **Westwood: equivalent 6FE primary school (Policies SP18, SP19 and SP20); 6FE secondary school (Policy SP20)**
- **Ramsgate (Manston Green): 2FE primary school (Policy SP15)**

6- Transport Strategy

Safe and Sustainable Travel

6.1 The National Planning Policy Framework (NPPF) states that transport policies have an important role to play in facilitating sustainable development and in contributing to wider sustainability and health objectives. Key messages include that the transport system needs to be balanced in favour of sustainable transport modes, giving people real choice about how they travel. Local Plan policies are expected to aim for a balance of land uses to encourage people to minimise journey length for employment, shopping, leisure, education and other activities.

6.2 Transport is a critical factor to Thanet's aspirations for sustainable economic regeneration. Thanet's residents need to go to work, school, shops and to access other services as part of their daily lives. Goods need to be moved to support employment and economic growth. Thanet does not at present suffer significant levels of congestion, traffic noise, pollution and delays such as experienced in urban centres elsewhere in Kent. A high proportion of Thanet's population has no access to a car. However this has potential to change and some traffic congestion already occurs at certain junctions at peak times. Thanet has an attractive environment and is a pleasant place to live and work. Its environment is also a potential asset in attracting investment. The intention is to maintain that situation while attracting and accommodating appropriate development in support of regeneration. Accordingly, key actions will be to manage mobility by putting in place an efficient and effective, sustainable transport system.

6.3 With Port Ramsgate, Thanet has a potentially significant international Gateway function important for economic development across the region. The introduction of high speed trains connecting Thanet with the High Speed 1 (HS1) service has reduced journey times from Ramsgate to London by over 30 minutes. Manston Business Park is a location of strategic importance. A travel plan will be required alongside planned growth to promote sustainable travel, particularly by the workforce.

6.4 Kent County Council's Local Transport Plan (Delivering Growth without Gridlock, 2016-2031) identifies strategic transport projects to support Kent's sustainable economic growth. One of the identified strategic priorities is journey time improvements and Thanet Parkway Railway Station. It also identifies a number of local priorities for Thanet:

- Inner circuit of new and improved highway routes, including improved links to Westwood Cross
- Bus priority measures
- Improve sustainable transport options in Westwood
- Westwood Relief Strategy - Westwood Road to Margate Road Link
- Margate junction improvements
- Ramsgate Port investment
- Public realm improvements in the coastal towns

6.5 The Council is also working with Kent County Council to prepare a Transport Strategy for the district which supports the development proposed through the draft Local Plan.

6.6 The Transport Strategy is informed by transport modelling of the draft Plan proposals, and

seeks to address key transport issues, including those related to the development identified in this Plan. It includes proposals for cars, public transport, walking and cycling. The key new road infrastructure is set out under Policy SP47.

6.7 Thanet's services and most employment sites are clustered in and around the coastal centres and Westwood. These are close to Thanet's existing communities, including the deprived neighbourhoods, and highly accessible by public transport including the frequent "Loop" bus.

6.8 An efficient and convenient public transport system and direct walking and cycling routes need to be at the heart of the transport network to reduce the risk that growth may cause traffic congestion, noise and air pollution, or isolate disadvantaged communities.

6.9 Within the context of an established development pattern, the most significant change likely to generate demand for travel will result from new housing development. It is necessary, therefore, to consider the location of development in areas accessible to a range of services on foot and by public transport, preventing urban sprawl and improving local high streets and town centres. Methods such as providing showers and changing facilities in employment related development and locating cycle parking close to town centres/entrances will also help reduce the need to travel by car.

6.10 Thanet and Kent County Council are jointly preparing a Thanet Transport Strategy to help increase the efficiency and effectiveness of the transport system, achieve a shift to more sustainable travel patterns and modes and to identify the transport infrastructure and improvements required to support implementation of the Local Plan. The following sections address challenges identified in the draft Strategy.

Policy SP43 - Safe and Sustainable Travel

The Council will work with developers, transport service providers, and the local community to manage travel demand, by promoting and facilitating walking, cycling and use of public transport as safe and convenient means of transport. Development applications will be expected to take account of the need to promote safe and sustainable travel. New developments must provide safe and attractive cycling and walking opportunities to reduce the need to travel by car.

Accessible Locations

6.11 Guiding the location, scale and density of new development is an important way of reducing the need to travel, reducing travel distances, and making it safer for people to use alternatives to the car. Consistent policies directing location of travel generating uses will also guide infrastructure investment further supporting integration of transport and land use.

Policy SP44 - Accessible locations

Development generating a significant number of trips will be expected to be located where a range of services are or will be conveniently accessible on foot, by cycle or public transport. The Council will seek to approve proposals to cluster or co-locate services at centres accessible to local communities by public transport and on foot.

Transport Infrastructure

6.12 The draft Transport Strategy aims to promote walking, cycling and use of public transport as well as improvements to the road network to facilitate sustainable choice and safe and convenient travel. Where the need for improvements arises wholly or largely from proposed development the developer will be expected to contribute towards required improvements as set out in the draft Transport Strategy and the draft Infrastructure Delivery Plan (IDP).

6.13 While this Plan seeks to increase use of sustainable modes of transport, people will continue to make use of private cars and planned growth will increase travel demand. There are a number of locations where traffic flow issues need to be addressed. These are "Victoria" traffic lights Margate, Coffin House Corner Margate, Marine Terrace Margate, Dane Court Roundabout Broadstairs and the "Spitfire" junction. Any new transport links also need to serve new development and relieve the pressure on the urban route network.

6.14 The Council, together with Kent County Council, is proposing a new Inner Circuit, which is set out under the Strategic Routes Policy SP47.

Policy SP45 - Transport Infrastructure

Development proposals will be assessed in terms of the type and level of travel demand likely to be generated. Development will be permitted only at such time as proper provision is made to ensure delivery of relevant transport infrastructure. Where appropriate, development will be expected to make a proportionate contribution to the provision, extension or improvement, of walking and cycling routes and facilities and to highway improvements.

Subject to individual assessments, schemes may be required to provide or contribute to:

- 1) capacity improvements/connections to the cycle network;**
- 2) provision of pedestrian links with public transport routes/interchanges;**
- 3) improvements to passenger waiting facilities;**
- 4) facilities for display of approach time information at bus stops along identified quality bus corridors;**
- 5) improvement and expansion of public transport services;**
- 6) improvements to the road network in line with schemes identified through the transport strategy;**
- 7) provision of electric vehicle charging points, in accordance with policy SP14.**

Connectivity

6.15 Thanet's location in the south east corner of England has previously been seen as a disincentive to investors, but now the transport infrastructure in place offers attractive business opportunities with an integrated transport hub, maximising on the potential of HS1 from Ramsgate and the port. Recent years have seen the completion of the A299 Thanet Way and its new connection to the now completed A299/A256 improvements. This road infrastructure gives direct connectivity between the ports of Dover and Ramsgate, and the rest of Britain's strategic road network.

6.16 Prospective investments in line speeds along the domestic link to HS1 will result in further significant reduction in journey times between Thanet and London. The Council will continue to lobby for investments to secure further improvements to rail journey times for CTRL including domestic services between Ashford and Ramsgate.

New Railway Station

6.17 The introduction of faster trains on the Ramsgate to St Pancras route, utilising the High Speed rail link (HS1) means that Ramsgate is only 76 minutes from London for much of the day. As a result, Thanet has the potential to become a more attractive location for people employed in London seeking to live in a more pleasant environment.

6.18 Kent County Council, through its Local Transport Plan 'Growth without Gridlock', and the South East Local Enterprise Partnership, through its Strategic Economic Plan support the provision of a new Parkway railway station to the west of Ramsgate close to Cliffsend village. In promoting delivery of the project, Kent County Council has identified a preferred location west of Cliffsend.

6.19 Thanet District Council supports the principle of a new railway station at a suitable location along the rail-side area west of Ramsgate. The following policy safeguards land at the preferred location west of Cliffsend for the Parkway project including an area for car parking and a road access to the A299/A256 roads. In addition the Council will continue to investigate and press for improvements to the running times of trains between Thanet and Ashford with a view to reducing the journey time from the Parkway to less than 60 minutes to London.

6.20 In supporting the principle of a new railway station, emphasis will be placed on its accessibility by public transport and road (including sufficient car parking) for established and planned residential areas. New housing development is proposed on the edge of Ramsgate and at the village of Cliffsend in close proximity to the new railway station.

Policy SP46 - New Railway Station

Land west of Cliffsend (as shown on the Policies Map) is safeguarded for a new railway station. Proposals will be required to specifically demonstrate all of the following:

- 1) satisfactory vehicular access arrangements from the A299**
- 2) suitable level of car parking**
- 3) integration with wider public transport services**
- 4) mitigation of any noise impacts on sensitive receptors**
- 5) compatibility with the landscape character of its location**
- 6) located to minimise the loss of best and most versatile agricultural land**

Strategic Road Network

6.21 The Council, with KCC, has carried out a high-level assessment of the potential of the Local Plan proposals on the strategic road network, to a methodology agreed with Highways England, notably in relation to the Brenley Corner junction with the M2, and the junctions of the A256 with the A2 near Dover.

6.22 This work has concluded that the potential impact is very limited, and not significant in the context of wider traffic patterns at these junctions.

6.23 Kent County Council and Thanet District Council are preparing a new Transport Strategy for the District, which includes proposals for new and improved roads and junctions; enhancements to bus and train services and an expansion of the cycling/walking network.

Strategic Routes

6.24 The key element of the emerging Strategy is the development of a proposed "Inner Circuit" to serve new development and reduce pressure on the existing network. This incorporates a new bypass for Birchington; a relief road for Westgate; connections to Westwood from the north-west and south; and improved connections to Manston Business Park, and should bring benefits to the wider road network. It is intended that the Inner Circuit schemes will incorporate provision for buses and cycling.

6.25 These road proposals are required to support proposed new development in the area, and the routes are safeguarded in this draft Local Plan to ensure that they can be completed in due course alongside the development set out in the draft Local Plan. As set out in the working draft of the Infrastructure Delivery Plan, this infrastructure is regarded as critical to support the development proposed in the draft Local Plan, and it is expected that all new development will contribute to the provision of all key infrastructure in a proportionate and appropriate way. The Council, with its partners, will also seek other forms of funding, to support infrastructure provision.

6.26 The exact routes identified in Policy SP47 may vary as detailed plans for the strategic urban extensions come forward and more detailed transport evidence becomes available. The review of the Local Plan will need to respond to the decision on the Development Consent Order for Manston Airport, and this may result in a variation of the alignment identified in relation to the B2050 Manston Road (from Manston Court Road to Spitfire Junction).

Policy SP47 - Strategic Routes

The following areas, as shown on the Policies Map, are safeguarded for the provision of key road schemes and junction improvements, to support the implementation of the Thanet Transport Strategy, including land at:

- 1) **Birchington strategic housing site**
- 2) **B2050 Manston Road, Birchington**
- 3) **Shottendane Road (from Birchington to Margate)**
- 4) **Shottendane Road-Manston Road - Hartsdown Road housing site**
- 5) **Nash Road-Manston Road housing site**
- 6) **Nash Road, Margate**
- 7) **Nash Road-Westwood strategic housing site**
- 8) **Manston Court Road/Star Lane (from Haine Road, Westwood to B2050 Manston Road)**
- 9) **From Columbus Way to Manston Road, Birchington**

The following strategic routes are sufficient in their existing form to provide for the growth envisaged in the Plan)(subject to the Local Plan review process set out in Policy SP03).

However, if further development is permitted, including further development at Manston Airport, which has a material impact on the capacity or operation of these routes, the Council will require alternative on-site highway provision where appropriate and/or proportionate contributions towards any improvements or changes to the existing routes which is thereby necessitated:

- 1) B2050 Manston Road (from Manston Court Road to Spitfire Junction
- 2) B2190 Spitfire Way (from Spitfire Junction to Columbus Avenue junction).

Junction/traffic management improvements are required at the following junctions to ensure the fully effective functioning of the Inner Circuit. Development that compromises the ability to deliver such improvements will not be permitted:

- 1) Victoria Traffic Lights
- 2) Coffin House Corner Traffic Lights

The Council expects all new development to make a proportionate contribution to the provision of this key infrastructure.

In the event that there is any delay in site acquisition or assembly in relation to any of the schemes identified in Policy SP47, the Council will, in conjunction with the County Council, make interim highway arrangements to enable allocated development schemes to proceed.

6.26 The Council is confident that, working with Kent County Council, the full Inner Circuit can be delivered during the Plan period alongside the proposed development in the Plan. The Council will work with developers and KCC to ensure that the requirements for the Inner Circuit are applied reasonably so that there is no delay to the delivery of development across the Plan period.

6.27 Potential measures to manage interim traffic impacts include:

- Localised widening within existing verge areas
- Localised narrowing and priority working systems to manage traffic flow
- Alternative routes
- Localised weight restrictions for HGVs, linked to positive signing strategies for routeing larger vehicles

7- Economy

Retention of existing employment sites

7.1 The Council considers that it is essential to retain employment premises in order to conserve stock for future use. Sites have been assessed for their compatibility with the plan's employment land strategy. The sites listed below contribute positively and are retained and protected for employment purposes accordingly.

7.2 Some sites have been identified as suitable for flexible uses. Flexible uses will be restricted to these areas. It is important that traditional employment uses on retained sites are not compromised by incompatible flexible uses that lead to conflicts such as statutory noise and nuisance complaints and highway safety issues.

Policy E01 - Retention of existing employment sites

The following sites will be retained as employment sites and the Council will support uses falling within Use Classes B1, B2 and B8 where they would not harm the living conditions of neighbouring occupiers of land or buildings:

- 1) All sites specifically identified under Policy SP05; and
- 2) Existing business sites and premises identified set out below:
 - Cromptons site, Poorhole Lane, Broadstairs
 - Pysons Road Industrial Estate, Broadstairs
 - Thanet Reach Business Park (part), Broadstairs
 - Dane Valley Industrial Estate St.Peters, Broadstairs*
 - Northdown Industrial Estate St.Peters, Broadstairs
 - Manston Business Park (part), Manston
 - Manston Green, Manston
 - Manston Road Depot, Margate
 - Westwood Industrial Estate, Margate*(part)
 - Fullers Yard, Victoria Road, Margate
 - All Saints Industrial Estate, Margate
 - Laundry Road Industrial Estate Minster
 - Eurokent (part), Ramsgate*
 - Leigh Road Industrial Estate, Ramsgate
 - St. Lawrence Industrial Estate, Ramsgate
 - Princes Road Depot/Pioneer Business Park, Ramsgate
 - Whitehall Road Industrial Estate, Ramsgate
 - Hedgend Industrial Estate, Thanet Way, St.Nicholas-at-Wade
 - Tivoli Industrial Estate, Margate
 - Manston Road Industrial Estate (part), Ramsgate

Proposals for alternative uses on sites identified under Policy E01 (1) and (2), and other buildings and land currently used for employment, will only be permitted where:

- It has been demonstrated that the site is no longer suitable or viable for employment purposes following an active and exhaustive marketing process for a minimum of 12 months;
 - The proposal would not undermine economic growth and employment opportunities in the area;
 - The proposal would not result in a significant, or harmful reduction in the supply of land available for employment purposes for the remainder of the plan period, having regard to the type of employment land proposed for reuse and its location;
 - The proposal would not prejudice the ongoing operation of remaining businesses nearby; and
 - The proposal would result in a good standard of amenity for existing and future occupants.
- * these are flexible employment sites, where wider employment generating uses will be allowed in addition to B1, B2 and B8 uses. Development must be compatible with neighbouring uses. Proposals for main town centre uses should also comply with Policy E05 - the sequential test where necessary. These uses will be expected to contribute towards the Local Employment and Training Fund.

Flexible uses include leisure, tourism and other town centre uses which, due to scale and format cannot be accommodated within town centres. They also include uses known as sui generis which do not fall into a category in the Use Classes Order.

These include uses such as car showrooms and crèches

Home Working, Digital Infrastructure and Community Business Space

7.3 The National Planning Policy Framework (NPPF) requires the Council to plan for flexible working practices such as the integration of residential and commercial uses within the same unit.

7.4 The proportion of people that are home working is relatively high in Thanet according to the Economic and Employment Assessment 2012. It is not clear from the evidence whether these are small local business starting up from home or employees of companies potentially located outside the district. In either case this is considered beneficial to Thanet's economy as a result of money spent in the district. The co-location of home and work can reduce car use, and is therefore environmentally sustainable, particularly bearing in mind the growth of fast broadband. It is therefore considered important that improvements to digital infrastructure are supported.

7.5 Flexible office space (workhubs) with professional equipment and meeting space that can be hired and used in an ad hoc manner by home based workers can also support home working. Business advice may also be important. It is considered that these facilities can be accommodated on identified business parks or in the town centres.

7.6 Some small scale home working may not require planning permission. However, where home- working does require planning permission, consideration should be given to the impacts upon the neighbourhood, including for example traffic, noise and disturbance.

The Council supports home working proposals but wishes to ensure that any potential impact is acceptable, as set out in the following policies.

Policy E02 - Home Working

Proposals for the establishment of a business operating from a residential property will be permitted, provided that it can be demonstrated that the proposed use would not result in:

- 1) detrimental impacts on residential amenity by reason of dust, noise, light, smell, fumes or other emissions;**
- 2) additional traffic flows or vehicle parking in the vicinity, at a level that would be harmful to residential amenity or highway safety; or**
- 3) the erosion of the residential character of the area.**

7.7 The Council strongly supports the installation of digital infrastructure and considers that an appropriate balance needs to be struck when considering impacts on heritage assets, conservation areas and historic landscapes.

Policy E03 - Digital Infrastructure

Proposals for the installation of digital infrastructure will be required on allocated sites in this plan.

Retro-fitting in existing urban areas and villages will be supported, subject to no unacceptable harm on listed buildings and their settings, the character or appearance of conservation areas and their settings, and historic landscapes

8- Town and District Centres

Primary and Secondary Frontages

8.1 The National Planning Policy Framework (NPPF) requires local planning authorities to define the extent of primary and secondary frontages within town centres and set policies to make clear which uses will be permitted in such locations.

8.2 Healthy shopping centres rely on control over the number and location of non-retail premises within the main shopping area. The success of any particular centre is dependent, at least in part, upon retaining a reasonably close grouping of shops selling a wide range of products. This allows customers to fulfil the majority of their shopping needs in one trip, as well as providing the opportunity for comparing the price and availability of less frequently purchased goods. The existence of non-retail businesses in primary shopping areas can inhibit these activities by reducing the range of shops, and thereby potentially reducing the number of people visiting the centre, as well as making the centre less compact and therefore less convenient. However town centres perform a greater function than just retail centres. They are hubs of the community and encompass cultural, leisure, arts and heritage uses that in turn support the tourism industry. Therefore in line with the strategy for the town centres outlined earlier it is considered appropriate to provide a generous secondary frontage in the coastal town centres in order to maintain and support this trend.

Policy E04 - Primary and Secondary Frontages

Primary and Secondary Frontages are defined for Westwood, Margate, Ramsgate and Broadstairs.

Within the Primary Frontages the following development will be permitted:

- 1) Use Classes falling within A1, A2, A3, A4 and A5. (see glossary – Appendix D);**
- 2) residential and other main town centre uses will be permitted above ground floor level only.**

Within the Secondary Frontages the uses referred to in the preceding clauses will be permitted at ground and upper floor level where this would not fragment or erode the active frontages to a degree that would undermine the function of the centre.

Sequential and Impact Test

8.3 Local planning authorities are required by the National Planning Policy Framework (NPPF) to apply a sequential test to planning applications for main town centre uses that are not in an existing centre and are not in accordance with an up to date Local Plan. Applications for main town centre uses should be located in town centres, then in edge of centre locations and only if suitable sites are not available should out of centre sites be considered. When considering edge of centre and out of centre proposals, preference should be given to accessible sites that are well connected to the town centre. Applicants and local planning authorities should demonstrate flexibility on issues such as format and scale.

8.4 The NPPF requires that town centre development takes place on sites within designated town centres and only where there are no suitable, viable or available sites. Should edge of centre or out of centre locations be considered, the reasons for rejecting more central sites should be clearly explained.

8.5 This sequential approach should not be applied to applications for small scale rural offices or other small scale rural development.

8.6 The NPPF also requires that applications for town centre development outside of the defined town centres above a certain threshold are accompanied by an impact test in order to assess the impact on vitality and viability of the town centres. The thresholds for Thanet are set out in policy below.

Policy E05 - Sequential and Impact Test

Proposals for main town centre uses should be located within the designated town centres of Margate, Ramsgate, Broadstairs and Westwood, as shown on the policies map. Where this is not possible due to size, format and layout town centre uses should be located on the edge of town centres or on employment land designated for flexible uses. Outside these defined centres applicants should demonstrate that there is no sequentially preferable location within the catchment of the proposed development.

Applications for development above the following thresholds outside town centres should be accompanied by an impact assessment:

- 1) **Urban area* - 1,000 square metres**
- 2) **Rural area* - 400 square metres.**

The impact assessment should include:

- **the impact of the proposal on existing, committed and planned public and private investment in a town centre or town centres in the catchment area of the proposal; and**
- **the impact of the proposal on town centre vitality and viability, including local consumer choice and trade in the town centre and wider area, up to five years from the time the application is made. For major schemes where the full impact will not be realised in five years, the impact should also be assessed up to ten years from the time the application is made.**

Applicants should demonstrate flexibility on issues such as format and scale and will be expected to provide the Council with robust evidence of this.

Where an application fails to satisfy the sequential test or is likely to have an adverse impact on one or more of the above factors, it will be refused.

***As defined by the Boundary of Urban Area (SP24) on the Policies Map. The Villages are in the rural area.**

District and Local Centres

8.7 District and Local Centres perform an important role in the retail hierarchy catering for basket and top up shopping located in sustainable locations often walkable from residential areas. Developments in local parades and centres should primarily serve the community within which they are located with catchment areas of not more than 800 metres.

8.8 Thanet's District Centres consist of Cliftonville, Birchington, Westgate and Minster. There are a number of smaller local centres throughout the district.

8.9 The important function of District and Local Centres, particularly the services they provide for the elderly and infirm should not be compromised by an overconcentration of residential accommodation.

Policy E06 - District and Local Centres

Proposals for additional shopping provision at traditional District Centres (as defined on the Policies Map) and Local Centres* will be permitted where the proposals serve the local population and are of a scale appropriate to the particular centre.

Residential accommodation will be permitted in District and Local Centres where this would not fragment or erode the active frontages of such locations to a degree that undermines the function of the centre.

***The Local Centres are located at:- (as indicated on the Policies Map)**

- **Minnis Road, Minnis Bay, Birchington**
- **Cambourne Avenue/Lymington Road, Westgate on Sea**
- **Canterbury Road, Garlinge**
- **Canterbury Road, Westbrook**
- **Ramsgate Road, Margate (Victoria Lights)**
- **Holly Lane/Northdown Road, Margate**
- **Summerfield Road, Palm Bay, Margate**
- **St Peter's, Broadstairs**
- **Margate Road/Northwood Road, Ramsgate**
- **High Street, St Lawrence, Ramsgate**
- **Hereson Road, Ramsgate**
- **Grange Road, Ramsgate**

9 - Tourism

Tourist Accommodation

9.1 A strategic priority of this Plan is the provision of sufficient quality tourist accommodation necessary to increase tourist spend and help to extend the tourist season.

9.2 Existing hotel provision in the district caters well for the budget hotel market and this has been increasing in recent years, but Thanet is lacking in hotels at the top end of the market. There is also a shortage of family holiday accommodation. Hotel facilities must be attractive to tourists to capitalise on the trend for shorter breaks in the UK and demand for better overall quality and service. There is increasing demand for boutique and designer hotels fuelled by more sophisticated tastes.

9.3 Other than caravan accommodation Thanet has relatively few self-catering facilities. Touring and camping is a popular choice of tourist accommodation and is an up and coming market. Thanet is currently underprovided with these types of facilities and the Council aims to take advantage of this high demand.

9.4 It is therefore important to provide for new, and to protect tourist accommodation of all types and for all budgets to attract a range of staying visitors to the area, which the following policies seek to achieve.

Policy E07 - Serviced Tourist Accommodation (Hotels, Guest Houses and B&Bs)

The Council will permit the development of new serviced tourist accommodation, including extensions and improvements to existing accommodation, in appropriate locations such that:

- 1) It is of form, scale and design appropriate to its surroundings;**
- 2) It does not cause unacceptable impact on the road network or highway safety;**
- 3) It is accessible by a range of means of transport (wherever possible in rural areas);**
- 4) If it is located in a rural area, that it respects the character of the local countryside and is sensitive to its defining characteristics; Outside of the urban area development should respect landscape character and nature conservation value; and**
- 5) Sufficient mitigation should be provided to prevent against any material increase in recreational pressure on designated nature conservation sites.**

Policy E08 - Self Catering Tourist Accommodation

Proposals for the development, diversification, upgrade or improvement of self-catering accommodation will be permitted provided that:

- 1) it is sustainably located;
- 2) it is of a form, scale and design appropriate to its surroundings;
- 3) in relation to a caravan and camping park, that it does not cause unacceptable impact on the local road network or highway safety, and wherever possible is well related to the primary and secondary road network; and
- 4) if it is located in a rural area, that it respects the character of the local countryside and is sensitive to its defining characteristics;
- 5) Sufficient mitigation should be provided to prevent any material increase in recreational pressure on designated nature conservation sites.

Policy E09 - Protection of Existing Tourist Accommodation

Proposals that would result in the loss of existing tourist accommodation with 10 or more bedrooms will not be permitted unless it can be demonstrated that the hotel/guesthouse or self-catering accommodation is no longer viable* for such use.

* In order to demonstrate that the existing tourist accommodation is not viable, evidence will be required to show that the facility has been marketed extensively for at least a year and at an open market value which is attributable to its use as tourist accommodation with consideration given to alternative forms of holiday accommodation. Evidence will also be required of occupancy rates for the previous 3 years, and any other relevant factors such as previous marketing or business plans, locational factors and ease of access for visitors by a range of means of transport. In assessing whether the accommodation is not viable the Council may seek the independent views of industry experts.

Thanet's Beaches

9.5 Thanet possesses a large number of sandy beaches, whose characters range from intensively holiday-oriented beaches (eg: Main Sands, Margate) to undeveloped beaches with a natural character and appearance (eg: Grenham Bay, Birchington). The different types of beach offer opportunities for different types of recreational activity. In the interests of choice, the Council believes that it is desirable to ensure that the differences of character are maintained, and where appropriate, enhanced. Most beaches along the Thanet coast are internationally important for their wintering bird populations.

9.6 The Council's Destination Management Plan is considering potential locations for additional beach development, including accommodation, where it would be appropriate and viable. It is also investigating ways to improve the management of the beaches for the benefit of the tourism economy.

9.7 The following policies divide the beaches into three broad categories, in order to direct and restrict development appropriately to maintain and enhance their individual function and character, and to protect the designated nature conservation sites.

9.8 It should be noted that the intermediate category includes beaches which have scope for some further development, as well as those which are fully developed within the terms of the policy.

9.9 To provide for a variety of tastes and choice in the type of recreational activities, associated service facilities and degree of solitude on Thanet's coastline, the following policies will apply to beach development.

Policy E10 – Thanet's Beaches

Major Holiday Beaches

On those beaches identified as major holiday beaches below, the Council will support proposals for the provision and upgrading of a wide range of recreational facilities and services including tourist accommodation:

- 1) Main Sands, Margate**
- 2) Ramsgate Main Sands**
- 3) Viking Bay, Broadstairs**

Proposals must also comply with the heritage policies of this plan and the National Planning Policy Framework.

At Margate Main Sands recreational facilities will be concentrated on that part of the beach at the junction of Marine Terrace and Marine Drive and the built form shall not project above the level of the seafront promenade.

Development proposals must avoid or fully mitigate against any impact upon the designated nature conservation sites, and will be subject to the Habitats Regulations.

Intermediate Beaches

On those beaches identified as intermediate beaches below, and where scope exists for such development, the Council will support proposals for small scale tourism and leisure development (e.g. tourist accommodation, kiosks supplying food and refreshments, beach huts and beach furniture), subject to the scale of provision being consistent with the intermediate status of the beach and satisfactory design and siting of development:

- 1) Dumpton Gap (part)**
- 2) Joss Bay**
- 3) Louisa Bay**
- 4) Minnis Bay (part)**
- 5) St Mildred's Bay**
- 6) Stone Bay**
- 7) Walpole Bay**
- 8) Westbrook Bay**
- 9) Western Undercliff, Ramsgate**
- 10) West Bay**

Development proposals must avoid or fully mitigate against any impact upon the designated nature conservation sites, and will be subject to the Habitats Regulations.

Undeveloped Beaches

On, or adjacent to undeveloped beaches identified on the Policies Map, priority will be given to the maintenance and enhancement of their natural, remote and undeveloped character. New development including new built facilities, the provision of public car parking facilities and new or improved vehicular access to serve such beaches will not be permitted. In the event that there is an overriding need for development/necessary infrastructure that cannot be met or located elsewhere, such proposals must avoid or fully mitigate against any impact upon the designated nature conservation sites, and will be subject to the Habitats Regulations.

Language Schools

9.10 Thanet contains a considerable number of language schools and a large percentage of students using these services stay with Thanet families or as paying guests. In 2013 language schools turnover was an estimated £19.7 million with approximately £6.3 million paid to an estimated 2,800 host families in the district. Students' total spend in Thanet was an estimated £33.6 million and language schools created around 1,000 jobs. (TDC - Economic Impact of Language Schools/EFL Providers 2013 - Final Report)

9.11 English language schools in Thanet are therefore a major contributor to the local economy, and offer potential for encouraging the next generation of visitors to this part of Kent. The Council wishes to encourage growth in this sector of the economy.

9.12 However language schools can cause issues with noise and disturbance particularly where there are concentrations of such facilities in an area potentially resulting in large gatherings of young people. These issues need to be balanced with the benefit to the local economy, as set out in the following policy.

Policy E11 - Language Schools

Language schools will be permitted subject to:

- 1) **The number of students to be accommodated, the hours of operation, the range of facilities provided and the relationship with adjoining properties not resulting in an unacceptable impact on the living conditions of adjacent occupiers through noise, additional on-street parking or general disturbance;**
- 2) **The use of the property as a language school not resulting in an over-concentration of such uses in a particular locality to a level which is harmful to the character and appearance of the area.**

Quex Park

9.13 Quex Park Estate is set in 250 acres of parkland and trees in Thanet's otherwise wide open landscapes.

9.14 The major attraction and point of interest is the Powell Cotton Museum which is one of the finest collections of natural history and ethnographic artefacts in existence.

9.15 The Quex Park Estate contains a wealth of heritage assets. The Mansion House dates back to the early 1400s but this was demolished between 1769 and 1849 by John Powell who replaced it with an elegant Regency home. There are also acres of historic gardens and natural woodland with traditional Victorian layout and landscaping which includes built heritage of a walled garden and green houses.

9.16 Other heritage assets at Quex Park include the Three Towers - the Round Tower built in 1814, the Waterloo Tower built in 1819 and the clock tower above the listed coach house. The turret clock, by Benjamin Lewis Vulliamy, was installed in 1837 and chimes the quarters and the hour.

9.17 Quex Park farms 607 hectares in-house plus a further 607 hectares under contract agreements with other local farmers. The profitability of farming alone was not able to provide for the upkeep of the historic buildings and parkland despite registration for charitable status. As a result the Estate has diversified its many redundant buildings.

9.18 Therefore as well as the museum, house and gardens, Quex Estate incorporates Quex Barn farmers' market and restaurant, Jungle Jims children's indoor and outdoor play area, the Secret Garden centre, a paintballing arena, the Quex Maize Maze, the Craft Village, Build a Base (an indoor games arena) and Mama Feelgoods Boutique café. In addition to these individually managed enterprises the Estate also hosts weddings. The Estate as a whole employs in the region of 140 people.

The following policy seeks to promote further development of the Quex Park Estate to support its diversification as a local enterprise, providing valuable economic and tourism benefits whilst protecting the Parks character, heritage and biodiversity.

Policy E12 - Quex Park

Farm diversification projects and tourism and leisure development at Quex Park Estate will be supported where they contribute to the upkeep of the Quex House and Gardens and the Powell-Cotton Museum and promote the Estate as a destination for tourism and leisure.

Projects should be in keeping with the parkland character of the Estate, conserve and enhance the heritage assets and their settings, the Park's biodiversity, and meet the requirements of Policy SP26.

Applications that are likely to have a significant impact on the highway network must be accompanied by a Transport Assessment in accordance with Policy TP01. In other cases a transport statement may be required.

10- The Rural Economy

10.1 The National Planning Policy Framework (NPPF) requires that Local Plans support the sustainable growth and expansion of all types of business and enterprise in the rural areas, promote the development and diversification of agricultural and other land based rural businesses, support sustainable rural tourism and leisure developments that benefits businesses in the rural area and promote the retention and development of local services and community facilities. There is also the requirement for the Local Plan to address the needs of the food production industry and any barriers to investment that planning can resolve. The Council wishes to support a sustainable rural economy and rural economic development of an appropriate scale and the following policies seek to address this.

New build development for economic development purposes in the rural area

10.2 The NPPF states that planning policies should support economic growth in rural areas in order to create jobs and prosperity by supporting sustainable growth and expansion of all types of business and enterprise in rural areas, through well designed new buildings.

Development should have regard to the Kent Downs AONB Farmstead Guidance produced by English Heritage (now known as Historic England), Kent Downs AONB, KCC and Kent Design.

Policy E13 - Development for new business in the countryside

Well-designed new development for economic development purposes for new businesses will be permitted in sustainable locations, at a scale and form compatible with their rural location.

Conversion of rural buildings

10.3 An important consideration for the rural economy and rural diversification is the reuse of redundant buildings. The National Planning Policy Framework (NPPF) states that planning authorities should support the expansion of all types of business and enterprise in rural areas through the conversion of existing buildings.

10.4 Such conversions might be particularly desirable where buildings are listed, or have other landscape value, and their long-term retention may be sought for these reasons.

10.5 Disused rural buildings may hold species such as bats or barn owls, protected by the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. The conversion of such buildings should make provision for their continued use by protected species which are present. If this is not possible, mitigation should be provided nearby.

Policy E14 - Conversion of rural buildings for economic development purposes

Where it can be demonstrated that the building is not needed for agricultural use the conversion of rural buildings to other uses for economic development purposes will be permitted where all the following criteria are met:

- 1) their form, bulk and general design are in keeping with the character of the surrounding countryside;
- 2) the proposed use is acceptable in terms of its impact on the surrounding area and the local highway network;
- 3) it can be demonstrated through a structural survey that the building is capable of conversion;
- 4) any alterations associated with the conversion would not be detrimental to the distinctive character of the building (or its setting), its historic fabric or features.
- 5) if the building forms part of a complex of agricultural or industrial buildings, a comprehensive strategy is put forward which shows the effects on the use of the remaining complex.
- 6) where the building contains protected species any negative impacts should be fully addressed following the “avoid, mitigate and compensate” hierarchy.

Farm Diversification

10.6 The NPPF requires that planning policy should promote the development and diversification of agricultural and other land-based rural businesses.

10.7 The Council wishes to support proposals for diversification that will strengthen and protect the productive base of the farm unit that allows the farmer to continue to farm. The Council will expect an outline farm plan to be submitted with any planning application, indicating how the new diversification schemes integrates with and contributes to the overall business plan for the farm. By granting planning consent for acceptable diversification projects, the Council is indicating its long term support for a continuing viable agricultural community in Thanet.

10.8 However, farm diversification projects have the potential to result in adverse effects, for example, traffic and landscape impacts, and the depletion of financial and land resources. Applicants will therefore need to carefully assess the implications of new proposals, both for their own benefit, and to enable the Council to give support to acceptable and viable schemes. The following policy seeks to achieve this balance:

Policy E15 - Farm Diversification

Proposals to diversify the range of economic activities on a farm will be permitted if all the following criteria are met:

- 1) The proposal is compatible with the agricultural operations on the farm, and is operated as part of the farm holding.
- 2) The loss of best and most versatile agricultural land is minimised.
- 3) The likely traffic generation could be safely accommodated on the local highway network.

Proposals should, where possible, utilise available existing farm buildings.

Best and most versatile agricultural land

10.9 The Agricultural Land Classification system (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system and the presence of best and most versatile agricultural land should be taken into account alongside other sustainability considerations when determining planning applications.

10.10 The National Planning Policy Framework (NPPF) requires that planning authorities should take into account the economic and other benefits of best and most versatile land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality. For the purposes of Policy E16 significant development is considered to be any planning application that is “major development” as defined by The Town and Country Planning (Development Management Procedure) (England) Order 2015. The majority of agricultural land in Thanet is best and most versatile and therefore the following policy applies.

Policy E16 - Best and Most Versatile Agricultural Land

Except on sites allocated for development by virtue of other policies in this Plan, planning permission will not be granted for significant development which would result in the irreversible loss of best and most versatile agricultural land unless it can be clearly demonstrated that:

- 1) the benefits of the proposed development outweigh the harm resulting from the loss of agricultural land,**
- 2) there are no otherwise suitable sites of poorer agricultural quality that can accommodate the development, and**
- 3) the development will not result in the remainder of the agricultural holding becoming not viable or lead to likely accumulated and significant losses of high quality agricultural land.**

Applications for solar parks on best and most versatile agricultural land should comply with Policy CC06 - Solar Parks

10.11 The National Planning Policy Framework also states that the planning system should protect and enhance valued soils and prevent the adverse effects of unacceptable levels of pollution. This is because soil is an essential finite resource that provides important ‘ecosystem services’, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. As part of the government’s ‘Safeguarding our Soils’ strategy, Defra has published a Code of practice for the sustainable use of soils on construction sites. The Council would encourage developers to have regard to this.

10.12 The National Planning Policy Framework (NPPF) requires that Local Plans support the

needs of the food production industry. Agricultural related businesses are those that are not part of a farm business, such as producing and packing operations. These value adding operations are an important part of the rural economy but their scale and location should respect the character and appearance of the rural area as set out in SP04.

11 - Housing

Identification and Release of Housing Land for Development

Allocated sites

11.1 Sites allocated for housing (including strategic site allocations) are shown on the maps and featured in a list of housing site allocations in Appendix B. Notional dwelling unit capacities indicated are for the purposes of illustrating total land supply and do not signify that consent will be granted for particular numbers of dwellings at any site. Capacity on individual sites will be considered in light of planning policy and usual development management considerations.

11.2 The geographical extent indicated for site allocations affecting greenfield land represents the anticipated maximum land requirement. Proposals will be expected to consider, and where possible accommodate, notional maximum dwelling capacities indicated together with all other relevant policy requirements within a lower level of greenfield land take.

11.3 Sites will be released for development over specific time periods. The purpose of this is to ensure that the rate of release and take up is reasonably related to expected need and demand, taking account of the economic strategy and geared to planned infrastructure provision. Indicative phasing is shown as "notional delivery period" in the list at Appendix B.

11.4 This Local Plan does not identify or allocate potential housing sites likely to accommodate four or less dwellings. Such proposals will be assessed in relation to policy HO1.

11.5 Land allocated for residential use will be safeguarded for that purpose in the interest of maintaining a suitable, sustainable and sufficient land supply and reducing the need to find less sustainable alternatives.

Unidentified housing sites

11.6 Sites not previously identified and allocated in Local Plans (sometimes referred to as "windfall" sites") have contributed significantly in recent years to housing delivery in the district. It is anticipated that these will continue to come forward. Such opportunities can serve to make effective use of previously developed land and contribute towards the housing land supply. For the purposes of the following policy, previously developed land is as defined in the National Planning Policy Framework (NPPF) and does not include residential gardens.

11.7 In the case of any allocation or unidentified housing site affecting a site within defined town centre primary frontages, within Margate seafront and harbour arm or Margate Old Town, residential development will be restricted to above ground floor level (in accordance with policies E04 and SP10)

Policy HO1- Housing Development

Permission for new housing development will be granted on:

- 1) Sites allocated for this purpose, as listed below and shown on the Policies Map

SITE ADDRESS	CAPACITY
Queens Arms Yard, Margate	24
Cottage Car Park, New Street, Margate	32
Margate Town Centre (south of New Street), Margate	27
Adjacent to 9 Minnis Road, Birchington	11
End of Seafield Road, Ramsgate	16
Adjacent to 21 Royal Road & 9 Townley Street, Ramsgate	18
Gas works, Boundary Road, Ramsgate	96
Land at Wilderness Hill and Dane Road	14
79-85 High Street, Ramsgate	14
Gas Holder Station, Addington Street, Margate	22
WW Martin, Dane Park Road, Ramsgate	14
10 Cliff Street, Ramsgate	11
Complete Car Sales, Willsons Road, Ramsgate	10
Highfield Road, Ramsgate	25
Land at Victoria Road & Dane Road, Margate	35
Haine Farm, Haine Road, Ramsgate	35
Land off Northwood Road, Ramsgate	45
Dane Valley Arms, Dane Valley Road, Margate	13
Builders Yard, The Avenue, Margate	10
Land at Waterside Drive, Westgate	12
Suffolk Avenue, Westgate	23
r/o Cecilia Road, Ramsgate	23
Margate Delivery Office, 12-18 Addington Street, Margate	10
Industrial Units, Marlborough Road, Margate	10
Gap House School, 1 Southcliff Parade, Broadstairs	10
Foreland School, Lanthorne Road, Broadstairs	14
Thanet Reach southern part, Broadstairs	80
Part of Pysons Road, Broadstairs	26
Lanthorne Court, Broadstairs	56
Former Club Union Convalescent Home, Reading Street, Broadstairs	24
Adj to 60 Harold Road and r/o 40-56 Harold Road, Cliftonville	14
Adj to 14 Harold Road, Cliftonville	10
Part of allotment gardens, Manston Road	80

- 2) Non-allocated sites within the confines of the urban area and villages as shown on the policies map, subject to meeting other relevant Local Plan policies.

All development proposals should also:

- 3) comply with the relevant requirements of SP14;
- 4) demonstrate that adequate infrastructure will be in place to serve each unit.

Alternative development on non-strategic sites allocated for residential development will not be permitted.

11.8 Housing delivery will be monitored annually, and a housing implementation strategy will be put in place to facilitate delivery across the plan period including action that may be taken if necessary to maintain a rolling 5 year supply of deliverable housing sites.

Non-strategic Housing Allocations

Policy HO2 - Land on west side of Old Haine Road, Ramsgate

Land is allocated for up to 100 new dwellings with an approximate average density of 35 dwellings per hectare (net) at the west of Old Haine Road, Ramsgate. Proposals will be judged and permitted only in accordance with a masterplan for the whole site which should include:

- 1) pre-design archaeological evaluation;
- 2) appropriate landscape treatment that also ensures an appropriate transition between the development and the adjacent open countryside;
- 3) a proportionate contribution to necessary off-site highway improvements in accordance with Policy SP47.

Proposals will be accompanied by a Transport Assessment which shall assess the impact on the local road network.

Policy HO3 - Land fronting Nash Road and Manston Road, Margate

Land is allocated for up to 250 new dwellings with an approximate average density of 35 dwellings per hectare (net) at Nash Road and Manston Road Margate.

Proposals will be judged and permitted only in accordance with a masterplan for the whole site, which should include:-

- 1) any necessary upgrade of utility services;
- 2) linkages to new and existing public transport infrastructure, including bus and rail services;
- 3) the provision of a local distributor link road between Nash Road and Manston Road, including a new roundabout junction at Manston Road;
- 4) appropriate arrangements for surface water management.

All development proposals must include a phasing and implementation plan to include the

phasing of development, infrastructure and landscaping

Masterplanning will be informed by and address:

- 1) the provision of landscaping that also ensures an appropriate transition between the development and the adjacent open countryside;
- 2) pre-design archaeological assessment;
- 3) the preservation or enhancement of the setting of the listed building Salmestone Grange and the scheduled ancient monument; and
- 4) a design and layout that respects the presence of the crematorium on the adjoining site. Proposals will be accompanied by a Transport Assessment.

Policy HO4 - Land south of Brooke Avenue Garlinge

Land is allocated for up to 34 new dwellings with an approximate average density of 35 dwellings per hectare (net) south of Brooke Avenue, Garlinge.

Proposals for the development of the site will be informed by and address:

- 1) an archaeological evaluation; and
- 2) a landscaping scheme that also ensures an appropriate transition between the development and the adjacent open countryside.

Policy HO5 - Land at Haine Road and Spratling Street, Ramsgate

Land is allocated for up to 100 new dwellings with an approximate average density of 35 dwellings per hectare net at Haine Road and Spratling Street, Ramsgate.

Proposals for the development of the site will be informed by and address:

- 1) suitable access arrangements together with suitable footway connections;
- 2) the provision of a priority junction including a dedicated right turn lane for vehicular access to the site;
- 3) appropriate landscaping treatment that also ensures an appropriate transition between the development and the adjacent open countryside;
- 4) any necessary upgrading of utility services on site.

Policy HO6 - Land south of Canterbury Road East, Ramsgate

Land is allocated for up to 27 new dwellings with an approximate average density of 35 dwellings per hectare net on the south side of Canterbury Road East.

Proposals for the development of the site will be informed by and address:

- 1) an archaeological evaluation;
- 2) an ecological evaluation;

- 3) **appropriate landscaping which addresses the desirability to retain hedgerows and trees for their landscape and biodiversity value.**

Policy HO7 - Land at Melbourne Avenue, Ramsgate

Land is allocated for up to 49 new dwellings with an approximate average density of 35 dwellings per hectare net at the former Newington Nursery and Infant School, Melbourne Avenue, Ramsgate.

Proposals for the development of the site will be informed by and address

- 1) **an ecological assessment;**
- 2) **the retention of the existing area of woodland in the south western part of the site known as “The Copse” for community use;**
- 3) **appropriate landscaping.**

Proposals will be accompanied by a Transport Statement.

Cliftonville and Margate

11.9 The adjoining wards of Cliftonville West and Margate Central contain Thanet's most deprived neighbourhoods. This is manifested in high levels of economic dependency, and a fragmented community. The area has a predominance of cheap and poor quality rented accommodation often attracting vulnerable and transient people. The Cliftonville Development Plan Document (DPD) contains planning policies restricting additional accommodation in forms likely to fuel or perpetuate these problems.

11.10 The Council and its partners including Kent County Council and the Homes and Communities Agency are implementing a concerted programme "Live Margate" to focus and stimulate further investment in making Margate and, in particular, these two wards, an area where people aspire to live. A central feature of the programme is purchasing existing properties and turning them into quality family homes. Many properties in these wards have 3-4 storeys and would be suited to multigenerational living (with two or more generations living under the same roof). If house prices continue to rise there may be an increase in demand for multigenerational houses. The following policy supports proposals resulting from or compatible with the Live Margate initiative. In addition to relevant policies in the Cliftonville DPD, the following policy will apply within the DPD area as shown on the Policies Map.

Policy HO8 - Cliftonville West and Margate Central

Proposals to provide residential accommodation in those parts of Cliftonville West and Margate Central (as identified on the Policies Map) will be expected to:

- 1) **provide high quality homes in accordance with good design principles;**
- 2) **increase the number of family homes;**
- 3) **contribute to the creation of mixed settled communities in which families and individuals will want to live;**
- 4) **make a positive contribution to the street scene and environmental quality of the area.**

Housing in Rural Settlements

11.11 Most of Thanet's villages consist of freestanding rural settlements. These comprise Acol, Cliffsend, Manston, Minster, Monkton, Sarre and St Nicholas at Wade. Each makes its own contribution to the character and diversity of the Thanet countryside, and the Council considers that it is essential for them to retain their separate physical identity and vibrant communities. There are some settlements that, due to their mutual proximity, are potentially vulnerable to coalescence through the development along the road frontages that link them; for example, Minster to Monkton and Manston to Ramsgate. Policies protecting the open countryside provide appropriate safeguards for this.

11.12 The National Planning Policy Framework (NPPF) notes that to promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. In support of the Local Plan's housing objectives the rural settlements are considered to have some scope for new housing development in order to meet local needs and increase locational choice within overall objectively assessed need. A separate housing topic paper considers the scale of housing that could be accommodated at each of Thanet's rural settlements. This has helped to inform the following policy.

11.13 Appendix B allocates specific sites for housing development including at some of the rural villages. These are listed below.

11.14 The following policy indicates the scale of housing development that may also be permitted on other sites in the rural settlements of Minster, Cliffsend, St Nicholas at Wade, Monkton, Manston, Acol and Sarre.

Policy HO9 - Housing in Rural Settlements

Housing development will be permitted within the confines of the rural settlements subject to the provisions of policy HO1 and the criteria below:

- 1) The proposal being compatible with the size, form, character and scale of the settlement; and**
- 2) In the case of major development proposals accessible community services will be available.**

The sites listed below are specifically allocated for residential development.

Table 9 – Sites allocated for residential development at Rural Settlements

Site	Capacity
Tothill Street, Minster	250
Land at Manor Road, St Nicholas	10
Land at Walter's Hall Farm, Monkton	20
Land south side of A253, Cliffsend	62
Land north of Cottington Road, Cliffsend	41
Builders Yard south of 116-124 Monkton Street, Monkton	20
Former Jentex site Canterbury Road West, Cliffsend	56
Foxborough Lane (South Side), Minster	35
Land at The Length, St. Nicholas	25
Young's Nursery, Arundel Road, Cliffsend	12

In addition to the requirements set out in Policies HO10-HO15, the following development principles also apply:

- Former Jentex site, Canterbury Road West, Cliffsend. Allocated for up to 56 dwellings. Early consultation with Environment Agency and an assessment of potential contamination of ground and groundwater together with appropriate remedial measures required.
- Builder's Yard south of 116-124 Monkton Street, Monkton. Allocated for up to 20 dwellings. In light of former builder's yard use an assessment of potential contamination together with appropriate remedial measures may be required.
- Land at south side of Foxborough Lane, Minster. Allocated for up to 35 dwellings. Potential for bat and reptile presence will require further investigation and mitigation may be required.
- Land at The Length, St. Nicholas. Allocated for up to 25 dwellings.
- Young's Nursery, Arundel Road, Cliffsend. Allocated for up to 12 dwellings.

Policy HO10 - Land at Tothill Street, Minster

Land is allocated for up to 250 dwellings with an approximate average density of 35 dwellings per hectare at Tothill Street, Minster.

Proposals for the development of the site will be informed by and address

- 1) the provision, location and type of the requisite open space;
- 2) provide vehicular access to Tothill Street and links southwards with existing development restricted to pedestrian and cycle routes in order to limit additional traffic movement in the vicinity of Monkton Road and High Street;
- 3) provide an emergency access;
- 4) provide improvements to the Tothill Street/A299 Roundabout and a proportionate contribution to off-site junction improvements at Spitfire Way.

In light of the site's proximity to the cemetery and former transport depot, and its location in an area with sensitive groundwater requiring continued protection, consultation with the Environment Agency and contamination assessment is likely to be required.

Policy HO11 - Land at Manor Road, St Nicholas at Wade

Land is allocated for up to 36 dwellings with an approximate average density of 35 dwellings per hectare at Manor Road, St Nicholas at Wade

Proposals for the development of the site will address the provision, location and type of the requisite open space

Policy HO12 - Land at Walter's Hall Farm, Monkton

Land is allocated for up to 18 dwellings at an approximate average density of 35 dwellings per hectare at Walter's Hall Farm, Monkton.

Proposals for the development of the site will be informed by and address:

- 1) archaeological evaluation and
- 2) respect the setting of the listed building at Walters Hall Farmhouse.

Policy HO13 - Land south side of A253, Cliffsend

Land is allocated for up to 62 dwellings at an approximate average density of 35 dwellings per hectare on the south side of the A253, Cliffsend.

Proposals for the development of the site will be informed by and address:

- 1) a pre-design archaeological evaluation;
- 2) where possible, provide footpaths and cycleways to the proposed Parkway station;
- 3) a contamination assessment to investigate potential pollution in light of the site's proximity to the former Jentex site;
- 4) access arrangements onto the A253 and avoid access or additional traffic onto Foad's Lane.

Policy HO14 - Land north of Cottington Rd, Cliffsend

Land is allocated for up to 40 dwellings with an approximate average density of 35 dwellings per hectare north of Cottington Road, Cliffsend.

Proposals for the development of the site will be informed by and address:

- 1) further archaeological assessment including fieldwork;
- 2) a targeted assessment of the impact of development on the setting of St. Augustine's Cross;
- 3) a transport statement will be needed to take account of traffic impacts onto Foad's Lane area, and proposals will be expected to where possible, provide footpaths and cycleways to the proposed Parkway station.

Policy HO15 - Land south side of Cottington Road, Cliffsend

Land is allocated for up to 23 dwellings at an approximate average density of 35 dwellings per hectare on the south side of Cottington Road, Cliffsend

Proposals for the development of the site will be informed by and address

- 1) further archaeological assessment including fieldwork;
- 2) a targeted assessment of the impact of development on the setting of St. Augustine's Cross;
- 3) a flood risk assessment.

A transport statement will be needed to take account of traffic impacts onto Foad's Lane area, and proposals will be expected to where possible, provide footpaths and cycleways to the proposed Parkway station.

Rural Housing Need

11.15 The National Planning Policy Framework (NPPF) expects a responsive approach to local housing needs in rural areas, and indicates that release of rural exception sites may be an appropriate means of responding to local need for affordable homes.

11.16 Any such release would be conditional upon the first and all subsequent occupiers being first time buyers who are already village residents or their children, village residents living in unsuitable accommodation, dependents of village residents, people whose work is based in the village, or people with local connections who have been forced to move away from the village due to a lack of affordable or suitable housing.

11.17 Provision for some new village housing is made through other policies. Proposals on exception sites which include market housing or low cost housing will only be permitted where they form a small element of the scheme and it would provide significant additional affordable housing to meet local needs.

11.18 Any consent will be subject to a legal agreement to ensure the housing is available to meet local needs in the long term.

Policy HO16 - Rural Housing Need and Exception Sites

Planning permission will be granted for affordable housing development adjacent to rural settlements that:

- 1) is of a scale and size appropriate to its location and the level of services available to its residents, is of a type and mix that meets local needs as identified in a verified local needs survey; and
- 2) the location, size and form of which is sensitive to its setting and the defining characteristics of the area.

Permission will be granted for an element of market housing within any such development provided that it can be demonstrated that it is the minimum necessary to facilitate the provision of the affordable housing.

Planning permission will be subject to a planning obligation that secures priority occupation of the affordable housing by persons already resident in the relevant settlement or who have local family connections.

Agricultural dwellings

11.19 The National Planning Policy Framework (NPPF) states that the development of isolated homes in the countryside should be avoided unless there are special circumstances such as the essential need for a rural worker to live permanently at or near their place of work in the countryside.

11.20 Much of Thanet's countryside is in agricultural use. Planning permission will only be granted for a farm dwelling where an agricultural need has been demonstrated. In this context, need means the need of the particular farm business, rather than the owner or occupier of the farm or holding.

11.21 The Council takes the view that, in Thanet, agricultural need is directly related to the security of certain types of livestock, and horticultural produce. Thanet's agricultural land is largely in arable production which, by its nature, is not as susceptible to damage as other forms of agriculture.

11.22 The pattern of agricultural holdings in Thanet is well-established and stable, and the agricultural area is generally in close proximity to the urban areas. In view of this, the Council believes that there is little justification for new agricultural dwellings. Proposals for agricultural dwellings required for security purposes will be expected to be supported by information demonstrating that alternative measures such as CCTV have been considered.

Policy HO17 - New Dwellings for Rural Workers

The provision of a new dwelling for rural workers in the district will be permitted only where it is demonstrated that there is an essential need for them to live at or near their place of work and the proposal is acceptable in terms of access, design and location.

Where planning permission for a new dwelling is granted on the basis of agricultural requirements, a condition or legal agreement will be required to restrict occupation of the dwelling to agricultural workers and their dependents, or persons last employed in agriculture.

Care and Supported Housing

11.23 The range of accommodation needed by various groups in the community extends beyond conventional dwellings to more specialised forms of accommodation such as sheltered

housing (specialist accommodation typically individual apartments with on-site support in secure surroundings), extra care housing (typically individual apartments for older people with varying levels of care need and benefiting from shared facilities such as laundry, lounges or garden), residential care homes and nursing homes providing 24/7 care. Kent County Council has prepared a strategy (Kent Social Care Accommodation Strategy) to help deliver choice and access to high quality accommodation to vulnerable adults eligible for care and support. A key principle of this is to ensure people are not isolated from their communities and are able to live healthily and safely in their own homes. The accommodation strategy is informed by estimates of projected demand for need for particular types of accommodation. However, gaps in provision will be identified and addressed to reflect the objective of independent living and promoting appropriate housing and support to reduce reliance on residential and nursing care.

11.24 There is a growing need for specialist housing for older persons, as identified in the SHMA. In order to meet the forecast change in population of people aged 75 and over, the SHMA identifies a potential need for 1,522 units of specialised accommodation for older persons over the plan period (76 units per annum).

11.25 Thanet has historically been overprovided with some forms of accommodation which has caused concerns regarding importation and concentration of vulnerable and dependent people. For example in spring 2013 it was estimated that nearly two thirds of the 525 looked after children in Thanet were placed from areas outside the district; the majority of placed children being from outside Kent. While sympathetic to the needs of such people, the Council does not regard this overprovision of accommodation to meet demand arising outside the local area as sustainable or conducive to a balanced community. Therefore in considering individual proposals the Council will have regard to evidence of local need and, where applicable, the potential contribution development could make to the accommodation strategy for adult social care clients in Kent (Kent County Council).

11.26 The needs of the district for supported housing are an important consideration, and proposals meeting such need and in line with the Accommodation Strategy will be supported. Sheltered housing proposals will be supported where it is demonstrated that proposals would accommodate expected needs arising within the district.

11.27 For the purposes of planning policy, proposals for retirement homes, sheltered housing and extra care housing will, unless circumstances indicate otherwise, be regarded as residential dwellings and subject to usual planning policies for residential development. Household projections indicate an increase of 591 people living in registered care accommodation over the plan period (30 per annum). Where accommodation provides a higher level of care, such as nursing homes, then such uses will be regarded as Class C2 and specifically subject to clause 2 of the following policy.

11.28 The following policy seeks to facilitate an appropriate level of provision of good quality accommodation in line with the objective of supporting a balanced and inclusive community, and enabling independent living as far as possible.

Policy HO18 - Care and Supported Housing

The Council will seek to approve applications that provide accommodation for those in the community with care needs (including the provision of facilities and services which will support independent living).

Where such accommodation falls within Use Class C2 proposals will be expected to demonstrate they are suitably located to meet the needs of the occupiers including proximity and ease of access to community facilities and services.

Houses in Multiple Occupation including student accommodation

11.29 Accommodation within a building can be regarded as non-self-contained where unrelated households share one or more facilities such as a bathroom or kitchen. Houses in Multiple Occupation (HMOs) are an example where a high degree of sharing of facilities is typical, and where living arrangements, being more intense than single family occupation, can give rise to noise, nuisance, more callers, a higher parking requirement and visual deterioration of buildings and gardens.

11.30 While the Council does not wish to encourage proliferation of HMOs as a permanent measure, it does recognise that such sharing arrangements can provide a source of cheap rented accommodation, including affordable accommodation for students and supported housing. The previous Local Plan applied a criteria based policy, the principles of which are considered to remain valid.

11.31 In 2010 the Government introduced new legislation signifying that planning permission would no longer be required for change of use of a dwelling house to a house in multiple occupations for up to 6 unrelated people. The Council subsequently approved an Article 4 direction so that planning permission would still be required for such change of use in Thanet.

11.32 The extent to which non-self-contained accommodation may generate the problems referred to above depends not only on intensity of occupation, sharing of facilities and management of the building, but also the nature of the area in which it is situated, the type of building, and the concentration of similar uses in its vicinity.

11.33 Alternative use of family homes as private student accommodation in the form of multiple occupations has caused local concerns focused on the neighbourhood around the Broadstairs University campus. Christ Church University and East Kent College are highly important for delivering skills required by the workforce, meeting the expectations of existing and potential employers and stemming out migration of young people. Supporting the functions of our higher and further education establishments includes the need to recognise demand arising for suitably located decent accommodation for students. At the same time it is essential to ensure that satisfying such demand does not result in undue concentration of non self-contained accommodation in order to avoid local disturbance and to maintain a mixed and settled community.

11.34 In 2014 the percentage of properties in use as private sector student accommodation in the form of HMOs at the residential estate adjoining the campus was estimated at 2.4%. While such uses have generated local concern, including that recent changes of use might signal an ongoing trend, the Council does not consider that restriction on further change of use is currently justified in principle. Nonetheless, these concerns point to the need to incorporate within policy an indicative ceiling level of cumulative impact in order to maintain mixed and settled communities. Having assessed the circumstances in the district and approaches applied

in other locations, the Council considers 5% represents an appropriate level. Bearing in mind the potential for displacement pressure that such restriction may generate, this level is considered appropriate across the district. In order to address potential for localised concentration within this headroom, the 5% is applied on the basis of a 50 metre radius or exceed or further exceed 1 HMO in any group frontage of 20 dwellings houses.

11.35 The Cliftonville Development Plan Document (DPD) imposes a restriction on HMOs, and in the area it applies to that DPD takes precedence over the following policy.

Policy HO19 - Houses in Multiple Occupation

Proposals for Houses in Multiple Occupation (HMO's), either through conversion of existing buildings or new built development, will not be permitted in those parts of the Cliftonville and Margate Central Wards as illustrated on the policies map.

Elsewhere proposals will be permitted where the development:

- 1) does not give rise to an unacceptable impact on the living conditions of neighbouring residents through noise or general disturbance;**
- 2) does not result in an intensification or concentration of such uses which is detrimental to the amenity and character of the neighbourhood (having regard to the criteria set out in para 11.34 by way of guidance)**
- 3) provides suitable arrangements for car parking, or adequate on-street parking is available within the vicinity of the site and**
- 4) provides suitable arrangements for the storage and collection of waste**

Gypsy and Travelling Communities

11.36 The 2011 Census identified a total of 69 households in Thanet with a White: Gypsy or Irish Traveller' ethnicity. Of these, 1 household lived in a caravan or other mobile or temporary structure and 68 households lived in bricks and mortar (house, bungalow, flat, maisonette or apartment). The bi-annual DCLG Traveller caravan count identified no caravans over the last six counts up to July 2017. Likewise, the annual Travelling Showperson caravan count (undertaken each January) also found no Travelling Showpeople caravans in Thanet during the past four counts (2014-2017). There are no authorised Gypsy and Traveller sites or Travelling Showpeople yards in Thanet.

11.37 The Thanet Gypsy and Traveller Accommodation Assessment (GTAA) 2017/18 has become available since the publication and submission of the Reg.19 Plan. It analyses the latest available evidence to identify the accommodation needs of Gypsies and Travellers, Travelling Showpeople and houseboat dwellers from across the area. This data has been analysed to provide a picture of current provision and activity across the Thanet District and an assessment of future need.

11.38 The GTAA 2017/18 has found evidence of Gypsy and Traveller pitch need over the next five years (2018/18 to 2021/22) equating to 5 pitches under the cultural definition, or 1 pitch under the PPTS 2015 definition of Gypsy/Traveller. This takes account of existing evidenced need (one household who is PPTS-compliant) and an estimate of need arising from households

currently living in bricks and mortar accommodation (assumed not to fulfil the PPTS definition).

11.39 For the remainder of the Local Plan Period (up to 2030/31) the GTAA has identified a cultural need for 2 pitches and a PPTS need for 2 pitches. This takes account of a longer-term projection of need based on demographic modelling. The need over the total Plan Period is 7 permanent and 5 transit pitches. There is thus a need to identify pitches for the plan period and this work will have begun before the adoption of the Plan but will not be completed before then. In light of the early review of the plan to commence within 6 months of adoption in accordance with the Secretary of State's direction, it is intended to identify and allocate the necessary number of permanent sites within the review process. Until then the Council will act proactively to accommodate emerging needs on a temporary and, if possible, permanent basis.

Policy HO20 - Accommodation for Gypsy and Travelling Communities

The need over the total Plan Period is for 7 permanent pitches and 5 transit pitches. The change of use of land to provide accommodation for Gypsy and Travelling communities will be permitted provided the proposed site is:

- 1) suitable for its intended use (including any associated business activity) and can be accommodated without unacceptable impact on its surroundings and surrounding land uses and the living conditions of persons living in the vicinity of the site;**
- 2) has reasonable access to local facilities and services, particularly schools, employment and healthcare, and**
- 3) not within a flood risk area; and**
- 4) will not have an unacceptably detrimental impact on local environmental quality including Green Wedges or sensitive landscape areas.**

Pending the next review of the Plan the Council will take proactive steps to accommodate all emerging needs of Gypsy and Travelling communities within the District on temporary sites and, wherever possible, permanent sites which meet the above criteria. The Council shall address the identified need and monitor need in three stages: to continue to work with families to identify suitable short term sites; to commence immediately to identify suitable long term sites and to grant permission for them; and, to identify additional sites required to meet total provision in the next plan review

Making best use of the existing stock

11.40 The National Planning Policy Framework (NPPF) expects empty housing and empty buildings to be identified and brought back into use in line with local housing and empty homes strategies. As indicated in the Council's housing strategy, the Council is committed to bringing empty properties back into use.

11.41 Thanet has a substantial stock of empty property and vacant dwellings and has an active and robust programme for bringing those properties back into use. The Local Plan identifies an allowance of 540 housing units to come from empty properties being brought back into use. This is based on the position that the properties in question have been empty for a period of 4 years or more. Over that period it can be argued that those properties have been vacant and unused

for such a long period that they are no longer available in the housing market and therefore not part of the active housing stock. Such properties brought back into use are returned to the market, so can be included as new housing stock. This will need to be regularly monitored, and is dependent on the Council's Empty Homes programme continuing through the plan period.

Policy HO21 - Residential use of empty property

Proposals to bring vacant property into residential use will be approved where:

- 1) it is compatible with nearby uses; and**
- 2) the proposal would not conflict with any other policy.**

11.42 To complement policies aimed at increasing the overall housing stock it is important to retain the existing housing stock in such use.

Policy HO22 - Retention of existing housing stock

Proposals which would lead to the net loss of existing housing (class C3) will be permitted only where:

- 1) the proposal relates to the provision of community facilities for which there is a genuine local need; or**
- 2) the residential use is not appropriately located; or**
- 3) the building is unsuitable for residential use in its present form and is not capable of being readily improved or altered to make it suitable; or**
- 4) subject to the heritage policies of the Plan, the proposal provides a way of protecting or utilising an important heritage asset.**

Proposals for tourism or retail uses may be permitted if any of the above criterion can be satisfied and there is conformity with policies E07, or E08 (as applicable).

In all cases the proposed use should be compatible with, and cause no harm to, the character and appearance of the area and the living conditions of neighbouring residents

Ancillary accommodation for a family member

11.43 Residential annexes are a common form of development that is generally proposed in order to allow relatives to live with their family with a degree of independence. The benefits of this include:

- Allows family members to provide the care and support required
- Reduces the stress and impact on local services, ie nursing homes, home visits from care professionals etc.
- Cost effective and affordable solution to supported living
- Provides a measure of independence, while still being close to support
- Can provide accommodation for family members unable to purchase a house through the open market

In many cases, such proposals are considered to be acceptable by the Council.

11.44 However, such annexes would rarely be suited for occupation as separate living accommodation unrelated to the household occupying the main dwelling for a number of reasons including lack of self-containment, inadequate separate access, amenity space and lack of privacy.

11.45 Planning permission will therefore normally be subject to a condition to ensure that the occupation of the unit remains ancillary to the main dwelling.

Policy HO23 - Ancillary Accommodation for a Family Member

Proposals to provide an annexe for ancillary accommodation will be permitted where the proposed annexe is:

- **Within the curtilage of the principal dwelling and shares its vehicular access;**
- **Is occupied only in connection with the main dwelling in single family use;**
- **Is in the same ownership as the main dwelling;**
- **Designed in such a way as to easily allow the annexe to be used as an integral part of the main dwelling when it is no longer needed for independent occupation;**
- **Has no boundary demarcation or sub division of the land between the main dwelling and the annexe;**
- **Of a scale subservient to the principal dwelling and complies with the Council's design policies.**

Fostering and Child Care Accommodation

11.46 The Council, with its key partners, is concerned about the impact of new foster homes, or similar facilities, being located in the district, and in particular, in the Cliftonville West Ward, where there is already a very high concentration of foster homes. Parts of Margate and Cliftonville experience multiple layers of risk and significant deprivation, and are the subject of substantial inter-agency efforts to improve the environment and lives of people already resident in the area.

11.47 The Margate Task Force was set up in 2010, and is a multi-award-winning, integrated team, co-located at the Council's offices, made up of 14 different agencies and 30 staff, working in two of the most deprived wards in Kent (Margate Central and Cliftonville West). MTF aims to identify the most complex social issues and deliver a joint 'street level' service to respond to risk and vulnerabilities.

11.48 There is evidence from Kent Police, the Clinical Commissioning Group, Kent County Council and others to suggest that the concentration of these premises in this area causes a range of problems, including:

- children placed in these facilities being at increased risk;
- a significant impact on, and diversion of, the resources of key agencies, undermining the delivery of core services in the area; and
- Harm to the area in which these homes are located.

11.49 Until the profile of these areas change positively, through ongoing management and planning initiatives and intervention, they are not areas which currently possess the necessary characteristics conducive to a positive fostering environment. This approach is supported by Kent Police, the Clinical Commissioning Group and Kent County Council. The policy applies to proposals which include more than 6 residents (including staff).

Policy HO24 – Fostering Homes & Childcare Facilities

Proposals for new foster homes, or similar childcare facilities, requiring planning permission, will not be permitted within the Cliftonville West Ward as identified on the Policies Map.

Proposals for foster homes, or similar childcare facilities, requiring planning permission, elsewhere in the district will be supported where the Council is satisfied, in consultation with Kent Police, the Clinical Commissioning Group and Kent County Council, that:

- **The location of the proposal will not lead to an increased risk to the personal safety and welfare of children placed in these facilities;**
- **There is no significant impact on, and diversion of, resources of key agencies through increasing intervention, undermining the delivery of core services in the area generally and weakening the availability of resources for all those in need;**
- **Proposals do not result in harm to the character of the neighbourhood and the living conditions of local residents.**

12 - Natural Environment and Green Infrastructure

12.1 Designated sites of international, national and local value and extensive areas of wetland and farmland habitat harbour both protected and priority species. Diagram 1 shows the hierarchy of these designations from international, national to local importance. International and European designations and protected species are addressed in policies (SP27 and SP30).

Diagram 1 - Hierarchy of Nature Conservation Designations

International Designations
<p>Thanet Coast Special Area of Conservation (SAC) Sandwich Bay</p> <p>Special Area of Conservation (SAC)</p> <p>Thanet Coast and Sandwich Bay Special Protection Area (SPA) Ramsar site</p> <p>Margate and Long Sands Special Area of Conservation (SAC)</p> <p>Outer Thames Estuary Marine Special Protection Area (SPA)</p>
National Designations
<p>Sandwich Bay & Hacklinge Marshes Site of Special Scientific Interest (SSSI)</p> <p>Thanet Coast SSSI</p> <p>Thanet Coast Marine Conservation Zone Pegwell Bay (MCZ)</p> <p>National Nature Reserve (NNR)</p>
Local Designations
<p>Local Wildlife Sites (LWS): Monkton Chalk Pit; St Peters Churchyard; Golf Course Roughs Kingsgate; Woods and grassland Minster Marshes; Ash Level & South Richborough Pasture; Churchyard St Nicholas at Wade; Churchyard St Mary Magdalene Monkton; Ramsgate Cemetery; Cliftonville Grassland, Foreness Point.</p> <p>Monkton Local Nature Reserve (LNR)</p> <p>Roadside Nature Reserves (RNR): Cliff Promenade North Foreland, Stonelees A256, Monkton Chalk Pit, Chalkhole Farm Flete</p>

12.2 Sites of Special Scientific Interest (SSSI) are nationally designated sites under Section 28 of the Wildlife and Countryside Act 1981, which have important wildlife or geological value. This Act as amended by the Countryside and Rights of Way Act 2000 imposes a duty on public bodies exercising statutory functions which may affect SSSIs, to take reasonable steps to further enhance the features for which the site is designated. The nationally designated sites (SSSI and National Nature Reserve), also cover the coastline, and have similar features to the international sites, including over 30 nationally rare species of terrestrial and marine plants, 19 nationally rare and 149 nationally scarce invertebrate species and roost sites for migrating and wintering birds. Thanet has two SSSIs which are Thanet Coast SSSI and the Sandwich Bay and Hacklinge Marshes, one National Nature Reserve at Pegwell Bay which straddles the District boundary with Dover. The Thanet Coast is also a designated Marine Conservation Zone.

Protection of Nationally Designated Sites (SSSI), National Nature Reserve (NNR) and Marine Conservation Zones (MCZ)

Policy GI01- Protection of Nationally Designated Sites (SSSI) and Marine Conservation Zones (MCZ)

Development which would materially harm either directly, indirectly or cumulatively, or detract from the scientific or nature conservation interest of a Site of Special Scientific Interest, National Nature Reserve or Marine Conservation Zone will not be permitted.

Exceptionally, where it can be demonstrated that the need for the proposed development is compelling and overrides the national importance of the site, and it has been demonstrated that no suitable alternative site exists, mitigating measures will be required to maintain the integrity of the site, to the satisfaction of the appropriate authority.

The proposed development will, wherever possible and appropriate, include measures to enhance and improve connectivity to designated sites.

Locally Designated Wildlife Sites

12.3 The District has habitats and geological features which are of local significance. These are designated as Local Nature Reserves, Local Wildlife Sites and Regionally Important Geological Sites. Thanet has two Local Nature Reserves located at Monkton and Pegwell Bay, and eight Local Wildlife Sites: TH01 Monkton Chalk Pit, TH07 St Peter in Thanet Churchyard, TH09 Golf Course Roughs Kingsgate, TH12 Woods and Grasslands Minster Marshes, TH13 St Nicholas-at- Wade Churchyard, TH14 St Mary Magdalene Churchyard Monkton, TH15 Ramsgate Cemetery, TH16 Cliftonville Grassland Foreness Point. These sites host locally important habitats.

12.4 There are also four Roadside Nature Reserves which have been identified for their habitats and connections to areas of rich biodiversity, and include important features such as calcareous grassland, lizard orchids and diverse populations of butterflies and dragon flies. These are TH01 Cliff Promenade North Foreland, TH02 Stonelees A256, Pegwell Bay, TH03 Monkton Chalk Pit, Monkton, TH04 Chalk Farm Flete, Margate.

12.5 The Council considers it important to protect locally designated wildlife sites and the following policy seeks to maintain the biodiversity and wildlife at these locally designated sites.

Policy GI02 - Locally Designated Wildlife Sites

Development which would have a detrimental impact on locally designated wildlife sites will not be permitted unless suitable mitigation can be provided either on or off site within Thanet. Exceptionally, where a strategic need for a proposed development is identified which outweighs the importance of the locally designated sites and cannot be located elsewhere, an equivalent area of habitat will be created elsewhere at a suitable location well related to other existing habitats.

Wherever possible and appropriate, new developments will provide a net environmental gain in accordance with Policy SP30, and include measures to enhance and improve wildlife connectivity to designated wildlife sites.

Regionally Important Geological Sites (RIGS)

12.6 Regionally Important Geological / Geomorphological Sites (RIGS) are non-statutory Earth Science sites designated by locally based RIGS groups. Thanet has three Regionally Important Geological Sites (RIGS) that are important for historical, scientific research or educational reasons. These are located at Monkton Nature Reserve, Pegwell Bay and St Peter's Quarry. Their designation is a way of recognising and protecting features for the future. The importance and significance of these sites are acknowledged through the following policy.

Policy GI03 - Regionally Important Geological Sites (RIGS)

At RIGS sites, development which would result in the loss or obstruction of geological features of importance will only be permitted where a strategic need for the proposed development is identified which outweighs the importance of the locally designated sites and cannot be located elsewhere.

Requirements for New Open Space

12.7 An Open Space Strategy was carried out in 2018 which assessed Thanet's open space provision. The results and recommendations are set out in Table 12 which shows a deficit in all typologies against the Field in Trust guidelines. The following policies seek to deliver these recommendations for open space provision in new development. Further advice is given in Chapter 4 Environment Strategy. This sets out the intention of the Council to apply the Fields in Trust Guidelines to new developments in line with the draft recommendations in the strategy.

12.8 Table 12 sets out the provision guidelines, tables 10 and 11, set out the accessibility criteria and the Quantity Benchmark Guidelines for equipped/designated play space, respectively.

Table 10: Fields in Trust Accessibility Criteria

Open Space typology	Walking guideline (Walking distance metres from dwellings)*
Parks and Gardens	710m (approximately 10 minutes)
Natural and semi natural greenspace	720m (approximately 10 minutes)
Amenity greenspace	480m (approximately a 6 minute walk)
Equipped/designated play areas	LAPs 100m LEAPs 400m NEAPs 1,000m
Other Outdoor provision MUGAs and skateboard parks	700m

*Accessibility guidelines are provided as walking distance from dwellings. Indicative walking distances can be determined from the accessibility guidelines as set out below.

- 250m = 2 - 3 minutes' walk
- 400m = 5 minutes' walk
- 800m = 10 minutes' walk
- 1,200m = 15 minutes' walk
- 1,600m = 20 minutes' walk

Table 11: Recommended Application of Quantity Benchmark Guidelines - Equipped / Designated Play Space

Scale of development no. of dwellings	LAP	LEAP	NEAP	MUGA
5-10	Y			
10-200	Y	Y		Contribution
201-500	Y	Y	Contribution	Y
501+	Y	Y	Y	Y

Source: Fields In Trust - Guidance for Outdoor Sport and Play Oct 2015

Table 12: Requirements for New Open Space

Open Space typology	Existing provision Total no. of sites	Ha	Current provision ha/1000	Fields in Trust guidelines	Requirement by 2031	Projected Deficit / oversupply 2031
Amenity Greenspace	137	67.11	0.52	0.6ha per 1,000 per population	96.9	-29.79
Provision for children and young people	31	3.61	0.03	0.25ha per 1,000 population	40.38	-76.77
Allotments	16	24.46	0.17	0.2ha per 1,000 population	32.3	-7.84
Natural and semi-natural greenspace	14	100.51	0.71	1.8ha per 1,000 population	290.7	-190.19
Public parks and gardens	26	74.54	0.53	0.8ha per 1,000 population	129.2	-54.66

Amenity Green Space and Equipped Play Areas

12.9 Thanet's three main coastal towns each have a 'flagship' playground, as well as other standard playgrounds. There are currently also five skate parks in Thanet.

12.10 The cumulative impact of smaller housing developments and population increase will put pressure upon existing amenity green spaces and existing play facilities. With the drive to provide more housing on brownfield land in urban areas, whether it is new build or conversion, 'smaller' sites are likely to be developed. New family housing should provide gardens to ensure the provision of "doorstep" playspace. High quality areas of amenity space and children's play areas will contribute to quality of life and help social interaction.

12.11 Children's playspace should be adequately equipped and safely and conveniently available to all new residential developments of a size and type likely to meet the new demand. The location of facilities should, however, take into account the potential impact of noise and other disturbance on neighbouring properties. In addition to play space for younger children, facilities for teenagers should also be considered. New development will be expected to make provision for amenity green space and equipped play areas in line with the Fields in Trust guidelines as set out in tables 10, 11 and 12 and the approach set out in chapter 4. Provision will also need to be made for the continued maintenance of such facilities.

12.12 The provision of open spaces should be considered at an early stage in the design process and consider:

- accessibility in terms of highway safety and proximity to dwellings served
- security of children using amenity space and play areas (including whether the site and access to it is overlooked by dwellings) and
- Convenience of siting in relation to noise sensitive development (e.g. dwelling units designed for, or particularly suited to, occupation by the elderly).
- Making provision for biodiversity through appropriate landscaping schemes
- Addressing climate change for example, considering the effects of extreme temperatures through the provision of shaded areas by planting trees

12.13 The Planning Obligations & Developer Contributions Supplementary Planning Document (SPD) gives details of how financial contributions can be made towards the upkeep and maintenance of existing play areas if on site provision is not possible. The SPD will be subject to review if the Council implements the Community Infrastructure Levy. The following policy seeks to ensure the recommended provision of amenity and children's play space is provided for.

Policy GI04 - Amenity Green Space and Equipped Play Areas

New residential development will make provision for appropriate amenity green space and equipped play areas to meet the standards set in tables 10, 11 and 12.

The type and amount of open space to be provided will depend on:

- 1) **the size and location of the development;**
- 2) **existing open space provision near the development site; and**
- 3) **the number of people likely to live in the proposed development.**

New family dwellings* will be expected to incorporate garden space in order to provide a safe "doorstep"* play area for young children.**

In exceptional circumstances where it would be impractical to provide adequate and suitably located playspace as part of the development, then a financial contribution may instead be acceptable to offset the costs resulting from the additional use and need for increased maintenance and play equipment at suitably located existing playspaces and amenity areas.

The developer will be responsible for the funding and arrangement of the ongoing maintenance and management of amenity and play areas which will be secured through a legal agreement.

*Family dwellings are considered to be those having two or more bedrooms.

** Doorstep playspace is defined as playspace for young children which is immediately adjacent to, closely visible and safely accessible from the dwellings served.

Outdoor Sports Facilities

12.14 The National Planning Policy Framework (NPPF) states that planning policies should plan positively for the provision of sports venues, guard against the unnecessary loss of facilities and that access to high quality open spaces and opportunities for sport and recreation

can make an important contribution to the health and well-being of communities.

12.15 Outdoor sports facilities include pitches, greens, courts, athletics tracks and miscellaneous sites such as croquet lawns and training areas. These also include facilities owned by the local authority, education authorities or facilities within the voluntary, private or commercial sectors that serve the outdoor leisure needs for their members or the public.

12.16 The Open Space Strategy (2018) includes a more up to date assessment of the current provision of sports facilities and sets out the requirements for future provision.

12.17 The Council will seek financial contributions from developers for the provision of new facilities or the upgrade or renewal of existing facilities where on site provision of outdoor sports facilities is not possible. For new provision, the Council have regard to the Sport England Sports Facility Calculator when preparing proposals to determine the need generated by their development. The Planning Obligations & Developer Contributions Supplementary Planning Document gives details of how financial contributions can be made and how they will be calculated.

Protection of Playing Fields and Outdoor Sports Facilities

12.18 The important contribution that sport and recreation, as well as community facilities, can make in improving people's quality of life is now widely accepted. Participation in sport and recreation can improve the health and well-being of an individual, whilst sports clubs and community facilities can improve social interaction and provide a sense of community pride.

Policy GI05 - Protection of Playing Fields and Outdoor Sports Facilities

Built development will not be permitted on playing fields or on land last used as a playing field unless one or more of the following applies:

- 1) it is demonstrated that there is an excess of playing field provision in the area, for current and future uses of both the school and the community; or**
- 2) the proposed use is ancillary to the primary use as a playing field and does not affect the quantity or quality of pitches or adversely affect their use; or**
- 3) the proposed development is on land incapable of forming a pitch or part of a pitch and does not result in the loss of, or inability to make use of, a pitch; or**
- 4) the playing field or fields that would be lost as a consequence of the proposed development would be replaced, prior to the commencement of the development, by a playing field or fields of at least a similar or improved quality and size in a suitable nearby location and subject to equivalent or improved management arrangements; or**
- 5) the proposed development is for an indoor or outdoor sports facility, the provision of which would be of sufficient benefit to sport and recreation as to outweigh the detriment caused by the loss of the playing field or playing fields**

In each case the playing field should not make an important visual contribution to the amenity of the area and its loss should not be detrimental to the character of the area.

Landscaping and Green Infrastructure in New Developments

12.19 A positive natural environment can have economic benefits by making the area a place where people want to live. New developments should contribute to and enhance the natural environment.

12.20 Green infrastructure can be created through landscaping and design by providing wildlife corridors and stepping stones in new developments, creating links between existing habitats. This can contribute to people's health and well-being by keeping people in touch with their natural environment, providing opportunities for residents to manage their local environment and reinforce a sense of community.

12.21 Landscaping can create a pleasant setting for development, provide shade from the sun and pollution attenuation as trees and shrubs absorb water and dust. It should be an integral part of the design of a development, rather than consisting of 'offcuts' of leftover land or as a way of camouflaging poor design.

12.22 Landscaping designs should, in the first instance, be related to each plot of land so that each future owner would be responsible for its upkeep, reducing the burden on Council resources. If this is not possible or desirable, commuted payments through legal agreements may be negotiated in appropriate circumstances. Accordingly, landscaping matters should be considered at the earliest stages of the design process. For developments that fall within the identified landscape character areas, further guidance is available within the landscape strategy for each character areas in the 2017 assessment.

12.23 Thanet has relatively few trees. The Council will therefore seek to retain existing trees as part of any proposed developments through the making of Tree Preservation Orders and through use of planning conditions where appropriate. British Standard BS5837: 2012 (Guide for Trees in Relation to Design, Demolition and Construction) gives guidance regarding the best approach to new site development in relation to existing trees.

12.24 The Council seeks to retain hedges and other semi-natural habitat, such as ponds and species-rich grassland, together with new planting, as they lend maturity to a development and can enhance biodiversity and wildlife habitats, through the following policy.

Policy GI06 - Landscaping and Green Infrastructure

Major development proposals and all other proposals which are likely to have significant landscape implications shall be supported by a landscape survey. The landscape survey should describe the current landscape features on the application site, and demonstrate how the proposed development will provide landscaping and Green Infrastructure to enhance the setting of the development, where possible and appropriate, to:

- **Retain historic features including boundaries and layouts**
- **Create new wildlife corridors and stepping stones**
- **Soften hard building lines and the impact of new buildings**
- **Create an attractive environment for users and occupiers**
- **Establish a sense of enclosure with hedges and trees**

- **Provide screening from noise and sun**
- **Create new wildlife habitats and improve biodiversity including the integration with surface water management**
- **Improve connectivity between new and existing features**

The developer will need to satisfy the Council that adequate arrangements to ensure continued maintenance of landscaping has been made. The Council may seek to secure arrangements for this purpose through a planning agreement.

12.25 Jackey Bakers sports ground is Thanet's main area for sports and recreation purposes. The site provides the best opportunity to both enhance existing facilities, and in the longer term, to increase the level of facilities.

12.26 Any new sports development may be supported by a limited development of D2 (leisure facilities) or A3 (restaurants) or D1 (community facilities) uses to subsidise the sporting use and ensure it is viable. Any such proposal will need to be subject to a full justification being made when any application is submitted and will be judged against the amount of land retained for open sporting purposes. There are current proposals for a new astro-turf pitch and pavilion with changing facilities.

Policy GI07 - Jackey Bakers

Jackey Bakers sports ground will be promoted as the long-term primary sports venue for Thanet. Proposals which will provide a 3G pitch and improve the facilities for football, rugby, hockey and other sports will be supported. Proposals will need to include a new clubhouse with improved changing and social facilities.

Where fully justified, the Council will permit ancillary development on order to maintain the sports use. This could include limited development of D2 (leisure facilities), D1 (community facilities) and A3 (restaurant facilities).

13 - Quality Development

Sustainable Design

13.1 Sustainable design can make an important contribution to sustainable development and aid a reduction in carbon emissions. The Government's approach to reducing carbon emissions is evolving. There are a number of measures that can be considered in the design of new development that will help reduce energy consumption and provide resilience to increased temperatures, such as:

- the use of landform
- layout
- provision of adequate space for recycling and composting
- building orientation to maximise summer cooling through natural ventilation in buildings and increasing passive solar gain
- tree planting
- landscaping

13.2 Landscaping can be particularly beneficial as it can provide stepping stones, wildlife corridors or new habitats, and contribute to Thanet's Green Infrastructure network. In terms of adapting to climate change, integrating vegetation (i.e. planting on building walls and roofs) can help to reduce solar gain as vegetation has a much higher reflective capacity than masonry, as well as providing a cooling effect through evapo-transpiration. Planting can also help mitigate against poor air quality by presenting a large surface area for filtering air. A large tree can deliver the same cooling capacity as five large air conditioning units running for 20 hours a day during hot weather. New planting can help provide more comfortable, cooler spaces via summer shading.

13.3 Within the context of an established development pattern, the most significant change likely to generate demand for travel will result from new housing development. It is necessary, therefore, to consider the location of development in areas accessible to a range of services on foot and by public transport, preventing urban sprawl and improving local high streets and town centres. Methods such as providing showers and changing facilities in employment related development and locating cycle parking close to town centres/entrances will also help reduce the need to travel by car.

13.4 Building insulation is a simple way of maximising energy efficiency and thereby reducing energy demands. Poor insulation is one of the leading causes of energy wastage in homes. In areas of deprivation this can lead to households being in fuel poverty. The definition of Fuel Poverty is when a household has to spend 10% or more of its income on energy to maintain acceptable levels of warmth. This is considered to be a temperature of 21°C- 23°C in the main living area of a home and 18°C in other areas. Fuel poverty is influenced by three key factors - the cost of fuel, the income of the household and the energy efficiency of the home. The energy efficiency of the home is one area that planning can influence through policy.

13.5 The latest figures from Department for Business, Energy and Industrial Strategy 2015 (updated 2017) for Thanet show that 11.3% households in Thanet were defined as being fuel poor which has increased from 10.3% in 2013 (DECC figures) Source: DECC Fuel Poverty Statistic 2013 (Low Income High Cost model indicator)

13.6 In addition, since the introduction of Energy Performance Certificates in 2007, the District is still only achieving low levels of A to C energy efficiency in new builds for example, 0.4% of EPCs lodged in 2016 achieving an "A" energy rating, 7% achieving EPC rating B and 22% achieving energy rating C. *Source:*

13.7 To help reduce fuel poverty and improve the energy rating, all new homes should seek to maximise energy efficiency through improved insulation eg roof, wall, floor insulation and energy efficient windows. Other initiatives can include on site options such as LED street lights, photovoltaic (solar) panels, electric vehicle charging, near site options - eg financial contributions towards site based district heating scheme, retro fitting of low/zero carbon technologies to local communal buildings. Off-site options - investment in energy from waste plants, investment in district heating pipe work. These are addressed in the Climate Change chapter.

13.8 For existing residential developments there are a number of other initiatives such as the Kent and Medway Warm Homes scheme which is a partnership project between Kent County Council and district councils to support residents in Kent and Medway to save energy in their home. In addition Kent Housing Group consulted on the Kent Fuel Poverty Strategy in 2016 and is producing an Action Plan.

13.9 The requirements to provide these could have an impact on the viability of development in Thanet. The Council commissioned a Whole Plan Viability Study to ensure that policies in the Plan and has concluded that development in Thanet remains viable after taking these requirements into account.

13.10 The following policy seeks to ensure that new development achieves the necessary levels of sustainable design and construction and should be read in conjunction with the policy on the new technical standards.

Policy QD01 - Sustainable Design

All new buildings and conversions of existing buildings must be designed to reduce emissions of greenhouse gases and have resilience to function in a changing climate. All developments will be required to:

- 1) Achieve a high standard of energy efficiency to the equivalent of Level 4 of the Code for Sustainable Homes (subject to HE05 where applicable). Where viability is an issue, it will be incumbent on an applicant to demonstrate to the satisfaction of the Council why this standard cannot be achieved.**
- 2) Make the best use of solar energy passive heating and cooling, natural light, natural ventilation and landscaping.**
- 3) Provide safe and attractive cycling and walking opportunities to reduce the need to travel by car.**

All new buildings and conversions of existing buildings must be designed to use resources sustainably. This includes, but is not limited to:

- 4) **Re-using existing buildings and vacant floors wherever possible;**
- 5) **Designing buildings flexibly from the outset to allow a wide variety of possible uses;**
- 6) **Using sustainable materials wherever possible and making the most sustainable use of other materials;**
- 7) **Minimising waste and promoting recycling, during both construction and occupation.**

General Design Principles

13.11 The historic environment can add value to new development by creating a sense of place and distinctiveness. New developments need to be designed in a way that respects and complements their surroundings, and enhance areas that are less attractive. There are many areas in Thanet which are considered to possess certain valuable qualities such as their open form of development, the separation between buildings and the positive contribution made by landscaping. The design, scale and grouping of existing buildings, the spaces between them, the texture, type and colour of materials, enclosure, land contours and views all contribute to the character and identity of a place. An attractive well-designed environment can foster economic regeneration. Heritage England provides advice and guidance on Heritage and Sustainable Growth. Materials should normally be of a local type and harmonise with those of adjoining development (where these present a pleasing appearance). Architectural style should respect that of other development in the locality. Innovation in decoration can, if sensitively considered, enhance the identity and character of a building and place. New innovative modern design will be acceptable where it reflects local context and distinctiveness, is fit for purpose and exhibits durability.

13.12 Buildings and the spaces around them should be thought about holistically, with the landscape and public realm, including open space provision, being as important as the building itself. Successful landscape design will integrate development into its surroundings and enhance the function, character and amenity value of spaces and boundaries. Taking account of existing landscape features, such as trees, is crucial in creating high quality and responsive schemes. Existing trees can provide a sense of maturity to new developments and play an important role in softening and integrating development into the district. Landscape design extends beyond the curtilage of new buildings to include streets, parks and other open spaces and should help to support an attractive and high quality public realm. This policy does not seek to control the design of individual gardens unless these are a key part of a heritage asset.

13.13 Well-designed open spaces and parks not only help to create a high quality environment but they help to encourage a more active lifestyle thereby improving the health of the local community. The Open Space Strategy 2017 highlights that one of the key issues facing the district is relating to health with 68.4% of residents being classed as having weight issues which are "excessive" and "obese". In order to meet the objective of promoting the physical and mental well-being of the community as set out Strategic Priority 4, the Council will expect developers to have regard to the Active Design Guidance produced by Sport England. This sets out 10 principles of active design which have been identified by drawing from urban design practice and practical examples to promote environments that offer individuals and communities the greatest potential to lead active and healthy lifestyles. The 10 principles are: activity for all; walkable communities; connected walking and cycling routes; co-location of community facilities; network of multifunctional open space; high quality of street and spaces; appropriate infrastructure; active buildings; management maintenance monitoring and evaluation; and

activity promotion and local champions.

13.14 Landscape proposals should result in high quality amenity spaces, which receive adequate sunlight (in accordance with best practice guidance) and which work with the buildings to help define thresholds and boundaries and to provide opportunities for private usable amenity space through gardens, roof terraces and balconies.

13.15 Maintenance and management plans must be provided with any proposals and considered early in the design process. Schemes which include species that support local distinctiveness enhance biodiversity and cope with climatic changes will be supported.

13.16 The function of a building is a major determinant of its built form. However, a principal aim in designing new development should be to respect and complement the merits of existing built and natural features including landscape, while still expressing and accommodating the function of the building through design.

13.17 Some buildings (e.g. public buildings) need to be of larger scale than others. However, the scale and proportion of existing development should generally be respected. It may be possible to break down the bulk of a large building (e.g. by insertion of horizontal design features) to achieve a satisfactory appearance in relation to adjoining plot widths and proportions and to break bland expanses down to a scale sympathetic to that of existing buildings.

13.18 Density is a measure of the number of dwellings which can be accommodated on a site or in an area and can affect the appearance and characteristics of development in the following ways:

- The space between buildings
- Amenity and private access
- Parking
- Provision/retention of trees and shrubs
- Levels of surface water run off

13.19 Some parts of Thanet are already densely developed. Former holiday areas such as Cliftonville have seen significant numbers of conversions of large buildings (often previously used as hotels) into flatted accommodation which has, in some cases, had a detrimental impact due to small, poor quality developments, absent landlords, and a transient population. To help address this, the Council will implement the optional internal space standards as set out in Policy QD04. Other areas of the district benefit from lower density developments. The density of residential developments is not prescribed in this Plan, as, in all instances, the compatibility with the character of the area and the mix of housing to meet local needs or demand will influence design and layout.

13.20 The National Planning Policy Framework (NPPF) states that local planning authorities should consider policies to resist inappropriate development of residential gardens where development would cause harm to the local area.

13.21 In Thanet, applications have been refused for development on garden land due to the impact the proposal would have on the character and appearance of the area. Some parts of the district enjoy a high quality environment, with spacious surroundings, and development within a garden could have a detrimental effect. Residential gardens also form part of Thanet's

Green Infrastructure providing biodiversity and wildlife habitats. However, there could also be instances where a development within a garden could be in keeping with the pattern of development, forms part of a comprehensive development, enhances the streetscene, or is situated where the property would be a frontage development.

The following policy seeks to ensure all new development respects and enhances local character.

Policy QD02 - General Design Principles

The primary planning aim in all new development is to promote or reinforce the local character of the area and provide high quality and inclusive design and be sustainable in all other respects. Development must:

- 1) Relate to the surrounding development, form and layout and strengthen links to the adjacent areas.**
- 2) Be well designed, respect and enhance the character of the area paying particular attention to context and identity of its location, scale, massing, rhythm, density, layout and use of materials appropriate to the locality. The development itself must be compatible with neighbouring buildings and spaces and be inclusive in its design for all users.**
- 3) Incorporate a high degree of permeability for pedestrians and cyclists, provide safe and satisfactory access for pedestrians, public transport and other vehicles, ensuring provision for disabled access.**
- 4) Improve people's quality of life by creating safe and accessible environments, and promoting public safety and security by designing out crime.**

External spaces, landscape, public realm, and boundary treatments must be designed as an integral part of new development proposals and coordinated with adjacent sites and phases. Development will be supported where it is demonstrated that:

- 5) Existing features including trees, natural habitats, boundary treatments and historic street furniture and/or surfaces that positively contribute to the quality and character of an area are should be retained, enhanced and protected where appropriate.**
- 6) An integrated approach is taken to surface water management as part of the overall design.**
- 7) A coordinated approach is taken to the design and siting of street furniture, boundary treatments, lighting, signage and public art to meet the needs of all users.**
- 8) Trees and other planting is incorporated appropriate to both the scale of buildings and the space available, to provide opportunities for increasing biodiversity interest and improving connectivity between nature conservation sites where appropriate.**

Residential development on garden land will be permitted where not judged harmful to the local area in terms of the character and residential amenity, the intrinsic value of the site as an open space is not considered worthy of retention, and will not conflict with any other requirements of other design policies and Policy HO1.

Living conditions

13.22 The increasing dominance of private housing and policies to maximise use of land have caused concern about homes having levels of "liveable" space. Where homes are of a substandard size people may be forced into buying them because of lack of alternatives and as a result do not stay in them long before they find they have to move on. This can be disruptive especially for families with young children and can affect education if children are having to move schools frequently, also inhibits community cohesion and "putting down roots". Application of the national spaces standards can help to address this.

13.23 There are opportunities to facilitate meetings between members of the community who might not otherwise come into contact with each other, including through mixed-use developments, strong neighbourhood centres and active street frontages which bring together those who work, live and play in the vicinity. Safe and accessible developments with clear and legible pedestrian routes and high quality open space will also help achieve this by encouraging the active and continual use of public areas.

13.24 Designing out crime and designing in community safety should be central to the planning and delivery of new development. Section 17 of the Crime and Disorder Act 1998 places a duty on councils to do all they reasonably can to reduce crime and disorder locally and improve people's quality of life as a result. New developments will need to demonstrate that their design has sought to introduce measures to reduce crime and address the needs of public safety. Design can help achieve a safer environment including in the following ways:

- Well defined routes, spaces and entrances
- Ensuring different uses do not conflict
- Ensuring publicly accessible spaces are over-looked
- Places that promote a sense of ownership
- Physical protection (i.e. security features)
- Places where human activity creates a sense of safety
- Future management and maintenance

Policy QD03 - Living Conditions

All new development should:

- 1) **Be compatible with neighbouring buildings and spaces and not lead to the unacceptable living conditions through overlooking, noise or vibration, light pollution, overshadowing, loss of natural light or sense of enclosure.**
- 2) **Be of appropriate size and layout with sufficient usable space to facilitate comfortable living conditions and meet the standards set out in QD04.**
- 3) **Residential development should include the provision of private or shared external amenity space/play space, where possible.**
- 4) **Provide for clothes drying facilities and waste disposal or bin storage, with a collection point for storage containers no further than 15 metres from where the collection vehicle will pass.**

Technical Standards

13.25 In March 2015, the Government introduced new technical standards covering water usage, internal space requirements, accessibility and adaptability. In respect of water efficiency, the Planning Practice Guidance states that where there is a clear local need, local planning authorities can require new dwellings to meet the tighter building regulations optional requirement of 110 litres/person/day, rather than the 125 litres/person/day. Thanet is within a water stress area as identified by the Environment Agency in their publication "Water Stressed Areas Final Classification July 2013". Both the Environment Agency and Southern Water support a reduction in daily usage per person/day for internal use in water stressed areas therefore new developments will be expected to meet the water efficiency optional requirement of 110litre /person/day.

Internal space standards:

13.26 Paragraph 50 of the National Planning Policy Framework states that local planning authorities should identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand. The National Planning Practice Guidance further qualifies this by recommending that where a local planning authority wishes to require an internal space standard they should do so by reference in their local plan (paragraph 18).

13.27 The Council believes that everyone has the right to a high standard of residential accommodation with sufficient space to meet their own needs. There has been a general trend for houses today to be comparatively smaller than ones built a hundred years ago and these trends have led to calls for the introduction of national space standards for housing. The requirement of a minimum space standard can add to the attractiveness of the development and increase the marketability of properties, thereby widening the potential sale and rental markets. The Council has successfully applied a standard for flat conversions as part of the Cliftonville Development Plan Document, where small room sizes were an issue in connection with flat conversions. (Conversion to Flats Guidelines - 1988).

13.28 In order to ensure that new housing is built to a high standard of design and provide adequately for the changing needs of future occupants thereby improving the quality of life, the Council is intending to implement the National Described Space Standard (March 2015). These are replicated in table 13 for ease of reference. The policy will apply to all tenures and it will be up to the applicant to demonstrate why these standards cannot be met within their development.

Table 13 - National Described Space Standards

Number of bedrooms (B)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37)*	-	-	1.0
	2p	50	58	-	1.5
2b	3p	61	70	-	2.0
	4p	70	79	-	
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

13.29 It certain circumstances it may be necessary to make an exception to development meeting these standards e.g. in the conversion of historic buildings where the implementation of the standard would be detrimental to the character and integrity of the building. In such circumstances the applicant will be required to demonstrate the case for not meeting these standards.

Policy QD04 -Technical Standards

All new development will be expected to meet the new technical standards as follows:

- 1) internal space standards as set out in Table 13;
- 2) water efficiency standard of 110litres/person/day.

Accessible and Adaptable Accommodation

13.30 Paragraph 7 of the NPPF states that one of the three dimensions to sustainable development is a social role which should support strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being. Paragraph 50 further states that local authorities should deliver a wide choice of high quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities. Local planning authorities should also plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes).

13.31 The District has an ageing population base and the recent 2014 based Sub-National Population Projections (published May 2016) project that the 60+ age group in Thanet will grow by 39% from 41,000 in 2014 to 57,000 by 2031. This has implications for the demand for different types of housing and meeting the needs of an ageing population in situ. An increase in the elderly population can be expected to result in an increase in people with dementia and mobility problems. The SHMA estimated that the number of people with a long term health problem or disability will increase by 32% over the Plan period. It is important that sufficient homes are built that have the flexibility to adapt to the range of life stages of the occupants. Some of these households will inevitably require adaptations to properties to provide the flexibility to accommodate their changing needs whilst others may require more specialist accommodation or support. There is clear evidence of need for properties which are capable of accommodating people's changing needs. This general trend can be evidenced from the Council's housing register (September 2016) which shows that there are 51 households on the register who are dependent on a wheelchair and a further 73 households who use a wheelchair for part of the day. Therefore there are currently 124 households currently in need of wheelchair adaptable accommodation. However, this may not include those households who currently have mobility problems and may become dependent on a wheelchair in the future.

13.32 The increase in persons with a long-term health problem/disability, as evidenced by the SHMA, together with the Council's own data from the housing register, provides clear evidence of a need for adaptable homes. The SHMA recommends that on this basis, the Council should consider whether it should require a proportion (such as 10%) of new homes to be wheelchair-accessible or whether new housing should be built to new National Housing Standards.

13.33 In order to meet the changing needs of this increasing age group, the Council will encourage developers to consider the future needs of households when designing residential units. The Council requires as a minimum, 10% of all new development should be designed to building regulation optional requirement M4 (2) accessible and adaptable dwellings. In respect of the new Building Regulation optional requirement M4 (3) wheelchair user dwellings, the

Council will require a proportion of new dwellings to meet this standard based on local need relating to the number of households requiring wheelchair adaptable homes in suitable locations, that are currently on the Council's housing register. This supports the general aim of the Plan to improve the quality of life and health of the residents of the District and ensuring a high standard of design. These standards aim to future proof new development in a sustainable way ensuring adaptability to changing needs and achieving longevity of design.

Policy QD05 - Accessible and Adaptable Accommodation

Accessibility provision in new developments as required by Building Regulations Part M4 shall be provided as follows:

- 1) 10% of new build developments will be expected to be built in compliance with building regulation part M4(2) accessible and adaptable dwellings;**
- 2) 5% of the affordable housing units on housing developments will be expected to be built in compliance with building regulations part M4(3) wheelchair user dwellings.**

The above requirements will only be reduced if it would make the proposed development unviable or site specific factors prevent their inclusion.

13.34 The technical standards have been assessed in the viability study and no viability issues have been identified. Only in exceptional circumstances will the Council consider deviations from the space and accessibility standards for example where there are viability concerns, or the practical implementation will affect the character or have a detrimental impact on a local heritage asset. If viability is thought to be an issue with a particular development the Council will assess viability considerations in line with the implementation Policy SP02.

Advertisements

13.35 Some advertisements need advertisement consent, and it is important that they are controlled through planning policy as they can form an integral part of the streetscene or they can be intrusive and discordant. It is also important to make sure that they are not a danger to the public or highway safety. It is particularly important to consider their impact when they are located in conservation areas.

Policy QD06 - Advertisements

Applications for advertisements will be considered in relation to their effects upon amenity and public safety. Regard will be paid to the surrounding location, manner of illumination (if proposed), material composition, design and relationship to the land, building or structure to which they are to be affixed. Advertisements should not dominate but should be in balance with the character, townscape and architecture of the buildings on which they are situated. Regard should be paid to the proximity of any listed buildings or structures, and any impact to their setting.

In and adjoining conservation areas the Council will require that the design and siting of advertisements does not detract from, and preferably makes a positive contribution to, the character and/or appearance of the area.

Telecommunications

13.36 The National Planning Policy Framework (NPPF) states that when preparing local plans, local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband.

13.37 Mobile communications are now considered an integral part of the success of most business operations and individual lifestyles. With the growth of services such as mobile internet access, demand for new telecommunications is continuing to grow. The Council is keen to facilitate this expansion whilst at the same time minimising any environmental impacts. It is the Council's aim to reduce the proliferation of new masts by encouraging mast sharing and siting equipment on existing tall structures and buildings.

Policy QD07 - Telecommunications

Proposals for telecommunications development will be permitted provided that the following criteria are met.

- 1) the siting and appearance of the proposed apparatus and associated structures should seek to minimise impact on the visual amenity, character and appearance of the surrounding area;**
- 2) if on a building, apparatus and associated structures should be sited and designed to minimise impact to the external appearance of the host building;**
- 3) if proposing a new mast, it should be demonstrated that the applicant has explored the possibility of erecting apparatus on existing buildings, masts or other structures. Such evidence should accompany any application made to the Council;**
- 4) if proposing development in a sensitive area, the development should not have an unacceptable effect on areas of ecological interest, areas of landscape importance, archaeological sites, conservation areas or buildings of architectural or historic interest.**

When considering applications for telecommunications development, the Council will have regard to the operational requirements of telecommunications networks and the technical limitations of the technology.

14 - Heritage

Archaeology

14.1 Thanet, the former island located at the north eastern point of Kent and in close proximity to continental Europe, has long been a gateway to new settlers, ideas, trade and custom into Britain and on the frontline of invasion and defence. Some of the great events in the nation's early history have taken place in or close to Thanet including the arrival of the Romans, Anglo-Saxons and Christianity. The result is an incredible wealth of archaeological remains throughout the island dating from earliest prehistoric times to the present day. Across Thanet's towns, villages and countryside, archaeological investigation is regularly making new discoveries of remains that are of regional and national importance and that in many cases exhibit a character that is unique to the former island. The archaeology of Thanet stands comparison with any area of the country.

14.2 Much of Thanet's archaeology lies shallowly buried beneath the plough soils of the island's agricultural lands. Here aerial photography and top soil stripping ahead of major infrastructure and other development works has in recent years revealed extensive buried archaeological landscapes, particularly of prehistoric, Roman and Anglo-Saxon date, that are changing our understanding of settlement and other activities at those times. Within the towns and villages, as well as remains of these earlier periods are often found remains, sometimes more deeply buried, associated with the medieval development of the settlements and extending through their periods of growth and industrial development to their 19th and 20th century prominence. Elsewhere across Thanet can be found buried and standing remains associated with the defence of the coast and the former airfield at Manston, the industrial heritage of the area and the development of the historic landscape. Much of this rich archaeological resource can be particularly vulnerable to new development both in undeveloped and brownfield sites.

14.3 It is not possible for this summary for the Local Plan to provide a comprehensive overview of the archaeology of Thanet, however particular themes particularly relevant for land-use planning are:

- Deposits and features associated with the formation of the island and the creation of the Wantsum Channel and its later reclamation for agricultural land;
- The evidence of early hunter gatherer peoples on Thanet which can be seen in the Pleistocene deposits of the island particularly at Pegwell Bay and Manston;
- The rich and extensive ritual and funerary buried landscapes of the Neolithic and Early Bronze Age periods. Particular highlights are the major monuments of the causewayed enclosures at Chalk Hill, Pegwell and the remains of hundreds of late Neolithic and Bronze Age barrows;
- Extensive buried landscapes of the settlements, farmsteads, trackways and agricultural lands of the later prehistoric peoples of Thanet. Recent investigations on major development schemes such as East Kent Access 2 and Thanet Earth have illustrated the layout and development of large tracts of the later prehistoric landscape. Evidence of major enclosed sites has been found in several places for example North Foreland, Dumpton, Pegwell Bay and Fort Hill, Margate;
- A rich Romano-British landscape that saw the development of villa estates (for example at Tivoli and Minster), a pattern of coastal and inland settlement that saw the construction of

sunken-featured buildings of a type rarely found outside Thanet, linked by a network of roads and trackways, and the establishment of small cemeteries of both inhumation and cremation burial rites. The inhabitants of Thanet at this time would have borne witness to the arrival and departure of the Romans at nearby Richborough and lived under the influence of that major port of entry;

- The arrival of the Anglo-Saxons is celebrated in Thanet through the tradition of the arrival of Hengist and Horsa (AD 449) at Ebbsfleet near Cliffsend. Remains of the new settlers can be seen in the rich cemeteries that can be found throughout the island and the occasional evidence of dispersed settlement that has been found on a number of sites and is difficult to locate other than through stripping of large areas;
- AD 597 saw the arrival in Thanet of a mission from Pope Gregory in Rome led by the monk Augustine. The growth of the church and its influence on Thanet can be seen in the establishment of the convent at Minster, the presence of a number of monastic granges and parish churches. Evidence for the early development of the villages can also be traced in the fabric of surviving historic buildings and buried deposits in the core of the settlements.
- Archaeological deposits connected with the origins and development of Thanet's main towns of Margate, Broadstairs and Ramsgate, their ports and development as 19th and 20th leisure resorts survive both in the ground and the fabric of the standing remains. Large numbers of wrecks are present around the coast e.g. Goodwin Sands.
- Remains of coastal and other anti-invasion defences and the important military and civilian airfield at Manston which had its origins in the First World War and continued as an important military airfield into the Cold War.

14.4 In response to their likely potential impact on important archaeological remains, the Council considers it essential for new development proposals to assess and understand the effect that they may have on the significance of archaeological remains whether known or as yet undiscovered. Because Thanet's heritage is such a valuable and irreplaceable resource the following policy applies.

Policy HE01 - Archaeology

The Council will promote the identification, recording, protection and enhancement of archaeological sites, monuments and historic landscape features, and will seek to encourage and develop their educational, recreational and tourist potential through management and interpretation.

Developers should submit information with the planning application that allows an assessment of the impact of the proposal on the significance of the heritage asset. Where appropriate the Council may require the developer to provide additional information in the form of a desk-based or field assessment. Planning permission will be refused without adequate assessment of the archaeological implications of the proposal.

Development proposals adversely affecting the integrity or setting of Scheduled Monuments or other heritage assets of comparable significance will normally be refused.

Where the case for development which would affect an archaeological site is accepted by the Council, preservation in situ of archaeological remains will normally be sought. Where this is not possible or not justified, appropriate provision for investigation and recording will be required. The fieldwork should define:

- 1) **the character, significance, extent and condition of any archaeological deposits or structures within the application site;**
- 2) **the likely impact of the proposed development on these features;**
- 3) **the means of mitigating the effect of the proposed development.**

Recording should be carried out by an appropriately qualified archaeologist or archaeological contractor and may take place in advance of and during development. No work shall take place until a specification for the archaeological work has been submitted and approved by the Council. Arrangements must also be in place for any necessary post- excavation assessment, analysis and publication of the results, and deposition of the archive in a suitable, accessible repository.

Development in Conservation Areas

14.5 Conservation areas are designated by the Council where there is a valued distinctive character which the Council considers deserve special protection. Key elements of a conservation area include the architectural design or historic interest of buildings; the materials, colour and texture; the contribution of green and open spaces; street patterns and spaces between buildings; and views in and out of the area. The Council will review the boundaries of existing conservation areas and will consider the designation of new conservation areas as necessary and as resources allow.

14.6 The Council will not permit development which fails to retain those essential features upon which the character of a conservation area depends. These features may include natural features, trees, hedges, walls, fences, open areas and ground surfaces, as well as buildings and groups of buildings.

14.7 The character of conservation areas depends on the relationship of buildings to each other and their settings, in the local and wider context. The effect of a proposed development on the character or appearance of a Conservation Area is always a material consideration in the determination of planning applications. All development should preserve or enhance that character or appearance or local distinctiveness. It is also important that the spaces around and within the conservation area are retained, where they add to its character. The first step in the design process must, therefore, be an appraisal of the qualities of the area and the opportunity to reflect and improve on them. Such an appraisal should be submitted as part of a planning application.

14.8 Particular attention should be paid to conserving attractive views out of and into the area, including those from more distant or higher vantage points. Consideration should also be given to the assessment and mitigation against any negative impact the proposal might have on the townscape, roofscape, skyline and landscape.

Policy HE02 - Development in Conservation Areas

Within conservation areas, development proposals which preserve or enhance the character or appearance of the area, and accord with other relevant policies of this Plan, will be permitted, provided that:

Proposals for New Buildings

- 1) They respond sympathetically to the historic settlement pattern, plot sizes and plot widths, open spaces, streetscape, trees and landscape features;**
- 2) they respond sympathetically to their setting, context and the wider townscape, including views into and out of conservation areas;**
- 3) the proportions of features and design details should relate well to each other and to adjoining buildings;**
- 4) walls, gates and fences are, as far as possible, of a kind traditionally used in the locality;**
- 5) conserve or enhance the significance of all heritage assets, their setting and the wider townscape, including views into and out of conservation areas;**
- 6) demonstrate a clear understanding of the significance of heritage assets and of their wider context.**

Proposals for Extensions

- 7) The character, scale and plan form of the original building are respected and the extension is subordinate to it and does not dominate principal elevations,**
- 8) Appropriate materials and detailing are proposed and the extension would not result in the loss of features that contribute to the character or appearance of the conservation area.**

New development which would detract from the immediate or wider landscape setting of any part of a conservation area will not be permitted.

Listed Buildings and their setting

14.9 The NPPF sets out the general approach to conserving and enhancing the historic environment and the impact of development on designated and non-designated heritage assets and conservation areas (paragraphs 126-141). The Council will assess proposals to alter or extend a listed building against the need to preserve the special architectural or historic interest which led to the building being listed. There is a general presumption in favour of the preservation of listed buildings, and consent to demolish or partly demolish such buildings will only be granted in exceptional circumstances.

14.10 The setting of listed buildings may be affected by development. It is important that applications for planning permission for development affecting listed buildings, or their settings, include full details of the proposal so that an informed decision can be reached and will be supported where they preserve or better reveal the significance of the Listed Building.

Local Heritage Assets

14.11 Local heritage assets, including buildings, structures, features and gardens of local interest, are an important element of the rich history of a settlement and reinforce local distinctiveness and sense of place.

14.12 The National Planning Policy Framework (NPPF) requires local planning authorities to have an up to date understanding of the local historic environment and its significance. Although not likely to meet the current criteria for statutory listing, local heritage assets are important to their locality by reason of their cultural, architectural and historical contribution.

14.13 The retention of local heritage assets may be achieved through appropriate adaptive re-use or change of use. A high quality historic built environment can aid economic regeneration and investment.

14.14 Unlike statutory listed buildings or Registered Parks and Gardens, Local Designated Asset status does not put any extra planning constraints on a property; rather it would be a material consideration if a development was proposed (i.e. the historical and architectural quality of the building would be taken into consideration). In addition, it is intended that the locally designated Asset Register will raise the profile of and give recognition to the buildings and parks that are of special importance to Thanet.

14.15 The NPPF supports the introduction of locally designated heritage assets and heritage best practice encourages further support to this important local designation by the introduction of Article 4 (2) to all locally designated single dwellings within a conservation area.

14.16 Authorised works to single dwellings are permitted under Article 3 of the Town and County (General Permitted Development) Order 1995 as amended by the Town and County Planning General Permitted Development (Amendment) Order 2008 which came into force from 1st October 2008.

14.17 Many of these small scale permitted development works such as the replacement of as built timber windows and doors with plastic in modern styles can significantly harm the character and appearance of historic buildings and areas.

14.18 When a building is statutory listed this problem is avoided by the requirement for listed building consent. In the case of unlisted buildings (even those locally listed) Article 3 of the General Permitted Development Order allows a vast range of works to be carried out without the need to apply for planning permission.

14.19 Within conservation areas permitted development rights are more limited than elsewhere but even so those works can still degrade the character of individual buildings as a result of inappropriate changes.

14.20 A local planning authority can restrict the permitted development rights of property owners to carry out certain categories of development that would otherwise be automatically allowed through the making of an Article 4 direction. These directions can be made to cover one or more properties and they can restrict one or more classes of development.

14.21 The effect of an Article 4(2) Direction is not that development within the particular class in Schedule 2 of the General Permitted Development Orders cannot be carried out but simply that it is no longer automatically permitted, but instead must be subject to a specific planning application (for which there is no fee). This does not necessarily mean that the local planning authority will refuse permission for the works but it does enable the authority to retain some control over the design and detailing of the proposed development and to grant permission subject to appropriate conditions. The introduction of these directions is not intended to prevent all change, but rather to manage the way building and landscape alterations are carried out.

14.22 Before undertaking any works to a designated heritage asset, the significance of that asset must be clearly understood, as well as the potential impact of the development. Where listed buildings are concerned, it is important to address the full impact of modern building standards concerning aspects such as fire prevention, sound and thermal insulation, energy-efficiency savings and disabled access. Pre-application meetings are strongly recommended to ensure that standards can be accommodated without jeopardising the special interest of the building. Applicants considering works to a listed building are also advised to consult best practice guidance.

Policy HE03 - Heritage Assets

The Council supports the retention of local heritage assets, including buildings, structures, features and gardens of local interest. Local heritage assets will be identified in a local list as part of the Heritage Strategy.

Proposals that affect both designated and non-designated heritage assets, will be assessed by reference to the scale of harm, both direct and indirect, or loss to, the significance of the heritage asset in accordance with the criteria in the National Planning Policy Framework.

Historic Parks and Gardens

14.23 Thanet has a number of important parks; gardens, planned squares, cemeteries and churchyards. These areas provide significant amenity areas for the immediate environs and support and enhance the setting of significant designated and non-designated heritage assets. Parks and gardens of particular historical importance are listed by English Heritage in a Register of Historic Parks and Gardens - Albion Place Gardens in Ramsgate is included in this register. Kent County Council's Historic Environment Record also includes a number of important gardens and urban spaces locally.

14.24 Planned parks such as Ellington Park and Dane Park were opened to the public in 1898 and include features such as ornate bandstands and fountains. Less formal areas include grounds to substantial historic houses such as George V in Ramsgate (former residence of Sir Moses Montefiore), Pierremont Park and Northdown Park. The cemeteries at Margate and Ramsgate include a selection of fine memorials, cemetery buildings and mature trees.

14.25 Planned squares are evident within the towns and are typically set pieces subordinate to buildings. These are a particular feature of the coastal towns. Examples include Hawley Square in Margate and Vale Square in Ramsgate where high quality amenity space is closely related to the setting of listed buildings with a high degree of openness and permeability.

14.26 Both registered and non-registered parks and gardens are important because of their design or design history, the plants they contain; their historic significance; or their relationship with adjacent buildings and structures. In many cases, the designed open space is an important element of the design of the surrounding built environment. The Council will resist changes that would harm the character or setting of important parks and gardens, important plant material (particularly trees), views and other features. In recognising the importance of these heritage assets the following policy applies.

Policy HE04 - Historic Parks and Gardens

Proposals that affect historic parks and gardens will be assessed by reference to the scale of harm, both direct and indirect, or loss to and the significance of the park or garden.

Works to a heritage asset to address climate change

14.27 The Council is committed to tackling climate change and reducing the carbon emissions of Thanet. At the same time, the Council is committed to conserving the historic environment, particularly preserving and enhancing the character and appearance of its heritage assets. The Council's aim, therefore, is to ensure a balanced approach between protecting the heritage assets of Thanet and ensuring that they contribute to tackling climate change and reducing the carbon emissions of the district. Such measures could include seeking to encourage and enable the sensitive retrofitting of energy efficiency measures and the appropriate use of micro-renewables in historic buildings (including listed buildings) and conservation areas, whilst safeguarding the special characteristics of these heritage assets for the future.

14.28 The Council has been involved in a joint initiative with the Kent School of Architecture to consider the impact of climate change and energy efficiency on the historic environment. It secured funding from the Technology Strategy Board for a project that looked at how Victorian Seaside houses would perform environmentally in the climate of the year 2080. A building on Dalby Square was chosen as a test bed. The Council worked with Kent School of Architecture who found that terraced Victorian houses can perform environmentally better than some modern dwellings. The findings of this ground breaking study will be published by the Kent School of Architecture as a Climate Change Toolkit for Victorian houses. Further advice on the adaptation of the historic environment in response to climate change issues can be found in the Historic England (formerly English Heritage) publication: Climate Change and the Historic Environment (2008). Adaptive re- use of a building gives significant carbon savings in terms of embodied energy in the fabric of the building, so the focus will be on enhancing the performance of traditional buildings as much as practicable without damaging their significance. Minimal intervention will be required, along with assurance that the works do not harm the building's integrity or significance.

14.29 Planning applications will need to demonstrate a thorough understanding of the building in question via the submission of the following information:

- surveys of existing construction, to include walls, floors, ceilings and roofs;
- submission of baseline energy consumption data before and after improvements have taken place;
- measured data of existing environmental performance of the building's fabric;
- an indication of any national performance standards being targeted as a result of works; and
- recommendations on the environmental performance measures to be implemented in order to achieve the standard.

14.30 Prior to looking at alternative means of generating energy, it is important to investigate and put into practice all possible means of conserving energy (hierarchical approach). The Chartered Institution of Building Services Engineers' guidance on Building Services in Historic Buildings sets out four principal aims when seeking to enhance the sustainability of heritage assets:

- Preserve historic fabric;
- Extend the beneficial use of older buildings;
- Reduce carbon emissions, using the hierarchical approach; and
- Specify environmentally conscious materials.

Policy HE05 - Works to a Heritage Asset to Address Climate Change

Proposals to enhance the environmental performance of heritage assets will be supported where a sensitive and hierarchical approach to design and specification ensures that the significance of the asset is not compromised by inappropriate interventions.

Any works should be undertaken based on a thorough understanding of the building's performance.

15 - Climate Change

15.1 Adaptation is an essential part of addressing the impacts and opportunities created by our changing climate. The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as "adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderate harm or exploit beneficial opportunities". There is a statutory duty on local planning authorities to include policies in their local plan designed to tackle climate change and its impacts. These can range from policies that reduce the need to travel, flood risk and coastal change, sustainable construction and design and renewable low carbon technologies. Local plans can also address appropriate adaptation and mitigation measures to combat climate change.

Fluvial and Tidal Flooding

15.2 Flooding has become a significant issue and the National Planning Policy Framework (NPPF) states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but without increasing the risk of flooding elsewhere. This is known as the 'Sequential Test' and is accompanied by an 'Exception Test' to be applied where necessary. Any development that takes place in an area at risk of flooding must incorporate appropriate flood resilient and resistant measures (in line with paragraph 103 of the NPPF). The Strategic Flood Risk Assessment sets out other generic mitigation measures that could be applied to developments in flood risk zones such as ensuring sleeping accommodation of residential development is above ground floor level. Other measures could include those that prevent or limit the amount of water entering the property, flood resilient building techniques such as the siting of electrical controls at higher levels, raising floor levels and the use of sustainable drainage systems and flood barriers.

15.3 Thanet has few areas of low lying land that are at risk of flooding from the sea. The two primary sources of flooding in the district are fluvial and tidal; fluvial flooding from the Wantsum Channel, and tidal flooding from extreme tide levels. The majority of development proposed in this Plan has been directed away from the identified Flood Risk Areas.

15.4 The densely populated Old Town area of Margate falls within an area of low lying land. The financial cost of damage to property in the Old Town area resulting from a major flooding event could be as much as £70m. Such a flooding event could also put the safety of residents and the public at risk. Recent flood defence works have significantly reduced this risk. The Council's flood risk assessment presents advice and recommendations on the implications of flood risk and climate change. Site specific Flood Risk Assessments may be required for developments within identified areas at risk from flooding.

15.5 Areas at risk of flooding are shown on the flood maps on the Environment Agency's website and are updated regularly - www.environment-agency.gov.uk. These should be referred to when considering development in areas at risk from flooding as these are regularly updated.

The following policy seeks to ensure that development is not put at risk by flooding.

Policy CC01 - Fluvial and Tidal Flooding

New development in an area identified as being at risk of flooding and falling within Flood Zones 2 and 3, will only be permitted if it can be demonstrated that it satisfies the Sequential Test and, where required, the Exception Test as set out in the NPPF.

Development proposals in these areas shall be accompanied by a Flood Risk Assessment, including developments over 1 hectare in Flood Zone 1, which should address flood risk from all sources of flooding including surface and groundwater flooding.

Any development that takes place in a flood risk area will be expected to incorporate flood resilient measures.

Surface Water Management

15.6 Management of surface water is important in terms of reducing the risk of pollutants draining into the groundwater and bathing waters, and reducing the risk of surface water flooding.

15.7 The Thanet Surface Water Management Plan (SWMP) 2013 assessed historic flooding incidents, and identified the causes of this flooding as surface water, sewer, tidal or blocked drains or gullies. SWMPs identify areas which may be vulnerable to surface water flooding as a result of flooding occurring elsewhere (eg excessive drainage into a site from flooding occurring further along a watercourse). An Action Plan has been developed which identifies a range of recommended actions for the reduction of flood risk across the Thanet area.

15.8 The following actions are identified for the Council, which could be achieved through the planning process:

- Ensure all new developments, where possible, consider the use of Sustainable Urban Drainage Systems (SuDs)
- Ensure new developments do not increase the risk of surcharge of the sewer network within their catchment
- Promote benefits of rainwater reuse and recycling
- Support KCC in the use of SuDs in identified areas

15.9 SuDs are designed to control surface water run-off close to where it falls to and mimic natural drainage as closely as possible minimising pollution and the impacts of flooding (NPPG). Surface water runoff in built up areas tends to flow rapidly into the sewer system, which places a burden on the sewerage network and increases flood risk downstream as piped systems have limited capacity. SuDs can slow the rate at which water disperses, thus reducing the risk of flooding.

15.10 SuDs are more sustainable than traditional drainage methods and they provide opportunities to:

- Reduce the causes and impacts of flooding;
- Remove pollutants from urban run-off at source;
- Combine water management with green space with benefits for amenity, recreation and wildlife.

15.11 The provision of sustainable drainage within new development became a material consideration in planning decisions from April 2015. Kent County Council is the Lead Local Flood Authority (LLFA) for the county and as such they are the statutory consultee in the planning process to oversee the provision of SuDs for major development within the District. The LLFA provides technical advice and guidance on the surface water drainage strategies, designs and maintenance arrangements proposed by developers for any new major development. Kent County Council has prepared a Drainage and Planning Policy Statement (September 2015) containing guidance on how to integrate sustainable drainage systems into the master planning of large and small developments. Developers should consult and refer to this guidance and any future updates, when preparing applications incorporating SuDs schemes. All applications incorporating a SuDs scheme will also need to include details of a robust maintenance scheme to be agreed with the appropriate authority.

15.12 Sustainable Drainage Systems may have both direct and indirect impacts on the historic environment and historic buildings are often more vulnerable than modern buildings to flood damage to their foundations. Kent County Council has produced guidance on 'The Historic Environment and Sustainable Drainage' and they maintain the County Historic Environment Record (HER). When preparing SuDs schemes developers should fully consider the potential impact on the historic environment and ensure that any avoidable damage is mitigated.

15.13 Kent County Council has prepared guidance on the process from application to adoption of SuDs 'Drainage and Planning Policy Statement 2017'. Developers should consult KCC's guidance and any future updates, when preparing applications for SuDs schemes. KCC should be consulted early on in the process and further information is available from <http://www.kent.gov.uk/waste-planning-and-land/flooding-and-drainage/sustainable-drainage-systems>.

15.14 Infiltration methods are unlikely to be appropriate in some parts of Thanet due to the quality of the groundwater. Groundwater from the chalk rock beneath Thanet is used to supply water for drinking water, agriculture, horticulture and industry. It also feeds the springs that emerge along the coast and near the marshes. The groundwater is extremely vulnerable to contamination as substances (natural substances and man-made chemicals) are able to pass rapidly through the thin soils and the natural fissures (cracks) in the chalk rock to the groundwater below the ground surface. The acceptability and construction details of infiltration devices is not only based on whether the site is in a Groundwater Source Protection Zone, it also depends on whether the ground conditions are suitable (i.e. free from contamination) and if there are adequate unsaturated area to help reduce any discharge. Proposals for infiltration methods within the Groundwater Source Protection Zone should be discussed with the Environment Agency as it may be possible for SuDs to be lined, or for water to be treated prior to infiltration.

15.15 Under the Water Framework Directive (WFD), the Kent Isle of Thanet Groundwater Body has been classified as poor status for the groundwater quality and quantity. The groundwater is impacted by nitrates, pesticides, solvents and hydrocarbons at levels that are of concern.

15.16 The quality of the groundwater also has an impact on Thanet's bathing waters. The Bathing Water Directive which aims to protect public health and the environment from population has been revised and now introduces tighter water quality standards. This was fully implemented in 2015. Thanet has 13 beaches which have been designated as 'Bathing Waters' under the Bathing Water Directive. Thanet received seven European Blue Flag Awards for its beaches in 2015. These are awarded to beaches that have met and maintained a series of stringent environmental, educational, safety and access related criteria. In addition to this Thanet has been awarded three Seaside Awards for Margate Main Sands, Westbrook Bay and Viking Bay, which rewards beaches in England that achieve the highest standards of beach management. There is also 1 shellfish water designated under the EU Shellfish Waters Directive.

15.17 Walpole Bay has previously failed to meet current EC mandatory bathing water standards and is therefore considered to be at significant risk of not meeting the revised Bathing Water Regulations.

15.18 Bathing waters can be nominated for designation or delisting in the annual DEFRA review. The quality of bathing water quality can be affected by pollution that arises from a variety of sources and the amount of pollution from individual sources may be small but the combined effect can be significant. Diffuse pollution, from agricultural or other sources, can run off land or percolate through it into rivers which drain into the sea.

15.19 The following factors could contribute to poor bathing water quality in Thanet:

- Pollution from sewage - bacteria from sewage can enter our waters as a result of system failures or overflows or directly from sewage works.
- Water draining from farms and farmland - manure from livestock or poorly stored slurry or poor practices in the application of manure on to land can wash into rivers and streams resulting in faecal material entering the sea.
- Animals and birds on or near beaches - dog, bird and other animal faeces can affect bathing water as they often contain high levels of bacteria (much higher than treated human waste).
- Water draining from populated areas - water draining from urban areas following heavy rain can contain pollution from a variety of sources, including animal and bird faeces or incorrect connections of wastewater from houses and businesses into surface water drainage
- Domestic sewage - misconnected drains and poorly located and maintained septic tanks can pollute surface water systems.

15.20 The loss of blue flags or the failure of any of Thanet's beaches to meet the requirements of the revised Bathing Water regulations or for Shellfish water failure could have knock-on implications on perception of water quality at neighbouring beaches as well as the local economy and tourist and fishing industry. To ensure development does not negatively impact bathing and shellfish water quality it is important to ensure drainage infrastructure is adequate i.e. sewer capacity is available (or financially viable to increase) and surface water drainage is managed. The following policy seeks to ensure surface water run-off is managed appropriately.

Policy CC02 - Surface Water Management

New development is required to manage surface water resulting from the development using sustainable drainage systems (SuDs) wherever possible. SuDs design, together with a robust long term maintenance plan should be included as an integral part of the master planning and design process for new development and should, wherever possible, incorporate multi-functional benefits for people and wildlife. Developers should demonstrate how the guidance produced by the Lead Local Flood Authority (LLFA) has been taken into account and applied when submitting a planning application for any major development. Approval of the design and measures to be implemented for the long term maintenance of SuDs will be required prior to development being permitted.

When preparing SuDs schemes developers should fully consider the potential impact on the historic environment and ensure that any damage is mitigated. Proposals for SuDs at sites within the Groundwater Source Protection Zone as shown on the Policies Map, or sites near the Groundwater Source Protection Zone, must demonstrate that the methods used will not cause detriment to the quality of the groundwater.

Sites identified as a Tidally Sensitive Area (as identified in surface water management plans) will need to incorporate Sustainable Drainage Methods and a maintenance schedule where appropriate, at the design stage of a planning application, and a Flood Risk Assessment will be required before planning permission can be granted.

Coastal Development

15.21 There are a number of other discrete areas of flood risk around the coastline; however, the majority of coastline is at risk of erosion and not flooding. Coastal defences have an approximate lifespan of 50 years. If there appears to be an economic justification for maintaining them then they will be maintained; however, feasibility work does not always indicate that a project will be successful in achieving funding, and in such cases defences may cease to be maintained.

15.22 The Isle of Grain to South Foreland Shoreline Management Plan (SMP) provides a large-scale assessment of the risks associated with coastal evolution and presents a policy framework to address these risks to people and the developed, historic and natural environment in a sustainable manner. It also includes an action plan to facilitate implementation of the SMP policies and monitor progress. The following policy seeks to ensure that new development is not put at risk from coastal erosion which may put people or property at risk, or potentially reduce the lifespan of those dwellings.

15.23 The Marine Management Organisation (MMO) will deliver UK marine policy objectives for English waters through statutory Marine Plans and other measures. Thanet is within the South East Marine Plan area and a marine plan for this area is under development. Until a Marine Plan has been published, the UK Marine Policy Statement should be used for guidance and licensing on any planning activity that includes a section of coastline or tidal river. A marine licence from the MMO may be required for coastal developments and early consultation with the MMO is advised.

Policy CC03 - Coastal Development

Proposals for new development within 40 metres of the coastline or clifftop must demonstrate to the satisfaction of the Council that it will not:

- 1) expose people and property to the risks of coastal erosion and flooding for the life of the development; or**
- 2) accelerate coastal erosion due to increased surface water run off; and**
- 3) impact on natural habitats through the process of coastal squeeze or otherwise restrict the capacity of the coastline to adjust to sea-level rise and climate change.**

Renewable energy

15.24 There are a number of options for obtaining energy from renewable sources in new or existing developments. These include:

- Solar photo-voltaic panels
- Wind turbines
- Solar water heating
- Ground source heat pumps
- Biomass and biofuel

15.25 The Council will encourage new developments to make provision for renewable installations in their master planning and will encourage the retrofitting of such installations to existing buildings, subject to the criteria in policy CC04. The following policy seeks to encourage the use of renewable energy installations in new and existing development whilst mitigating against any detrimental effects.

Policy CC04 - Renewable Energy

Proposals for major new developments shall demonstrate that they will make maximum use of renewable energy or micro- generation equipment and to this end shall include a feasibility assessment taking into account site location and viability. Proposals for renewable energy or micro-generation facilities in new developments should ensure that:

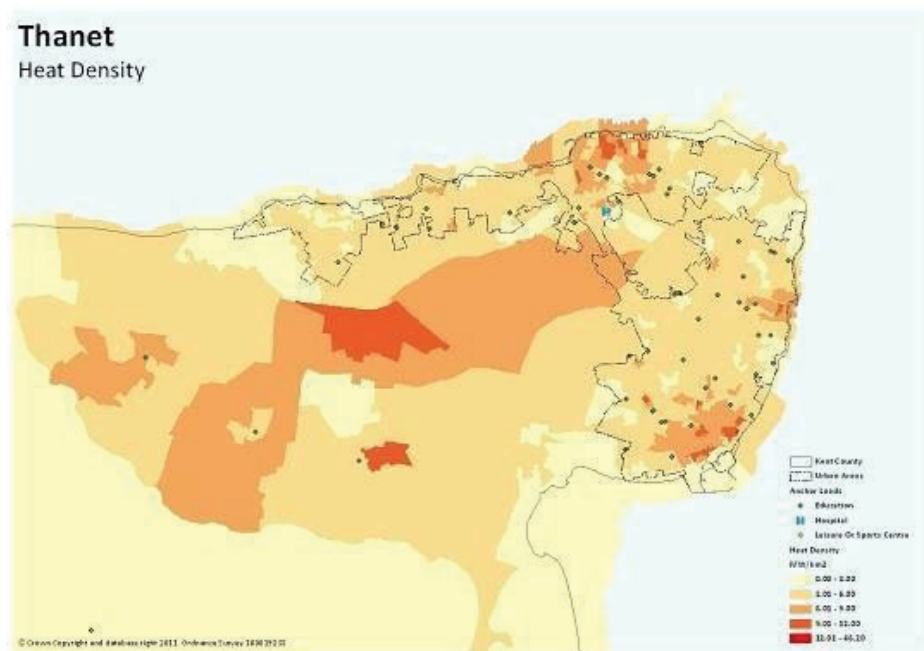
- 1) There are no significant adverse impacts on the surrounding area such as visual, noise and amenity;**
- 2) Visual and landscape impacts have been minimised in the design and layout of the scheme;**
- 3) There is no significant impact on residential amenity of local residents;**
- 4) There is no adverse impact on heritage assets or their setting;**
- 5) There is no significant impact on the landscape setting, habitats, biodiversity or wildlife assets, particularly protected species and habitats;**
- 6) They do not have an impact on the best and most versatile agricultural land unless that it can be demonstrated that it is necessary and no alternative lower grade land is available.**

District Heating

15.26 District heating schemes supply heat from a central source directly to homes and businesses through a network of pipes carrying hot water. This means that individual homes and business do not need to generate their own heat on site.

15.27 Large energy users, or 'anchor loads' are an essential part of a district heating network to provide a base heat demand that will allow a system to run efficiently. Anchor loads could be large energy users such as industry, schools, hospitals or leisure centres with heated swimming pools. Map 4 is a heat map for Thanet showing potential areas suitable for district heating.

Map 4 - Thanet's Heat Density



15.28 District heating is most suitable where there is a high density of built development, and especially where there is a mix of building types. This diversity of energy demand helps to keep combined heat and power (CHP) or boiler plant running in a more steady state for longer - which is more efficient.

15.29 The Renewable Energy for Kent report identifies the following scale and types of district heating networks which may come forward:

Small local networks: Typically between 10 and 50 homes in a street or a block. Gas fired boilers or biomass boilers supplying heat only.

Medium size networks: Typically over 200 homes and normally with an 'anchor building' (i.e. a school, hospital or leisure centre).

Large networks: A number of small and medium sized networks linked up and perhaps taking heat from a large biomass or energy from waste power station.

15.30 The following policy seeks to encourage district heating schemes where appropriate and feasible. Energy statements are a useful tool for considering the energy strategy for major sites. These could consider any of the following aspects:

- the overall energy strategy for the site
- the energy demands for the development
- an assessment of the feasibility of the available renewable and low carbon technologies
- assessment of the likely energy savings and emissions
- costs of technology where viability is a concern
- other potential impacts of renewable energy and low carbon technologies
- long term management of energy supply on site

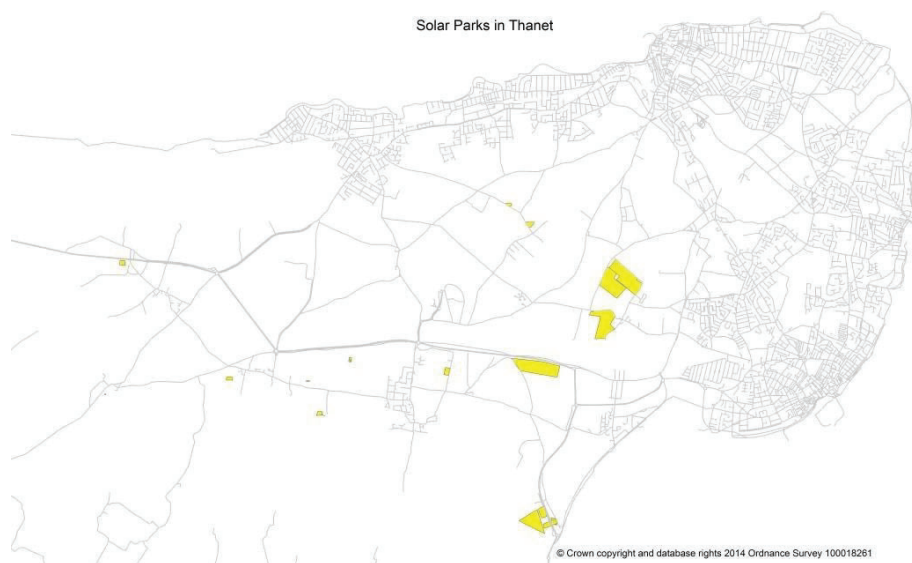
Policy CC05 - District Heating

Support will be given to the inclusion of district heating schemes in new development. Major development proposals should be supported by an Energy Statement to demonstrate that the inclusion of such a scheme has been considered. Where a district heating scheme cannot be provided the developer should set out the reasons for this.

Solar Parks

15.31 There have been a number of developments for renewable energy applications in the district to help reduce emissions. A number of solar parks have been granted permission - these are mainly located in fields, or parts of fields, are temporary (most have a 25 year lifespan), and the land can revert to its original use when the panels are removed.

Map 5 - Solar Parks



15.32 The siting for a solar park will usually be near to a connection to the national grid due to cost implications for connection, and will require the erection of a fence surrounding the site for security reasons.

15.33 Map 5 shows sites where permission has been granted for solar parks at the time of writing. It may be possible that other sites could be considered for further development of solar parks. Further sites should be located on previously developed land or non-agricultural land wherever possible. There are potential negative impacts to the countryside, landscapes, and to best and most versatile agricultural land. For proposals on agricultural land, the developer will be expected to demonstrate how the land can still be used for agricultural purposes.

15.34 The developer will be required to outline a management programme to demonstrate that the areas beneath and around the panels will not become overgrown, and to assist with the eventual restoration of the site, normally to its former use.

Policy CC06 - Solar Parks

Applications for solar parks will only be permitted if there is no significantly detrimental impact on any of the following:

- 1) Thanet's historic landscapes;**
- 2) visual and local amenity, including cumulative effects;**
- 3) heritage assets and views important to their setting.**

Proposals on agricultural land must demonstrate that the proposal will comply with all of the following:

- 4) Cause minimal disturbance to the agricultural land and**
- 5) Be temporary, capable of removal and reversible, and allow for continued use as such on the remaining undeveloped area of the site;**
- 6) Provide biodiversity enhancements.**

The need for renewable energy does not automatically override environmental considerations.

Solar park proposals will be assessed for their impact on the Thanet Coast SPA and Ramsar site in order to ensure no loss of functionally linked land and provide mitigation if required.

15.35 The Richborough area, which straddles the district boundary with Dover, has become a focus for waste treatment, renewable and low carbon energy industries. The former Richborough Power Station provides a potential location for such facilities, as well as a connection to the national grid. Thanet and Dover Councils have approved applications for solar parks and anaerobic digesters in the surrounding area, a peaking plant facility and site-wide infrastructure to facilitate the creation of energy from waste site, on the former Richborough Power Station site.

15.36 The Council recognises the potential of the site to help to mitigate against climate change. Therefore in liaison with Dover District Council and Kent County Council (as the Minerals and Waste Authority), the Council will continue to explore, with the promoters of any

schemes, how this potential can be realised. Particular regard would need to be had to environmental, transport and wildlife impacts together with visual impact on landscape and on the gateway location to and from Thanet.

15.37 The Kent Minerals and Waste Sites Local Plan 2013-2030 and Waste Sites Plan look to this area as a potential location for energy from waste, green waste treatment and for the treatment/material recycling facilities. Development proposals in this area should also refer to these plans and the relevant National Planning Statements.

15.38 The Secretary Of State for Transport has issued directions under the Town and Country Planning (General Development Procedure) Order 1995 to safeguard the route corridor of the Channel Tunnel Rail Link Project. This includes additional land that may be required for associated works/development. (Such direction and works are not proposals of the District Council, and the routes in question will not be determined through the development plan process but through other statutory procedures which will provide appropriate opportunities for any objections by those directly affected by the project).

15.39 Safeguarding directions for development affecting the route corridor for the channel tunnel rail link project apply to land at Richborough. In accordance with the direction, the Council will consult HS1 (south) limited before granting planning permission or resolving to carry out/authorise development within the limit of land subject to consultation.

Policy CC07- Richborough

Proposals for the development of renewable energy facilities at Richborough will be permitted if it can be demonstrated that the development will not be detrimental to nearby sites of nature conservation value or heritage assets and that any potential effects would be fully mitigated.

16 - Safe and Healthy Environment

16.1 The National Planning Policy Framework (NPPF) states that the planning system should contribute to and enhance the natural and local environment. It should prevent both new and existing development from contributing to or being put at unacceptable risk of pollution by soil, air, water or noise or land instability, and remediate and mitigate despoiled, degraded, derelict contaminated and unstable land where appropriate. Consideration must be given to the impacts of noise on health and quality of life from new developments, and the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas.

16.2 Environmental pollution and impacts on human health are important issues, and the Council is keen to ensure that Thanet's environmental quality is maintained and enhanced. The following policies aim to address a number of environmental issues to help achieve this.

Potentially Polluting Development

16.3 Activities with the potential to pollute are controlled by wide ranging powers under pollution control legislation. However, the effects of development that might cause the release of pollutants to water, land or air, or from noise, dust, vibration, light, odour or heat, are material considerations when deciding whether or not to grant planning permission. The Council will require any application to include sufficient information to enable the risk of pollution to be assessed.

Policy SE01 - Potentially Polluting Development

Development with potential to pollute will be permitted only where:

- 1) Applicable statutory pollution controls and siting will effectively and adequately minimise the impact upon existing and proposed land uses and the environment including the effects, including cumulative effects, on health, the natural environment such as significant natural and heritage assets, or general amenity resulting from the release of pollutants to water, land or air or from noise, dust, vibration, light, odour or heat; and**

In determining individual proposals, regard will be paid to:

- 2) The economic and wider social need for the development; and**
- 3) The visual impact of measure needed to comply with any statutory environmental quality standards or objectives.**
- 4) where there is an impact and the development is acceptable, a suitable mitigation is proposed to the satisfaction of the pollution control regimes.**

Permission for development which is sensitive to pollution will be permitted only if it is sufficiently separated from any existing or potential source of pollution as to reduce pollution impact upon health, the natural environment or general amenity to an acceptable level, and adequate safeguarding and mitigation on residential amenity.

Landfill Sites and Unstable Land

16.4 Sites that have been used for the deposit of refuse or waste may generate explosive or otherwise harmful gasses. Thanet has approximately 26 such sites which are all listed in the National Landfill Atlas held by the Environment Agency.

16.5 A former landfill site will be unlikely to be actively gassing after 40-50 years of its closure. The Council is required to consult the Environment Agency, as Waste Regulation Authority, before granting consent for development within 250m of land which is, or has within 30 years of the relevant application, been used for the deposit of refuse or waste.

16.6 If an application for a new development/redevelopment or major change of use on or adjacent to a site included in the landfill atlas is received, then a full site-investigation report including gas monitoring will be required.

16.7 Where the presence of gas is discovered or it is suspected that it may be present during site development, the Council will require the applicant to arrange for an investigation to be carried out to determine its source and for satisfactory and effective remedial measures to prevent hazards from migrating gas (including accumulation into property or other confined spaces) during the course of development and during subsequent use of the site. Specialist design and construction advice will usually have to be sought by the developer in this regard.

16.8 For development on unstable land, it may be necessary for the developer to carry out specialist investigations and assessments to determine the stability of the site proposed for development and identify any remedial measures that will be needed to deal with instability. Areas known to the Council where land instability is likely to be an issue include:

- Minster Marshes
- Monkton Marshes
- Sarre Marshes
- Wade Marshes
- Land overlying Ramsgate and Margate caves
- Land overlying disused railway tunnel between Ramsgate main sands and the railway line at Broadstairs

Policy SE02 - Landfill Sites and Unstable Land

In considering planning applications on or near landfill sites, or where there is otherwise reason to suspect that potential danger from evolving or migrating gas may be present, or on land for which known or suspected instability might render it unsuitable for development, the local planning authority may require a specialist site investigation and assessment by the developer to identify any remedial measures required before determining such planning applications.

Development or redevelopment, including change of use, will only be permitted where:

- 1) the applicant/developer has demonstrated either that there is no unacceptable risk caused by the development or that appropriate remedial measures can overcome such risk;**
- 2) the development would not adversely affect neighbouring land; and**

- 3) **any necessary remedial measures can be achieved without unacceptable environmental impact.**

Where the local planning authority is satisfied that the risks from landfill or ground instability can be overcome, planning consent may be granted subject to conditions or a legal agreement specifying the necessary measures to be carried out.

Land affected by Contamination

16.9 Some sites in Thanet are known to be affected by contamination. The allocation of sites should not be taken as an indication that they are free from any hazardous/physical constraints, or that they are not in the vicinity of other installations handling hazardous substances.

16.10 Development on land affected by contamination will require a site investigation and assessment to establish the levels of contamination present and identify any remedial measures to clean the site to make it suitable for its proposed end use and remediate risks to the wider environment.

16.11 The Council has adopted a revised Contaminated Land Strategy (January 2019) which sets out the Council's position on the remediation of brownfield land in relation to the EPA 1990 Part IIa duties and links with the planning regime.

Policy SE03 - Land affected by Contamination

Development proposals that would enable contaminated sites to be brought into beneficial use will normally be permitted, so long as the sites can be rendered suitable for the proposed end use in terms of the impact on human health, public safety and the environment, including underlying groundwater resources.

Development on land known or suspected to be contaminated or likely to be adversely affected by such contamination will only be permitted where:

- 1) **an appropriate site investigation and assessment (agreed by the Council) has been carried out as part of the application to establish whether contamination is present and to identify any remedial measures necessary to ensure that the site is suitable for the proposed end use;**
- 2) **the proposed remedial measures would be acceptable in planning terms and would provide effective safeguards against contamination hazards during the development and subsequent occupation of the site.**

Planning conditions will be attached to any consent to ensure that remedial measures are fully implemented, before occupation.

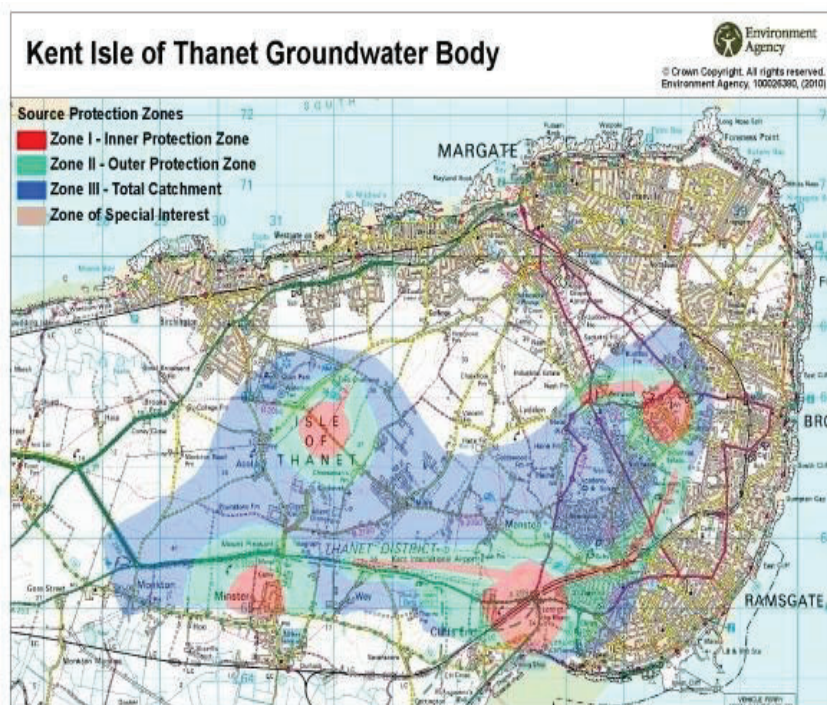
In the case of sites where contamination is only considered to be a possible risk, a site investigation will be required by condition. Sites where contamination is believed to have been removed or where the full site history is unknown should not be able to be considered as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land.

Groundwater Protection

16.12 Thanet's groundwater is of poor quality and is vulnerable to contamination due to Thanet's thin soils and cracks in the chalk rock, which means pollution would soak through quickly to the groundwater. However the groundwater is used to supply water for drinking water, agriculture, horticulture and industry and also feeds the springs that emerge along the coast near the marshes, so it is important that there is no further contamination to the groundwater.

Thanet's groundwater zones are shown on the Policies Map, and in more detail on Map 6.

Map 6 - Thanet's Groundwater Protection Zones



16.13 Thanet's groundwater is extremely vulnerable to contamination as substances (natural substances and man-made chemicals) are able to pass rapidly through the thin soils and the natural fissures (cracks) in the chalk rock to the groundwater below the ground surface.

16.14 Once the chalk and groundwater is contaminated at a site by a substance it can take decades to clean-up. The Council and the Environment Agency have worked hard to prevent contamination by consistently applying Groundwater Protection policies to any proposed land-use changes in Thanet to reduce potential future impact.

16.15 Under the Water Framework Directive (WFD), the 'Kent Isle of Thanet Groundwater Body' has been classified as poor status for the groundwater quality and quantity. The groundwater is impacted by nitrates, pesticides, solvents and hydrocarbons at levels that are of concern. Thanet's groundwater is currently a candidate Water Protection Zone (WPZ). These zones are used in areas identified as being at high risk as a 'last resort' when other mechanisms have failed or are unlikely to prevent failure of WFD objectives. WPZs are a new regulatory tool to address diffuse water pollution. They are designed to help enforce measures to prevent pollution and improve water quality where standards set out in the Water Framework Directive (WFD) are not being met. It is hoped that sufficient measures can be taken, by various organisations and individuals, that will help remediate the problems with Thanet's groundwater

and avoid a WPZ designation.

16.16 The poor groundwater quality cannot be attributed to just one source. In Thanet there are considerable risks to the groundwater from both urban and rural activities. These risks are intensified by the compact nature of the district. Hazards to Thanet's groundwater include petrol stations, gas works, drainage from roads, leakage from sewers, pesticide storage, septic tanks, sheep dips, and farm buildings. Uses that can cause pollution to the groundwater include dry cleaners, mechanics, scrap metal, photo processing, and some sustainable drainage systems.

16.17 Well designed SuDs in suitable locations can improve the volume of groundwater available without affecting the quality; however locations and depths of discharge to ground must be carefully designed to ensure that they are appropriate and do not cause further degradation. SuDs must be designed so that pollutants are removed prior to discharge, and where possible, properly designed in order to improve the groundwater quantity. Discharges to the ground in sensitive areas should be approved by the Environment Agency.

16.18 Drainage and provision of water are addressed by Policies SP02 and SP14 for housing development and general pollution prevention Policy SE01.

Policy SE04 - Groundwater Protection

Proposals for development within the Groundwater Source Protection Zones identified on the Policies Map will only be permitted if there is no risk of contamination to groundwater sources. If a risk is identified, development will only be permitted if adequate mitigation measures can be implemented. Proposals which involve the use of piled foundations on contaminated sites must demonstrate that they will not cause disturbance of any ground so as to cause turbidity in water supply and/or create pathways enabling contaminated materials to reach the groundwater.

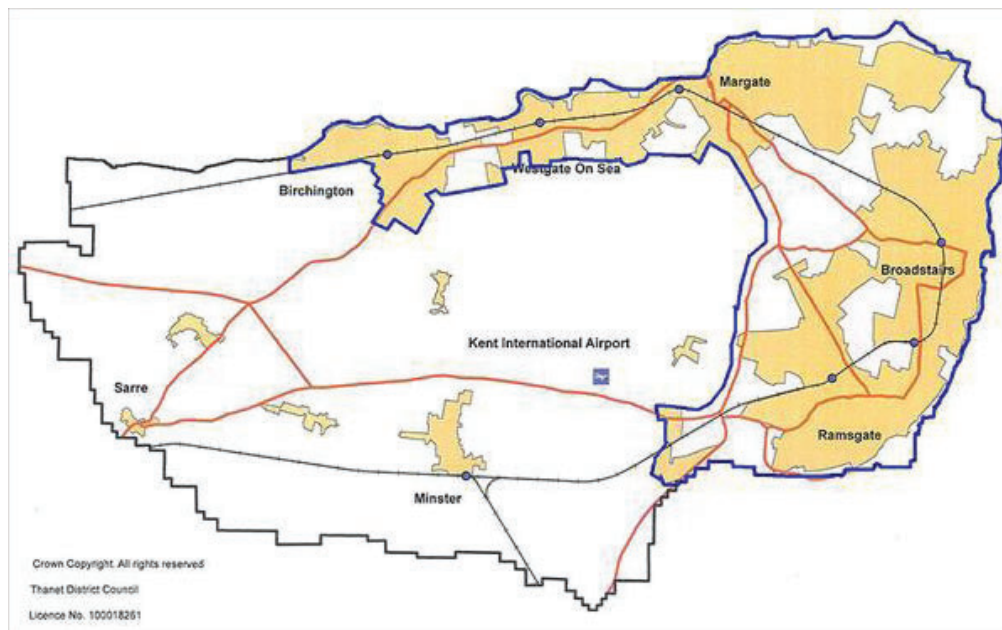
Proposals for Sustainable Drainage systems involving infiltration must be assessed and discussed with the Environment Agency to determine their suitability in terms of the impact of any drainage into the groundwater aquifer.

Air Quality

16.19 The Environment Act 1995 established a local air quality management regime which requires local authorities to review and assess ambient air quality in their areas against health-based standards for a number of specific pollutants as set out in regulations. It is then required to produce an Air Quality Action Plan. If there is a risk that levels of air pollution in any part of an authority's area will be higher than the prescribed objectives then the authority is required to designate an Air Quality Management Area (AQMA).

16.20 Thanet generally has good air quality; however there are areas at The Square in Birchington, the junction of Hereson Road/Boundary Road and High Street St Lawrence, Ramsgate where air quality is poor due to pollution from road transport. An urban wide Air Quality Management Area has been declared to enable effective management of air quality. The transport strategy that accompanies the plan is aiming to address this issue by proposing road improvements and new links to form an "inner circuit". Further details are available in Chapter 6 New Strategic Routes Policy.

Map 7 - Thanet Urban Air Quality Management Area



16.21 Planning is an effective tool to improve air quality. It can be used to locate development to reduce emissions overall, and reduce the direct impacts of new development, through policy requirements.

16.22 An AQMA makes consideration of the air quality impacts of a proposed development important. However, there is still a need to regard air quality as a material factor in determining planning applications in any location. This is particularly important where the proposed development is not physically within the AQMA, but could have adverse impacts on air quality within it, or where air quality in that given area is close to exceeding guideline objectives itself.

16.23 The Council has produced an Air Quality Technical Planning Guidance August 2016, in conjunction with the Kent and Medway Air Quality Partnership. The guidance sets out the approach that should be adopted from pre-application stage through to submitting details to the local planning authority. The process involves initial screening to see if the development does not require any assessment and/or mitigation or if the development requires an air quality assessment and/or an emissions mitigation assessment. Advice from the Council's air quality officer should be sought early on in the process.

16.24 Developments that require the submission of an Air Quality Assessment include the following:

- 1) If the development is likely to have a significant impact upon an AQMA;
- 2) If the development has the potential to cause a deterioration in local air quality (i.e. once completed it will increase pollutant concentrations);
- 3) If the development is located in an area of poor air quality (i.e. it will expose future occupiers to unacceptable pollutant concentrations) whether the site lies within a designated AQMA or, if so advised by the Local Authority, or a "candidate" AQMA;
- 4) If the demolition/construction phase will have a significant impact on the local environment (e.g. through fugitive dust and exhaust emissions).

16.25 The types of development that are likely to require an air quality assessment are identified in the Kent and Medway Air Quality Partnerships Technical Planning Guidance August 2016, although the Council's air quality officer will confirm whether an air quality assessment is required or if an emissions mitigation assessment will suffice.

16.26 Where an air quality and/or an emissions mitigation assessment are required, they should be carried out by the developer's air quality consultant.

16.27 The Air Quality Technical Planning Guidance provides advice on the level of information required, the process, assessment and possible mitigation and applicants are encouraged to refer to this document. It is vital that air quality is discussed at the pre-application stage where possible, to avoid delays in the processing of the planning application. Applicants should always seek to use the most up to date information on air quality when carrying out an assessment. Early consultation with the Council's air quality officer is recommended to determine whether an air quality assessment is required before submitting a planning application.

16.28 In order to improve air quality generally within the District, the Air Quality Technical Planning Guidance encourages the use of less polluting transport, by requiring proposals for new residential development of 10 or more units and commercial/industrial developments above a certain size, to provide electric car charging points.

16.29 This approach compliments the Council's aim to improve the health and wellbeing of its residents. The Council will also work with the relevant providers of public transport to provide less polluting forms of transport through a Quality Bus Partnership.

Policy SE05 - Air Quality

All major development schemes should promote a shift to the use of sustainable low emission transport to minimise the impact of vehicle emissions on air quality. Development will be located where it is accessible to support the use of public transport, walking and cycling.

New development must ensure that users are not significantly adversely affected by the air quality and include mitigation measures where appropriate.

All developments which either individually or cumulatively are likely to have a detrimental impact on air quality, will be required to submit an Air Quality and/or Emissions Mitigation Assessment, in line with the Air Quality Technical Planning Guidance 2016 and any subsequent revisions.

The Air Quality Assessment should address the cumulative effect of further emissions.

The Emission Mitigation Assessment should address any proposed mitigation measures through good design and offsetting measures that would prevent the National Air Quality Objectives being exceeded or reduce the extent of the air quality deterioration. These will be of particular importance within the urban AQMA, associated areas and areas of lower air quality.

Proposals that fail to demonstrate these will not be permitted.

Noise Pollution

16.30 The National Planning Policy Framework (NPPF) outlines that local plan policies and development management decisions should aim to avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development. It states that where conflict does arise, impacts must as far as possible be mitigated against and be reduced to a minimum.

16.31 The Government's Noise Policy Statement for England stated priority is to:

'Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development'.

16.32 The second aim is to mitigate and minimise adverse impacts, and the third is to contribute to the improvement of health and quality of life through effective management control of noise.

16.33 Noise is a material consideration when determining planning applications. The Government's National Planning Practice Guidance^[1] states that consideration should be given to:

- Whether or not a significant adverse effect is occurring or likely to occur;
- Whether or not an adverse effect is occurring or likely to occur; and
- Whether or not a good standard of amenity can be achieved.

16.34 The guidance provides the following noise hierarchy to determine when noise could be a concern:

Table 14 - Noise Hierarchy

Perception	Examples of outcomes	Increasing effect level	Action
Not noticeable	No effect	No observed effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No observed adverse effect	No specific measures required
		Lowest Observed Adverse Effect Level	

Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; closing windows for some of the time because of the noise. Potential for non-awakening sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. having to keep windows closed most of the time, avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

16.35 The guidance suggests four broad types of mitigation against noise:

- **engineering:** reducing the noise generated at source and/or containing the noise generated;
- **layout:** where possible, optimising the distance between the source and noise-sensitive receptors and/or incorporating good design to minimise noise transmission through the use of screening by natural or purpose built barriers, or other buildings;
- **using planning conditions/obligations** to restrict activities allowed on the site at certain times and/or specifying permissible noise levels differentiating as appropriate between different times of day, such as evenings and late at night, and;
- **mitigating** the impact on areas likely to be affected by noise including through noise insulation when the impact is on a building.

Further information and guidance can be found in the following sources:

- Chartered Institute of Environmental Health, Acoustic and Noise Consultants and Institute of Acoustics: Professional Practice Guidance on Planning and Noise
- British Standard 4142: Methods for rating and assessing industrial and commercial sound

- British Standard 5228 Code of practice for noise and vibration control on construction and open sites
- British Standard 6472 Vibration
- British Standard 8233 Guidance on sound insulation and noise reduction for buildings

Policy SE06 - Noise Pollution

In areas where noise levels are relatively high, permission will be granted for noise-sensitive development only where adequate mitigation is provided, and the impact of the noise can be reduced to acceptable levels.

Development proposals that generate significant levels of noise must be accompanied by a scheme to mitigate such effects, bearing in mind the nature of surrounding uses. Proposals that would have an unacceptable impact on noise-sensitive areas or uses will not be permitted.

Noise Action Plan Important Areas

16.36 Noise Action Plans have been prepared in line with the terms of the Environmental Noise Directive and cover noise from roads, railways and agglomerations. There are 26 road related 'Important Areas' and 2 rail Important Areas in Thanet. (These correspond with hotspots identified in the AQMA). The Defra maps are available here:

<http://www.extrium.co.uk/noiseviewer.html#>

16.37 Within the identified areas, residential development will need to include mitigation measures to reduce the impact of noise on residential amenity. Such measures may include screening/barriers, double glazing, locating windows so they are not opposite the noise source. Developers should liaise with Kent County Council as the Highway Authority to agree appropriate mitigation.

Policy SE07 - Noise Action Plan Important Areas

Proposals for residential development within identified Important Areas in the Noise Action Plan must incorporate mitigation measures against the impact of noise on residential amenity.

Light Pollution

16.38 Light pollution is identified as a statutory nuisance under the Clean Neighbourhoods and Environment Act 2005. Poorly designed or installed lighting can be obtrusive by introducing a suburban character into rural areas, and also wastes electricity. Different forms of light pollution are identified as:

- Light Spillage - artificial illumination that results in the spillage of light that is likely to cause irritation, annoyance or distress to others
- Light Trespass - the spilling of light beyond the boundary of the property on which

- the light source is located
- Light Glare - the uncomfortable brightness of a light source when viewed against a dark background
 - Sky Glow - the brightening of the night sky above our towns and cities

16.39 Due to Thanet's open landscapes and vast skies, poor outdoor lighting can have a substantial adverse effect on the character of the area well beyond the site on which the lighting is located.

16.40 Inappropriate lighting has been shown to have major impacts on wildlife. The impacts of light pollution on bat species and potential mitigation measures are particularly well documented.

16.41 The Council refers to the Institution of Lighting Professionals Guidance Notes for the Reduction of Obtrusive Light^[i]. The guidance identifies environmental zones and corresponding lighting environments as shown in table 15.

[i] [REDACTED]

Table 15 - Environmental Zones

Zone	Surrounding	Lighting Environment	ILP examples	Corresponding areas in Thanet
E0	Protected	Dark	UNESCO starlight reserves, IDA dark sky parks	None
E1	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc	Landscape Character Areas associated with Pegwell Bay and former Wantsum Channel, the European Marine Sites
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations	Rural areas outside of the built confines Including Green Wedges
E3	Suburban	Medium district brightness	Small town centres or suburban locations	Urban areas and villages
E4	Urban	High district brightness	Town/city centres with high levels of night time activity	Amusement area at Margate Seafront

16.42 The Institute of Lighting Professionals recommends the following standards within these areas:

Table 16 - Obtrusive Light Limitations for Exterior Lighting Installations - General Observers

Environmental Zone	Sky Glow ULR [Max %] (1)	Light Intrusion (into windows) Ev [lux] (2)		Luminaire intensity I [candelas] (3)		Building Luminance Pre-curfew (4)
		Pre-curfew	Post-curfew	Pre-curfew	Post-curfew	
E0	0	0	0	0	0	0
E1	0	2	0 (1*)	2,500	0	0
E2	2.5	5	1	7,500	500	5
E3	5.0	10	2	10,000	1,000	10
E4	15	25	5	25,000	2,500	25

ULR = Upward Light Ratio of the Installation is the maximum permitted percentage of luminaire flux that goes directly into the sky.

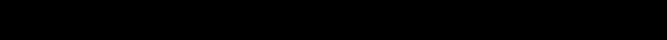
Ev = Vertical Illuminance in Lux - measured flat on the glazing at the centre of the window. I = Light Intensity in Candelas (cd)

L = Luminance in Candelas per Square Metre (cd/m²)

Curfew = the time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied by the local planning authority. If not otherwise stated - 23.00hrs is suggested.

* = Permitted only from Public road lighting installations

- 1) **Upward Light Ratio** - Some lighting schemes will require the deliberate and careful use of upward light, e.g. ground recessed luminaires, ground mounted floodlights, festive lighting, to which these limits cannot apply. However, care should always be taken to minimise any upward waste light by the proper application of suitably directional luminaires and light controlling attachments.
- 2) **Light Intrusion (into Windows)** - These values are suggested maxima and need to take account of existing light intrusion at the point of measurement. In the case of road lighting on public highways where building facades are adjacent to the lit highway, these levels may not be obtainable. In such cases where a specific complaint has been received, the Highway Authority should endeavour to reduce the light intrusion into the window down to the post curfew value by fitting a shield, replacing the luminaire, or by varying the lighting level.
- 3) **Luminaire Intensity** - This applies to each luminaire in the potentially obtrusive direction, outside of the area being lit. The figures given are for general guidance only and for some sports lighting applications with limited mounting heights, may be difficult to achieve.
- 4) **Building Luminance** - This should be limited to avoid over lighting, and related to the general district brightness. In this reference building luminance is applicable to buildings directly illuminated as a night-time feature as against the illumination of a building caused by spill light from adjacent luminaires or luminaires fixed to the building but used to light an adjacent area.

Further information, guidance and advice is available from the ILE website  and developers are recommended to refer to these.

Policy SE08 - Light Pollution

Development proposals that include the provision of new outdoor lighting or require specific lighting in connection with the operation of the proposed development will be permitted if it can be demonstrated that:

- 1) It has been designed to minimise light glare, light trespass, light spillage and sky glow through using the best available technology to minimise light pollution and conserve energy;**
- 2) There is no adverse impact on residential amenity and the character of the surroundings;**
- 3) There is no adverse impact on sites of nature conservation interest and/or protected and other vulnerable species and heritage assets;**
- 4) There is no adverse impact on landscapes character areas, the wider countryside or those areas where dark skies are an important part of the nocturnal landscape;**
- 5) It does not have an adverse impact on long distance views or from vantage points;**
- 6) Where appropriate, mitigation measures are proposed.**

In addition a lighting strategy may be required for major developments or those developments with specific lighting requirements or for those that are in or adjacent to sensitive locations.

A Landscape and Visual Impact Assessment will be required for proposed developments that fall in to the E1 category, as set out in Table 15 Environmental Zones.

Proposals that exceed the Institution of Lighting Professionals standards will not be permitted.

17 - Communities

17.1 Social, cultural and community facilities are an integral part of developing inclusive and cohesive communities.

17.2 One of the core principles of the National Planning Policy Framework (NPPF) is to take account of and support local strategies to support health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities to meet local needs.

17.3 The NPPF also states that planning policies and decisions should plan positively for the provision and use of shared space, community facilities and other local services, and to guard against the unnecessary loss of such facilities. It states that planning policy should promote the retention and development of local services and community facilities in villages. Further guidance and advice on the design of new facilities is set out in the Sport England Active Design guidance as referenced in paragraph 13.13.

17.4 The NPPF affords protection to existing open space, sports and recreational buildings and land (including playing fields) stating that they should not be built on unless the land is surplus to requirements, or the development will result in better provision of open space or sports and recreational provision.

17.5 Community facilities are defined in this Plan as local and village shops, meeting places, sports venues, nurseries, cultural buildings, public houses, places of worship, public rights of way, other local services including those for education and medical purposes, which enhance the sustainability of communities and residential environments. It also includes, vacant land that was last lawfully used as a community facility or previously occupied by a building whose last lawful use was for a community facility.

17.6 The provision of new facilities can be important in promoting sustainable development by reducing the need to travel and providing a service for those who do not have access to transport.

17.7 To be all inclusive, new community facilities should be designed in accordance with the Changing Places specification set out in Kent County Council's Kent Adult Social Services Glossary document dated October 2008 or any successor document or as modified by legislation or best practice or otherwise agreed which complies with the Disability Discrimination Act.

17.8 Paragraph 42 of NPPF recognises the vital role that high-speed broad band technologies and other communication networks play in enhancing the provision of local community services and facilities. Local authorities and other public sector providers are increasingly reliant on digital infrastructure to provide services and to interact with their customers. It is therefore becoming increasingly important for community facilities to also have this access as this will safeguard their future use making them more viable and adaptable for a range of uses. This will enable them to adapt to the changing demands thereby safeguarding their viability as a commercial concern. The Council will expect proposals for new community facilities to include the provision of high speed broadband to help facilitate the creation of a community hub thereby making the facility more viable in the long term.

Policy CM01 - Provision of New Community Facilities

Proposals for new, or extensions of, or improvements to existing community facilities will be permitted provided they:

- 1) are of a scale to meet the needs of the local community and in keeping with the character of the area;
- 2) are provided with adequate parking and operational space;
- 3) are accessible by walking or cycling to the local community;
- 4) are located within or adjacent to the community or settlement they serve;
- 5) would not significantly impact upon the amenity of neighbouring residents;
- 6) either provide or have the ability in the future, to make provision for broadband to facilitate the creation of a community hub network and provide flexible business space.

Protection of Existing Community Facilities

17.9 Community facilities including local shops, services and public houses play a vital economic and social role in both urban and rural areas and their retention can assist in meeting the needs of the local community and reducing the need to travel. The Council recognises that there is a risk that such facilities may be lost to more financially profitable uses, and that such facilities are often difficult to replace. It is therefore considered that the loss of existing facilities should be resisted where they provide for a current or future local need.

17.10 Such facilities that are important to the community should be retained unless genuine but unsuccessful attempts have been made to retain the premises in a community use. To assess applications for the change of use or redevelopment of existing community facilities, the Council will require a thorough analysis of the existing operation and attempts made to secure the future viability of the community use. In all cases, the applicant must demonstrate that:

- the need for the existing or alternative community facilities has been researched and that there is insufficient viable demand;
- opportunities to support the facility by the introduction of other services have been explored, where the dual use of premises for a number of community functions may help support the viability of facilities;
- efforts have been undertaken to secure the viability of the facility through applications for grant aid, business advice and discussions with community groups, parish Councils, Thanet District Council, Kent County Council and other national or local bodies with a direct interest in service provision; and
- the site has been actively marketed for its existing use and alternative community uses, at a realistic price and for a reasonable period of time of at least a year, proportionate to the type and scale of the facility.

17.11 The following policy seeks to ensure that existing community facilities are protected where there is a need for them.

Policy CM02 - Protection of Existing Community Facilities

Proposals which would result in the loss of a community facility will not be permitted unless it can be demonstrated:

- 1) there is alternative local provision which is accessible to the local community and the proposal will not undermine the ability of the community to meet its day to day needs; or**
- 2) every reasonable attempt has been made to secure an alternative community use and the site is not viable for redevelopment to provide alternative community facilities; or**
- 3) alternative provision of at least equivalent, or where possible, improved community benefit is provided in a convenient accessible location to serve the existing community.**

Margate Cemetery Expansion

17.12 Margate Cemetery is nearing capacity and a need has been identified for its expansion. A site of approximately 4.2 ha has been identified to the east of the existing cemetery to accommodate the additional land requirement.

Policy CM03 - Expansion of Margate Cemetery

Land of approximately 1 hectare is allocated and safeguarded for the expansion of Margate Cemetery and ancillary uses as shown on the Policies Map.

18 - Transport

Transport Assessments and Travel Plans

18.1 Development proposals may need to be accompanied by and judged against transport assessments or statements to assess the impact of development on the highway network and what improvements to transport infrastructure may be needed to accommodate them. Proposals likely to have significant transport implications will also require submission of a travel plan indicating measures to improve accessibility and promote sustainable and low carbon emission travel, such as electric vehicle charging infrastructure. Where feasible, development schemes should incorporate links to walking and cycling networks and/or contribute proportionately to their extension, rationalisation and improvement. Proposals should have regard to the route networks promoted in the walking and cycling strategies and integrate with them and with public transport routes and services. Many people will still choose to travel by car, and development may also need to provide or contribute to improvements to the road network to reduce congestion and improve pedestrian movement and safety.

18.2 The Council will require new development proposals to address any adverse transport impacts. With larger developments, equivalent to 100 dwellings or more, a Transport Assessment would usually be necessary. Smaller developments may only need a Transport Statement. However, some smaller developments may have a disproportionate impact on the network by reason of their location; the nature of the proposed development; or the timing of the development relative to other developments or the provision of new transport infrastructure. The Council, in conjunction with KCC Highways, will consider each proposal on its own merits and provide advice to applicants accordingly.

Policy TP01 - Transport Assessments and Travel Plans

Development proposals would have significant transport implications shall be supported by a Transport Assessment and where applicable a Travel Plan. These should show how multi-modal access travel options will be achieved, and how transport infrastructure needs arising from the expected demand will be provided.

In relation to other developments, a Transport Statement will be required, which addresses any transport impacts arising from the development and any mitigation measures that are needed to minimise the identified impact.

Walking

18.3 Walking and cycling generally improve overall health and fitness levels, can reduce the number of cars on the network, reduce congestion, improve air quality and save money for the individual. Creating active street frontages, with more people walking and cycling, also reduces crime levels and can act as a catalyst for more people to become active. The quality, safety and convenience of access by foot, bicycle and public transport are all key factors in encouraging people to select alternative modes to the private car.

18.4 Thanet has a road network which largely accommodates footways on both sides, not only in the main towns and seaside settlements but also along the distributor routes connecting them. In the rural areas the Public Rights of Way network offers walkers (and sometimes horse riders and cyclists) a good connection across open countryside to the coast, rural settlements and end destinations, with some circular walks offering superb views of both coast and countryside combined. The Thanet Coastal Path follows the longest stretch of chalk coastline in the country, the route having been set up in the 1990s. The Viking Coastal Trail is good for casual walkers, offering good views out to sea. There are other signposted walks in Thanet, including the Turner and Dickens Walk linking Margate and Broadstairs.

18.5 In 2005 "Feet First," a local walking strategy for Thanet was published. This identifies barriers to walking in the district and aims to promote and enable walking, for example by specifying a network of routes for improvements.

Policy TP02 - Walking

New development will be expected to be designed so as to facilitate safe and convenient movement by pedestrians including people with limited mobility, elderly people and people with young children.

The Council will seek to approve proposals to provide and enhance safe and convenient walking routes including specifically connection to and between public transport stops, railway stations, town centres, residential areas, schools and other public buildings.

Cycling

18.6 Cycling can provide an alternative to the private car for short trips and form part of longer journeys by public transport. Popularity of cycling as a healthy, enjoyable, efficient, pollution-free and cheap means of transport is dependent on safe, continuous, direct and attractive cycleways, together with facilities for secure cycle storage at interchange points and destinations.

18.7 The Viking Coastal Trail roughly encircles the former Isle of Thanet providing connections between the towns, leisure and heritage attractions. It forms part of the National Cycle Network and connects to the Oyster Bay Trail to Whitstable. Other routes have designated facilities to make cycling more attractive, such as the shared use footway/cycleways adjacent to New Haine Road. Provision of toucan crossings and facilities such as cycle parking at stations, shopping centres and other key locations, also help to improve the attractiveness and popularity of cycling in the district.

18.8 The Council has published a Thanet Cycling Plan (developed in association with local cycling groups), and, in conjunction with the County Council, will seek provision of a network of cycle routes using existing routes and where appropriate extensions to the primary route network. This includes part of the Sustrans national cycle network, which runs through Thanet, together with priority links between residential areas, places of work, schools, stations and town centres. The Council will seek every opportunity to introduce cycle routes in accordance with Thanet Cycling Plan.

18.9 Thanet Cycling Plan aims to establish a comprehensive safe network of cycle routes catering for all journey purposes, and features existing and proposed routes. The Cycling

Plan may be updated periodically to reflect the evolving network, and its proposed cycle routes are not therefore featured in this document.

18.10 New development generating travel demand will be expected to promote cycling by demonstrating that the access needs of cyclists have been taken into account, and through provision of cycle parking and changing facilities. Secure parking facilities and changing/shower facilities will encourage use of cycling. Cycle parking provision will be judged against the standards set out in the cycle parking standards Appendix C.

Policy TP03 - Cycling

The Council will seek the provision at the earliest opportunity of a network of cycle routes. Development that would prejudice the safety of existing or implementation of proposed cycle routes will not be permitted.

New development will be expected to consider the need for the safety of cyclists and incorporate facilities for cyclists into the design of new and improved roads, junction improvements and traffic management proposals.

Substantial development generating travel demand will be expected to provide convenient cycle parking and changing facilities.

New residential development will be expected to provide secure facilities for the parking and storage of cycles.

Bus and rail

18.11 Public transport has a major part to play in the realisation of a sustainable lifestyle by reducing car usage and pollution. Thanet has the lowest level of car ownership in Kent, which means that public transport is vital for personal mobility. A good public transport network is therefore important so that both these issues are addressed.

18.12 The Council has no direct control over the provision of bus and rail services. However, in its planning and other functions the Council will support the continuation and improvement of an effective public transport service for both bus and rail. Developer contributions will be used to facilitate implementation of such improvements. In addition the Council will expect new developments to take into account the needs of public transport. This could include various measures such as designing in waiting areas or the provision of sign posting and bus shelters.

18.13 Thanet is served by seven railway stations and has direct services to London, Canterbury, Ashford and Dover.

18.14 In December 2009 HS1 services commenced from Ramsgate to London St. Pancras reducing rail journey times to 1 hour and 16 minutes. For purposes of comparison, the mainline journey time to London Victoria is around 2 hours and to London Charing Cross up to 2 hours and 30 minutes. The three principal stations are Ramsgate, Broadstairs and Margate with routes in three directions:

- London via Faversham and Chatham
- London via Canterbury and Ashford

- Dover and Folkestone via Sandwich

Buses

18.15 Buses have an important role to play in providing a flexible alternative to the private car. This Plan supports development that will facilitate greater use of and improvement to bus services. New development will be expected to provide or contribute towards appropriate improvements.

18.16 In 2000 a Quality Bus Partnership (QBP) was formed between Stagecoach, Thanet District and Kent County Council with the aim of increasing local bus patronage. The formation of the Partnership has seen investment in roadside infrastructure and new vehicles as well as other initiatives to improve services, such as the high frequency LOOP and STAR services. However, there are still areas of congestion and inefficiencies on the highway network that prevent the bus services running as well as they might. The QBP will continue to work to remove these restrictions.

18.17 All bus routes within Thanet are supported by an established QBP between three partners - the commercial bus operator (Stagecoach), Kent County Council and Thanet District Council. This group meets quarterly and includes attendance by Council members from both Local Authorities.

18.18 The purpose of the QBP is to co-ordinate all matters which might affect bus operation, including potential investment opportunities, which could range from new bus stock, localised highway improvements to compliment bus routes to new highway infrastructure associated with new development proposals.

18.19 The re-development of the bus route network in 2004 and the subsequent support for bus services through the QBP have established underlying growth in the bus network. Whilst the projected increases in passenger numbers in future years appear less dramatic in percentage terms they actually constitute greater absolute growth.

Policy TP04 - Public Transport

Development proposals will be expected to take account of the need to facilitate use of public transport. The Council will seek to approve proposals consisting of or incorporating:

- 1) **improvement of passenger and waiting facilities;**
- 2) **measures to improve personal security;**
- 3) **improved accessibility for people with mobility limitations;**
- 4) **bus/rail interchange facilities;**
- 5) **secure cycle storage.**

Coach parking

18.20 Tourism in Thanet depends to a large extent on coach business. Coach travel is to be encouraged as an acceptable alternative to car based visitor travel. Dedicated sites to park

coaches are therefore required. Sites at Dreamland and Vere Road in Broadstairs are currently used for such purposes. Replacement provision for coach parking, displaced by development at the Rendezvous, Margate, is needed;

18.21 Ramsgate has no designated coach park, and Broadstairs has limited provision which may prove to be insufficient at peak times. The Council will seek appropriate solutions to accommodate demand on a temporary basis until such time as a specific site may be justified and identified through a review of potential coach parking sites.

Policy TP05 - Coach Parking

Land at Vere Road, Broadstairs, as identified on the Proposals Map will be retained for use as coach parking to serve the tourist trade.

The Council will consider the need to identify a site to accommodate demand for coach parking at other locations.

Car parking

18.22 The availability of car parking is a major influence on choice of means of travel. This Plan recognises the need to maintain some car parking provision, for example to provide choice of travel to urban centres, while restricting provision in new development in order to optimise site development potential, and promote sustainable transport choice.

18.23 The Council will expect new development to make efficient use of sites and optimise site development potential. Accordingly it will encourage well designed schemes that correspondingly minimise the proportion of the site used to accommodate the appropriate level of car parking.

18.24 It is anticipated that during peak periods demand for off-street car parking may be created by developments or activities that encourage large numbers of visitors to the area and may exceed current capacity. The Council will proactively seek and encourage suitable opportunities and solutions to manage and accommodate demand for car parking.

Policy TP06 - Car Parking

Proposals for development will be expected to make satisfactory provision for the parking of vehicles, including disabled parking.

Suitable levels of provision will be considered in relation to individual proposals taking account of the type of development, location, accessibility, availability of opportunities for public transport, likely accumulation of car parking, design considerations and having regard to the guidance referred to below. Parking provision in the town centres will also be assessed in relation to the provisions of Policies SP10-SP12.

In considering the level of parking provision in respect of proposals for residential development (use class C3), the Council will have regard to the guidance provided in Kent Design Review: Interim Guidance Note 3 - Residential Parking or any subsequent guidance.

In considering the level of parking provision in respect of proposals for other development, the Council will have regard to the indicative guidance in Kent Vehicle Parking Standards 2006 (Appendix C), or any subsequent guidance.

Where the level of provision implied in the above guidance would be detrimental to the character of a conservation area or adversely affect the setting of a listed building or ancient monument then a reduced level of provision may be accepted.

Within the town centres of Margate, Ramsgate and Broadstairs (as defined on the Policies Map) new development proposals will not be required or expected to provide on site car parking spaces. Where feasible such proposals should consider measures to encourage occupiers to make greater use of public transport.

18.25 The attractiveness of town centres for business, shoppers, residents and tourists depends amongst other things on an adequate level of car parking and effective enforcement of traffic regulations to prevent illegal parking on the highway and on public footpaths. In town centres the objective is to reduce the dominance of the private car in favour of walking, cycling and public transport, and to maximise site development potential. Accordingly the approach is to make better use of parking facilities that already exist, rather than providing more, and to apply charging and enforcement policies designed to encourage use of town centre public car parks for short term parking, and to prevent displacement of parking pressures beyond the immediate town centre area.

18.26 In district centres including Birchington and Northdown Road, non-car transport and optimum use of existing public and on street provision for short stay will be encouraged through appropriate charges and enforcement.

18.27 Outside the areas referred to above, the Council will monitor the situation, and consider appropriate measures and mechanisms to address any problems identified.

Policy TP07 - Town Centre Public Car Parks

In the town centres of Margate, Ramsgate and Broadstairs, as shown on the Policies Map, the existing level of off-street public car parking will be retained. Development resulting in the loss of space at such car parks will be permitted, providing the following criteria are met:

- 1) the proposal includes satisfactory replacement provision as part of the development or on an alternative site considered appropriate and compatible with the operational requirements of the Council's parking service, or**
- 2) exceptional release would enable provision at an alternative location for which there is greater demand and which is compatible with the operational requirements of the Council's parking service, or**
- 3) evidence demonstrates that the car park is under used and/or loss of spaces would be compatible with the operational requirements of the Council's**

parking service.

Freight and service delivery

18.28 Effective delivery of goods and services is essential to the health of Thanet's town centres, local business and economic regeneration. Road freight traffic needs to be directed to routes fit for the purpose. Thanet's business parks, industrial estates and the Port of Ramsgate are directly accessible through the primary road network. However, town centre roads are generally unsuited to accommodate large vehicles, and off-street servicing facilities are limited. Proposals for new development in town centres will therefore be expected to include adequate off-street servicing. Where feasible, off-street loading areas, enabling goods to be delivered to shops in smaller loads, will be encouraged in new developments.

Policy TP08 - Freight and service delivery

Wherever capacity exists or is capable of being provided, new development proposals will be expected to demonstrate adequate off street servicing.

Car parking at Westwood

18.29 Due to its historically ad hoc pattern of growth, Westwood has a number of large, free car parks in locations which encourage shoppers to drive between them to visit its various retail stores. As a multi-purpose destination, Westwood is collectively over-provided with car parking. The Council will seek to encourage non-car travel to Westwood. Within the area shown on the map below, it will restrict parking provision, and encourage developers to work with the Council to reduce existing parking provision, develop better access, services and facilities for customers who wish to walk, cycle or arrive by public transport. The Council will seek to achieve this through cooperation with developers and in determining development applications to extend existing or build new commercial development.

18.30 A key objective of the Westwood Relief Scheme is to remove private vehicles from the area around the A256/A254 intersection in favour of a pedestrian friendly public realm enabling safe and convenient movement on foot between various commercial destinations and a smoother flow of through traffic passing around the area. Delivery of the scheme will require some reconfiguration of the road network and land use in the vicinity including potentially locating and rationalising car parking so that access by vehicle is from outside the pedestrian friendly area.

18.31 The most appropriate way for this to be achieved is through a Supplementary Planning Document which sets out the long-term objectives for the area in more detail; and identifies particular schemes or opportunities for bringing this about. Policy SP07 sets this out in more detail.

Policy TP09 - Car parking provision at Westwood

At Westwood, new commercial development proposals will be expected to demonstrate specific measures to encourage customers to arrive at the site by means other than car. Such measures could include restricting total levels of car parking provision and would be the subject of a legal agreement.

- 1) car parking provision in new development at the indicative maximum level set out in the guidance at Appendix C will require specific justification.**
- 2) where new development is proposed at sites with existing car parking then shared use of car parking will be expected and total provision, assessed on the basis of resultant total floor space of existing and new development, shall not exceed the maximum levels of provision referred in Appendix C.**
- 3) where extensions to premises are proposed then no new car parking provision will be permitted. Replacement of any car parking lost as a result of such development will not be permitted unless special justification can be demonstrated.**
- 4) Proposals for development that may impact upon demand for car parking will be considered in light of compatibility with the Westwood Relief Strategy.**

Traffic Management

18.32 The emerging Transport Strategy identifies a range of issues to be addressed, and which may require traffic management based solutions. Such issues include the need to address deficiencies in the highway network or junction capacity affecting efficient running of bus services, causing congestion or affecting air quality and the need to improve connectivity and address barriers to walking and cycling.

Policy TP10 - Traffic Management

Development required to implement traffic management measures designed to realise the best use of the highway network in terms of safety, traffic capacity and environmental conditions will be approved.

Appendix A - Superseded Policies

Table 1 lists the policies that are to be replaced by the policies in Table 2 - below. The Cliftonville Development Plan Document adopted in February 2010 still applies.

TABLE 1: SUPERSEDED POLICIES

Policy Number	Policy Name
Economic Development & Regeneration	
EC1	Land Allocated for Economic Development
EC2	Kent International Airport
EC3	Kent International - surface transport issues
EC4	Airside Development Area
EC5	Land at, and east of, the airport terminal
EC6	Fire Training School
EC7	Economic Development Infrastructure
EC8	Ramsgate Waterfront
EC9	Ramsgate New Port
EC10	Margate Old Town and Harbour
EC11	Business Hotels
EC12	Retention of Employment Sites
EC13	Office Accommodation
EC14	Working from Home
Housing	
H1	Residential Development Sites
H2	Dwelling Supply
H3	Phasing
H4	Windfall Sites
H5	Monitoring
H6	Residential Development Site – Westwood

Policy Number	Policy Name
H7	Residential Development and Amenity Site – Minster
H8	Size and Type of Housing
H9	Better Use of Land for Housing
H10	Areas in Need of Special Action
H11	Non-self contained residential accommodation
H12	Retention of existing housing stock
H13	Residential Amenities
H14	Affordable Housing Negotiations on Housing sites
H15	Rural Local Needs Housing
H16	New Agricultural dwellings
Town Centres & Retailing	
TC1	New Retail Development
TC2	Westwood Cross Town Centre
TC3	Town Centre Expansion
TC4	Mixed Use Area
TC5	Retail Warehouse Stores
TC6	Assessment of Applications
TC7	Margate, Ramsgate and Broadstairs Core Centres
TC8	District and Local Centres
TC9	Hot Food Takeaways
Transportation	
TR1	Location of Development
TR2	Appropriate Use of Road Hierarchy
TR3	Provision of Transport Infrastructure
TR4	New Road and Highway Improvements
TR5	Off-street parking in town centres

Policy Number	Policy Name
TR6	Ramsgate Station Goods Yard
TR7	Roadside services
TR8	Rail Link Safeguarding Direction
TR9	Ramsgate Renaissance
TR10	Coach Parking
TR11	Pedestrian Movement
TR12	Cycling
TR13	Public Transport Facilities
TR14	Provision of Facilities for Sustainable Transport
TR15	Green Travel Plans
TR16	Car Parking Provision
TR17	Retention of existing Car Parking
TR18	Car Parking at Westwood and Out of Centre Locations
TR19	Traffic Management Measures
TR20	Telecommunications
Design	
D1	Design Principles
D2	Landscaping
D3	Extensions to Dwelling Houses
D4	Design Statements
D5	Advertisements
D6	Satellite Antennae
D7	Areas of High Townscape Value
D8	Seafront Architecture
D9	Accommodation for Elderly Relatives
D10	Agricultural Buildings

Policy Number	Policy Name
Heritage	
HE1	Listed Buildings of Special Architectural or Historic interest
HE2	Change of Use of Listed Buildings
HE3	Listed Rural Buildings
HE4	Planning Controls in Conservation Areas
HE5	Conservation Area Consent
HE6	Demolition in Conservation areas
HE7	Non-listed buildings in Conservation Areas
HE8	Street Furniture
HE9	Importance of Archaeological Resource
HE10	Scheduled Ancient Monuments
HE11	Archaeological Assessment
HE12	Archaeological Sites and Preservation
HE13	Royal Sea Bathing Hospital
HE14	Montefiore Site
Tourism	
T1	Tourist Facilities
T2	Serviced Accommodation
T3	Self-Catering Accommodation
T4	Former Hoverport Site, Pegwell Bay
T5	The Lido Site
T6	Language Schools
T7	Amusement Uses
T8	Dreamland
T9	Rural Tourism

Policy Number	Policy Name
Sport & Recreation	
SR1	New Facilities
SR2	Jackey Baker's
SR3	Maximising Use of Facilities
SR4	Provision of New Sports Facilities
SR5	Playspace
SR6	Amenity Areas
SR7	Urban Fringe
SR8	Formal Countryside Recreation
SR9	Informal Countryside Recreation
SR10	Public Open Space
SR11	Private Open Space
SR12	Playing Fields
SR13	Allotments
SR14	Community Woodland
SR15	Golf Courses & Country Park
SR16	Equestrian Uses and Buildings
SR17	Statutory Rights of Way
SR18	Major Holiday Beaches
SR19	Intermediate Beaches
SR20	Undeveloped Beaches
SR21	Development on Seafront Esplanades
Countryside & Coast	
CC1	Development in the Countryside (Urban and rural Confines)
CC2	Landscape Character Areas
CC3	Local Landscape Features
CC4	Island Approach Routes

Policy Number	Policy Name
CC5	Green Wedges
CC6	Village Separation Corridors
CC7	Rural Lanes
CC8	Power Lines
CC9	Best & most versatile Farmland
CC10	Farm Diversification
CC11	Agriculture Related Development
CC12	Farm Retail Units
CC13	Coastal Park Initiative
CC14	Development Along the Coast
CC15	Coastal Defence Works
CC16	Undeveloped Coast
CC17	Undeveloped Clifftop Sites
Rural Settlements	
R1	General Levels of Development
R2	Village Gaps
R3	Village Services
R4	Village Shops
R5	Conversion of Rural Buildings
R6	Traffic in the Villages
Nature Conservation	
NC1	Habitats
NC2	Nature Reserve and SSSIs
NC3	Local Wildlife Sites
NC4	Habitat Management and Creation
NC5	Lower Stour Valley
NC6	RIGS Sites

Policy Number	Policy Name
Environmental Protection	
EP1	Potentially Polluting Development
EP2	Landfill Sites
EP3	Unstable Land
EP4	Derelict and Contaminated Land
EP5	Local Air Quality Monitoring
EP6	General Noise Control
EP7	Aircraft Noise
EP8	Aircraft Noise and Residential Development
EP9	Light Pollution
EP10	Wantsum Channel Flood Risk Area
EP11	Margate Flood Risk Area
EP12	Surface Water Run-Off
EP13	Groundwater Protection Zones
EP14	Renewable Energy
Community Facilities	
CF1	Community Facilities
CF2	Development Contributions
CF3	Training Facilities
CF4	QEQM Hospital, Margate
CF5	Margate Cemetery
CF6	New Education Site

TABLE 2: SUPERSEDING POLICIES

Policy Number	Policy Name
Strategic proposals	
SP01	Spatial Strategy - Housing
SP02	Implementation
SP03	Local Plan Review
Economic Strategy	
SP04	Employment Growth
SP05	Land Allocated for Economic Development
SP06	Manston Business Park
SP07	Manston Airport
Town Centre Strategy	
SP08	Thanet's Town Centres
SP09	Westwood
SP10	Margate
SP11	Ramsgate
SP12	Broadstairs
Housing Strategy	
SP13	Housing Provision
SP14	General Housing Policy
SP15	Strategic Housing Site - Manston Green
SP16	Strategic Housing Site - Birchington
SP17	Strategic Housing Site - Westgate on Sea
SP18	Strategic Housing Site - Westwood
SP19	Strategic Housing Site - Land fronting Nash and Haine Roads
SP20	Strategic Housing Site - Land at Manston Court Road/Haine Road
SP21	Strategic Housing Site - Land north and south of Shottendane Road
SP22	Type and Size of Dwellings
SP23	Affordable Housing
Environment Strategy	
SP24	Development in the Countryside
SP25	Safeguarding the Identity of Thanet's Settlements
SP26	Landscape Character Areas
SP27	Green Infrastructure
SP28	Protection of the International and European Designated Sites
SP29	Strategic Access Management and Monitoring Plan (SAMM) policy
SP30	Biodiversity and Geodiversity Assets
SP31	Biodiversity Opportunity Areas
SP32	Protection of Open Space
SP33	Local Green Space
SP34	Provision of Accessible Natural and Semi Natural Green Space, Parks, Gardens and Recreation Grounds

Policy Number	Policy Name
SP35	Quality Development
SP36	Conservation and Enhancement of Thanet's Historic Environment
SP37	Climate Change
Community Strategy	
SP38	Healthy and Inclusive Communities
SP39	QEQM Hospital, Margate
SP40	New Medical Facilities at Westwood
SP41	Community Infrastructure
SP42	Primary and Secondary Schools
Transport Strategy	
SP43	Safe and Sustainable Travel
SP44	Accessible locations
SP45	Transport Infrastructure
SP46	New Railway Station
SP47	Strategic Routes
Economy	
E01	Retention of existing employment sites
E02	Home Working
E03	Digital Infrastructure
Town and District Centres	
E04	Primary and Secondary Frontages
E05	Sequential and Impact Test
E06	District and Local Centres
Tourism	
E07	Serviced Tourist Accommodation
E08	Self Catering Tourist Accommodation
E09	Protection of Existing Tourist Accommodation
E10	Thanet's Beaches
E11	Language Schools
E12	Quex Park
The Rural Economy	
E13	Development for new business in the countryside
E14	Conversion of rural buildings for economic development purposes
E15	Farm Diversification
E16	Best and Most Versatile Agricultural Land
Housing	
HO1	Housing Development
HO2	Land on west side of Old Haine Road, Ramsgate
HO3	Land fronting Nash Road and Manston Road
HO4	Land south of Brooke Avenue Garlinge
HO5	Land at Haine Road and Spratling Street, Ramsgate
HO6	Land south of Canterbury Road East, Ramsgate

Policy Number	Policy Name
HO7	Land at Melbourne Avenue, Ramsgate
HO8	Cliftonville West and Margate central
HO9	Housing in Rural Settlements
HO10	Land at Tothill Street, Minster
HO11	Land at Manor Road, St Nicholas at Wade
HO12	Land at Walter's Hall Farm, Monkton
HO13	Land south side of A253, Cliffsend
HO14	Land north of Cottington Rd, Cliffsend
HO15	Land south side of Cottington Rd, Cliffsend
HO16	Rural Housing Need and Exception Sites
HO17	New dwellings for Rural Workers
HO18	Care and Supported Housing
HO19	Houses in Multiple Occupation
HO20	Accommodation for Gypsy and Travelling Communities
HO21	Residential use of empty property
HO22	Retention of existing housing stock
HO23	Ancillary accommodation for a family member
HO24	Fostering Homes & Childcare Facilities
Green Infrastructure	
GI01	Protection of Nationally Designated Sites (SSSI) and Marine Conservation Zones (MCZ)
GI02	Locally Designated Wildlife Sites
GI03	Regionally Important Geological Sites (RIGS)
GI04	Amenity Green Space and Equipped Play Areas
GI05	Protection of Playing Fields and Outdoor Sports Facilities
GI06	Landscaping and Green Infrastructure
GI07	Jackey Bakers
Quality Development	
QD01	Sustainable Design
QD02	General design principles
QD03	Living Conditions
QD04	Technical Standards
QD05	Accessible and Adaptable Accommodation
QD06	Advertisements
QD07	Telecommunications
Heritage	
HE01	Archaeology
HE02	Development in Conservation Areas
HE03	Heritage Assets
HE04	Historic Parks and Gardens
HE05	Works to a heritage asset to address climate change

Policy Number	Policy Name
Climate Change	
CC01	Fluvial and Tidal Flooding
CC02	Surface Water Management
CC03	Coastal Development
CC04	Renewable energy
CC05	District Heating
CC06	Solar Parks
CC07	Richborough
Safe and Healthy Environment	
SE01	Potentially Polluting Development
SE02	Landfill Sites and Unstable Land
SE03	Contaminated Land
SE04	Groundwater Protection
SE05	Air Quality
SE06	Noise Pollution
SE07	Noise Action Plan Important Areas
SE08	Light Pollution
Communities	
CM01	Provision of New Community Facilities
CM02	Protection of Existing Community Facilities
CM03	Expansion of Margate Cemetery
Transport	
TP01	Transport Assessments and Travel Plans
TP02	Walking
TP03	Cycling
TP04	Public Transport
TP05	Coach Parking
TP06	Car Parking
TP07	Town Centre Public Car Parks
TP08	Freight and service delivery
TP09	Car parking provision at Westwood
TP10	Traffic Management

Appendix B Housing Allocations and Permissions

Please note that the allocations table includes those sites with planning permissions for completeness. These are also listed in the permissions table however, these sites are only included in the planning permissions calculations therefore there is no double counting.

Site Address	Total units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026/ 27	2027/ 28	2028 /29	2029 /30	2030/ 31	2031/ 32
STRATEGIC SITES														
Westgate Policy SP17	2000	0	25	75	100	150	200	250	250	250	250	250	200	
Birchington Policy SP16	1600	0	0	50	100	150	150	200	200	200	150	150	150	100
Westwood Policy SP18	1450	0	0	50	150	150	150	150	150	150	150	150	100	100
Land At Manston Court Road / Haine Road Westwood Village SP20	1400	0	50	110	120	130	140	140	140	120	150	150	150	
Manston Green 14/0050 SP15	785	0	50	100	100	100	100	100	100	100	35	0	0	
Land At Manston Road & Shottendane Road SP21	550	0	30	90	90	90	90	90	70	0	0	0	0	
Euro Kent Land At New Haine Road 11/0910	496	0	0	50	50	50	50	70	70	70	70	16	0	
Euro Kent Land At New Haine Road 17/1485	54	0	0	10	20	24	0	0	0	0	0	0	0	

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Site Address	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026/ 27	2027/ 28	2028 /29	2029 /30	2030/ 31	2031/ 32
Land Fronting Nash And Haine Roads SP19 Phase 5 15/0250	0	0	50	50	75	75	75	75	69	0	0	0	
Land Fronting Nash And Haine Roads SP19 Phase 4 14/0320	0	50	50	50	54	0	0	0	0	0	0	0	
Land Fronting Nash And Haine Roads SP19 Phase 3C 17/0726	0	20	30	30	17	0	0	0	0	0	0	0	
NON STRATEGIC SITES OUTSIDE URBAN AREA													
Land Off Nash/Manston Rds, Margate HO3	0	20	70	70	70	20	0	0	0	0	0	0	
Westwood Lodge, Poorhole Lane Broadstairs 15/0788	0	0	20	50	50	31	0	0	0	0	0	0	
Land At Haine Rd & Sprating St, Ramsgate HO5 16/1374	0	5	15	30	30	20	0	0	0	0	0	0	
Land West Of Old Haine Road, Ramsgate HO2	0	0	50	50	0	0	0	0	0	0	0	0	
Land Adjacent To Former Manston Allotments Manston Road Ramsgate	0	20	30	30	0	0	0	0	0	0	0	0	
Land South East Of Brooke Avenue, Westbrook HO4 16/0376 18/1416	20	23	0	0	0	0	0	0	0	0	0	0	

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Site Address	Total units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026/ 27	2027/ 28	2028 /29	2029 /30	2030/ 31	2031/ 32
South Of Canterbury Rd, Ramsgate HO6 16/1416	14	14	0	0	0	0	0	0	0	0	0	0	0	
MIXED USE SITES														
Cottage Car Park, New Street, Margate	32	0	0	0	0	0	0	0	15	17	0	0	0	
Margate Town Centre, (South Of New Street, Margate)	27	0	0	0	0	0	0	0	5	10	12	0	0	
Queen Arms Yard, Margate	24	0	0	0	0	24	0	0	0	0	0	0	0	
NON STRATEGIC URBAN AREA SITES														
Manston Road Industrial Estate South Site Flambeau Europlast Ltd 15/0187	120	0	0	30	60	30	0	0	0	0	0	0	0	
Gas Works Boundary Road, Ramsgate	96	0	0	30	50	16	0	0	0	0	0	0	0	
Thanet Reach Southern Part Millenium Way	80	0	0	20	40	20	0	0	0	0	0	0	0	
Lanthorne Court Broadstairs	56	0	0	20	36	0	0	0	0	0	0	0	0	
Former Newington Nursery & Infants Nursery & Infants Melbourne Avenue HO7	49	0	0	20	29	0	0	0	0	0	0	0	0	

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Manston Road Industrial Estate North Site Adjacent To The Beacon 16/1715	0	0	10	20	18	0	0	0	0	0	0	0	0
Land Of Northwood Road, Ramsgate	0	0	20	25	0	0	0	0	0	0	0	0	0
Land At Victoria Road & Dane Rd, Margate	0	0	10	15	10	0	0	0	0	0	0	0	0
Haine Farm, Haine Road, Ramsgate	0	0	15	20	0	0	0	0	0	0	0	0	0
Part Of Pysons Road	0	0	10	16	0	0	0	0	0	0	0	0	0
Highfield Road, Ramsgate	0	0	10	15	0	0	0	0	0	0	0	0	0
Former Club Union Convalescent Home, North Of Reading Street Broadstairs	0	0	10	14	0	0	0	0	0	0	0	0	0
Suffolk Avenue, Westgate	0	0	11	12	0	0	0	0	0	0	0	0	0
R/O Cecilia Road, Ramsgate	0	0	0	0	0	0	0	10	13	0	0	0	0
Gas Holder Station, Addington Street Margate	0	0	11	11	0	0	0	0	0	0	0	0	0
Adjacent To 21 Royal Road & 9 Townley Street	0	0	0	0	0	0	0	9	9	0	0	0	0
End Of Seafield Road	0	0	16	0	0	0	0	0	0	0	0	0	0

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Land At Wilderness Hill And Dane Road	14	0	0	0	14	0	0	0	0	0	0	0	0	0
Ww Martin, Dane Park Road, Ramsgate	14	0	0	7	7	0	0	0	0	0	0	0	0	0
Foreland School, Lanthorne Rd, Lanthorne Rd,	14	0	0	7	7	0	0	0	0	0	0	0	0	0
Dane Valley Arms, Dane Valley Road, Margate	13	0	0	7	6	0	0	0	0	0	0	0	0	0
Land At Waterside Drive, Westgate	12	0	0	0	12	0	0	0	0	0	0	0	0	0
Adjacent To 9 Minnis Road, Birchington	11	0	0	0	0	0	0	0	5	6	0	0	0	0
10 Cliff Street, Ramsgate	11	0	0	0	11	0	0	0	0	0	0	0	0	0
Complete Car Sales, Willsons Road, Ramsgate	10	0	0	0	10	0	0	0	0	0	0	0	0	0
Builders Yard, The Avenue, Margate	10	0	0	0	10	0	0	0	0	0	0	0	0	0
Margate Delivery Office, 12-18 Addington Street	10	0	0	0	0	0	0	0	10	0	0	0	0	0
Ind Units, Marlborough Rd, Margate	10	0	0	5	5	0	0	0	0	0	0	0	0	0
Gap House School, 1 Southcliff Parade, Broadstairs	10	0	0	5	5	0	0	0	0	0	0	0	0	0

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Furniture Mart, Booth Place, Grotto Hill	9	0	0	0	9	0	0	0	0	0	0	0	0	
Magnet And Southern, Newington Road, Ramsgate	8	0	0	0	8	0	0	0	0	0	0	0	0	
Shottendane Farm, Margate	8	0	0	8	0	0	0	0	0	0	0	0	0	
Adjacent To 8 Chapel Place, Ramsgate	6	0	0	0	0	0	0	0	6	0	0	0	0	
Ro 7_10 Marine Gdns - 5 Dwellings	6	0	0	0	0	6	0	0	0	0	0	0	0	
38, 38a And 42 St Peters Road, Broadstairs	5	0	0	0	5	0	0	0	0	0	0	0	0	
Units 1-4 Monkton Place Ramsgate	5	0	0	0	5	0	0	0	0	0	0	0	0	
1 Thanet Road, Margate	5	0	0	0	5	0	0	0	0	0	0	0	0	
79-85 High Street, Ramsgate See 17/1508	0	0	0	0	0	0	0	0	0	0	0	0	0	
Laleham School, Northdown Park Road, Margate See 14/0518	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fort Hill, Arcadian See 15/0532 16/1240	0	0	0	0	0	0	0	0	0	0	0	0	0	

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RURAL SITES													
Tothill Street Minster HO10	0	30	60	60	50	50	0	0	0	0	0	0	0
Site "A" South Side Of A253, Cliffsend See 17/0152 HO13	0	20	20	22	0	0	0	0	0	0	0	0	0
Jentex Oil Depot Canterbury Road West Ramsgate	0	0	0	0	20	20	16	0	0	0	0	0	0
Land North Of Cottingham Rd (West Of Beech Grove) 17/0151 HO14	0	15	15	11	0	0	0	0	0	0	0	0	0
Land South Side Of Foxborough Lane	0	0	10	25	0	0	0	0	0	0	0	0	0
Land At The Length, St. Nicholas See 17/1342	0	0	5	10	10	0	0	0	0	0	0	0	0
South Side Cottingham Rd, Cliffsend. HO15	0	10	13	0	0	0	0	0	0	0	0	0	0
Land At Walter's Hall Farm, Monkton HO12	0	10	10	0	0	0	0	0	0	0	0	0	0
Builders Yard South Of 116-124 Monkton Street, Monkton	0	0	10	10	0	0	0	0	0	0	0	0	0
Land At Manor Rd, St Nicholas See 15/0770 (Residual Figure) HO11	5	5	0	0	0	0	0	0	0	0	0	0	0
CLIFTONVILLE SITES													

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Rear Of 59-65 Harold Rd	9	0	0	0	0	0	0	0	9	0	0	0	0	
Adj To 60 Harold Rd And Rear Of 40-56 Harold Rd	14	0	0	0	0	0	0	0	7	7	0	0	0	
Adj To 14 Harold Rd	10	0	10	0	0	0	0	0	0	0	0	0	0	
St George's Hotel See 05/0018	0	0	0	0	0	0	0	0	0	0	0	0	0	

Extant Planning Permissions (under construction and not started) as at 31st March 2019

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140050	Land East And West Of, Haine Road, Manston Green	785		50	100	100	100	100	100	100	100	35	0	0
110910	Land At New Haine Road (Eurokent)	496			50	50	50	50	70	70	70	70	16	
171485	Eurokent Land At New Haine Road RAMSGATE	54			10	20	24							
150250	Land North Of Haine Road Broadstairs And West Of Nash Road Margate Phase 5	469			50	50	75	75	75	75	69			
140320	Land North Of Haine Road Broadstairs And West Of Nash Road Margate Phase 4	204		50	50	50	54							
170726	Land North Of Haine Road Broadstairs And West Of Nash Road Margate Phase 3C	97		20	30	30	17							
151303	St Lawrence College College Road Ramsgate	166		10	20	30	30	30	30	16				
150788	Westwood Lodge Poorhole Lane Broadstairs	151			20	50	50	31						
150187	Flambeau Europlast Ltd, Manston Road, Ramsgate, Ct12 6hw	120			30	60	30							
/03/1200	Pleaurama Amusement Park Marina Esplanade Ramsgate	107					20	30	30	27				
161374	St Stephens, Haine Road, Ramsgate,	100		5	15	30	30	20						

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/04/0700	Royal Sea Bathing Hospital Canterbury Road Margate	91		20	30	30	11							
/05/0018	St Georges Hotel Eastern Esplanade Margate	87					20	20	20	27				
100573	Former Police Station Cavendish Street Ramsgate	82					10	10	20	20	22			
140518	Laleham School Northdown Park Road Margate	70	10	20	20	20								
120210	Former Allotment Gardens Manston Road	64	23	20	21									
170152	Land East Of 40 Canterbury Road West Ramsgate	62		20	20	22								
161715	Land South Of Manston Road Adjacent To The Beacon (Former Car Storage Site) Manston Road Ramsgate	48			10	20	18							
181416	Land Rear Of 2 To 28 Kingston Avenue Margate	43	20	23										
170151	Land North Of Cottingham Road And East Of Lavender Lane Ramsgate	41		15	15	11								
161522	Red House Farm Manston Court Road Margate	40		10	20	10								
151204	Land Adjacent And Rear Of Ashbre St Nicholas At Wade	39	1	10	10	10	8							
160654	66 Monkton Road Minster Ramsgate	35		10	10	15								
150537	Cliffsend Farm Cottages Cliffs End Road Ramsgate	31	3	10	10	8								

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171159	Westcliff House 37a Sea Road Westgate	31			10	10	11							
171447	Land Adjacent Little Orchard St Nicholas At Wade	30			10	10	10							
150956	Land Adjacent Holy Trinity School 99 Dumpton Park Drive Broadstairs	28	13	15										
171342	Land North East Of The Length ST Nicholas At Wade	25			5	10	10							
161473	Land South Of Briary Close, Margate	24			5	9	10							
160417	Land Between , Adjoining Manston Green Industries Ramsgate	23			5	8	10							
170150	Land Adjacent To Oakland Court Cliffsend	23		10	13									
170860	Farleys 46 - S4 Chatham Street Ramsgate	23		10	4	5	4							
171763	Manston Court Bungalows 5 Manston Road Manston Ramsgate	22			5	10	7							
160003	67 - 69 Northdown Road Margate	21		21										
160952	131- 137 King Street Ramsgate	18			14	4								
170842	64 Edgar Road Margate	15	15											
160424	Sheridans Cliff Road Broadstairs	14	14											

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161416	Land Adjoining 1 Chilton Lane And Canterbury Road East Ramsgate	14	14											
170321	Court Stairs Country Club Pegwell Road Ramsgate	14	7	5	2									
171231	Fard Industries Limited 237 Ramsgate Road Margate	14	14											
171508	81 - 85 High Street Ramsgate	14		7	7									
181446PN 06	Apollo House Chapel Place Ramsgate	14	14											
161752	Land At Haine Lodge Spratling Lane Ramsgate	13			4	4	5							
180459	Institute Of St Anselms Lonsdale Court Hotel 51 - 61 Norfolk Road Margate	13		11	2									
180790	24- 27 Marine Terrace Margate	13		6	7									
160934	43 Star Lane Margate	12			6	6								
160967	Land Adjacent 15 Southall Close Minster	12		2	5	5								
171125	7 - 9 Addington Road Margate	12	6	6										
171326	8-12 High Street Broadstairs	12		6	6									

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171523	Land West Of Hundreds Farm House Canterbury Road Westgate	12			12									
130694	Bown Of London 1 Archway Road	11	11											
160647	Shottendane Nursing Home, Shottendane Road, Margate	11			11									
161289	5-6 Mansion Street, And 5-7 Fort Road, Margate,	11			5	6								
171216	Primark 46a - 48 High Street Margate	11			5	6								
180642	8 Beach Avenue Birchington	11	5	6										
150770	Land Rear Of Manor Hall And Heritage Park Manor Road St Nicholas At Wade	10	5	5										
160974	98 King Street Ramsgate	10			10									
161160	Disused Railway Line College Road Margate	10	5	5										
161290	Thornton Bobby Ltd 240 - 242 Northdown Road Margate	10			7	3								
180430	Land Rear Of 163 To 173 Pegwell Road Ramsgate	10	4	6										
180445	3-4 Chatham Place Ramsgate	10	10											
1803/0249	Land Of Manston Road Ramsgate	10	10											

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/03/0249	Manston Court Bungalows 5 Manston Road Manston Ramsgate	10	10											
140096	Garages At Kingston Close Ramsgate	9	9											
150142	Cambay Lodge 91 Kingsgate Avenue Broadstairs	9	9											
170286	49 - 50 Hawley Square Margate	9			9									
171691	White Lodge 44 - 46 Madeira Road Margate	9	4	4	1									
180265	17 - 21 Warwick Road Margate	9	9											
180555	39 - 43 Sea Road Westgate	9			3	6								
181480	17 Regency Court St Augustines Road Ramsgate	9			9									
181503	Land North West Of Former Seabathing Hospital Canterbury Road Ramsgate	9		3	3	3								
140976	2a Park Road Ramsgate	8	5		3									
150532	Land Adj To 12-14 Fort Road Margate	8		4	4									
161705	Garages Adjacent Pikes Lane, Sussex Street Ramsgate	8		8										
171755	6 No Foreland Road Broadstairs	8		2	2	2	2							

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180518	Adams Gas 2 Bath Road Margate	8			4	4								
180608	41 - 43 Victoria Road Margate	8		4	4									
181713PN 06	Orbit Housing Associationfof House 27 - 29 High Street Margate	8		8										
140404	Land Adj Clifftop & Redriff North Foreland Avenue	7			3	4								
170358	Springfield Nursing Home Hengist Road Westgate	7			3	4								
170792	3 Carlton Avenue Broadstairs	7	7											
171605	Land On The South Side Of Duke Street Margate	7			7									
180851	Redriff Convent North Foreland Avenue Broadstairs	7		7										
131023	Garage Block 34-36 St Peters Road Broadstairs	6			6									
140847	140 King Street Ramsgate	6		3	3									
150087	139-141 High Street Ramsgate	6				6								
160377	125 Southwood Road Ramsgate	6	6											
170314	Land East Side Of Summer Road St Nicholas At Wade	6			3	3								

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171319	Land At 57 59 61 63 And 67 Eaton Road Margate	6				6								
171673	45 - 49 Sea Road Westgate	6			3	3								
180227	14 Cecil Square Margate	6	6											
180238	20 - 24 Harbour Street Ramsgate	6			6									
100248	Cliff Cottage Herschell Road Birchington	5				5								
120270	Land At 34 To 36 Bellevue Road And 25-27 Bellevue Avenue Ramsgate	5		2	3									
141066	Lord Nelson 11 Nelson Place Broadstairs	5				5								
150961	8 Westleigh Road Westgate On Sea	5	5											
160759	Land Rear Of Orchard House 17 Church Street Broadstairs	5			2	3								
161109	Land On The East Side Of Leicester Avenue	5		5										
170941	18 Western Esplanade Broadstairs	5		5										
171020	7 First Avenue And 2 Eastern Esplanade Margate	5				5								
171174	Seafields, Cliff Rd, Birchington	5		2	3									

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180103	53 Albion Road Broadstairs	5			2	3								
180757	Land West Of 33a Alexandra Road, Broadstairs	5			2	3								
181203	Land Adjacent Brooksend Lodge Canterbury Road Birchington	5		2	3									
/06/0177	10-14 Vicarage Crescent Margate	5				5								
140875	31 Eastern Esplanade Margate	4	4											
151293	Land Rear Of 33 Summerfield Road Margate	4	2	2										
151297	Ivor Thomas Amusements Limited 100 Grange Road Ramsgate	4	4											
160724	15a Tothill Street Minster Ramsgate	4		2	2									
161067	22-23 Marine Terrace Margate	4		4										
170364	Margate Royal British Legion Club Legion House 18 St Johns Road Margate	4		4										
170415	Winchmore Guest House 8 Grosvenor Place Margate	4	4											
171008	12 Weigall Place Ramsgate	4			2	2								

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171305	130 Gladstone Road Broadstairs	4		2	2									
180276	15 Warwick Road Margate	4	4											
180833	White Stag 70 Monkton Street Monkton	4		4										
180877	105 Grange Road Ramsgate	4	2	2										
181098	135 Monkton Road Minster	4			4									
181233	The Old Forge High Street Garlinge Margate	4		2	2									
110540	Land Rear Of 19 To 23 Harold Road And 9 To 15 Albion Road Margate	3			3									
120158	16 The Vale Broadstairs	3		1	2									
131013	30 Dalby Square Margate	3	3											
140087	Garages Adj 82-90 Chichester Road	3	3											
140103	Garages Rear Of 5 And 7 St Mary's Road Minster Ramsgate	3				3								
140616	36-42 Marine Terrace Margate	3	3											
160383	79 High Street Ramsgate	3			3									

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160993	Land Rear Of 6 To 8 Parkwood Close Broadstairs	3	1	1	1									
161418	Yard Rear Of 8 Arnold Road Margate	3			3									
170127	Bown Of London 1 Archway Road Ramsgate	3	3											
170195	Land Adjacent 12 To 14 Fort Road Margate	3		3										
170212	5 Beach Houses Royal Crescent Margate	3	3											
170447	The Yard St Annes Gardens Margate	3			3									
170572	Green Lawns 16 Sowell Street Broadstairs	3		1	2									
171112	17 Upper Dumpton Park Road Ramsgate	3			3									
171515	2 - 4 Arthur Road Margate	3	3											
171610	7 Westbrook Road Margate	3		3										
180015	38 St Mildreds Rd Westgate-On-Sea	3			3									
180247	64 High Street Broadstairs	3		3										
180587	15 - 16 Hawley Square Margate	3		3										

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180870	Essured Cars Uk Limited 30 Albion Road Broadstairs	3	1	2										
181383	2-4 Cowley Rise Margate	3		3										
181545	Newington Post Office 85 Newington Road Ramsgate	3	3											
100041	10-14 Vicarage Crescent Margate	2				2								
110602	31 High Street Minster Ramsgate	2	1	1										
120005	31 High Street Minster Ramsgate	2		2										
120765	Land Adjacent 30 And 32 High Street And 9 Cavendish Street Ramsgate	2		2										
130132	The Acorn Inn 6 Park Lane Birchington	2					2							
140242	Land Rear Of 1 To 7 Coronation Close Broadstairs	2				2								
150098	10 Effingham Street Ramsgate	2				2								
150202	1 Godwin Road Margate	2		2										
150310	Garages To Rear Of 55 Newington Road Ramsgate	2	2											
160545	101- 103 High Street Margate	2		2										

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160800	Hoo Farm 147 Monkton Road Minster	2			2									
161047	Land At Junction Of Sowell Street Broadstairs	2		2										
161151	7 Paragon Ramsgate	2	2											
161387	2-6 Station Approach Birchington	2	2											
161551	28 Ethelbert Crescent Margate	2			2									
161716	Garage Block Between 108 And 110 Clements Road Ramsgate	2	2											
170295	Plots 5, 6 And 7 Youngs Nursery Arundel Road Ramsgate	2	1	1										
170305	Land Rear Of Ashbre Manor Road St Nicholas At Wade Birchington	2			1	1								
170400	46 St Mildreds Road Westgate On Sea	2			2									
170746	Land Adjacent 35 Victoria Parade Ramsgate	2			2									
170892	85 Dane Road Margate	2		2										
170931	Post Office 48 High Street Ramsgate	2			2									
171081	62 Princess Margaret Avenue Ramsgate	2		2										

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171127	14 The Parade Margate	2		2										
171291	Former Builders Yard Rear Of 28/30 High Street Broadstairs	2		2										
171713	4 Effingham Street Ramsgate	2		2										
171795	Land West Of Hazeldene Ramsgate Road Sarre Birchington	2			2									
180057	Euro Parts 188 Northdown Road Margate	2		2										
180544	Hoo Farm Monkton Ramsgate	2		2										
180676	171 Grange Road Ramsgate	2			2									
180812	71 Eaton Road Margate	2		2										
181025	115a Canterbury Road Margate	2		2										
181179	2 Albert Terrace Margate	2		2										
181275	Land To The Side Of 51 Holly Lane Margate	2			2									
181295	50 High Street Ramsgate	2			2									
181301	52 Gordon Road Westwood Margate	2		2										

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
181324	E J Lovelt And Sons 20 Princes Crescent Margate	2		2										
181553	104 Northdown Road Margate	2		2										
181727	Crown And Sceptre The Street Acol Birchington	2	2											
190005	First Steps Nursery 25 - 29 Thanet Road Margate	2			2									
110615	19 High Street Margate	1		1										
121003	Land Rear Of 122 Grosvenor Place Margate	1		1										
130787	Land Adjacent To 39 High Street Minster Ramsgate	1			1									
140178	Land Between 26 And 30 Princes Gardens Margate	1	1											
140241	Land Adjacent 4 Oakdene Road Ramsgate	1			1									
140698	4 Bellevue Road Ramsgate	1		1										
140837	1 Knights Avenue Broadstairs	1	1											
140880	Rear Of 37 Palm Bay Avenue Margate	1	1											
140934	Land Rear Of 31 Royal Road Ramsgate	1			1									

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
150348	42 Chatham Street Ramsgate	1		1										
150431	Land Adjacent To 34 St Mildred's Avenue, Ramsgate	1		1										
150809	9 Western Esplanade Broadstairs	1	1											
160066	144 Grange Road Ramsgate	1			1									
160140	47 Albert Road Ramsgate	1	1											
160171	Land Rear Of 1a Minster Road Ramsgate	1			1									
160194	6 Albion Place Ramsgate	1	1											
160284	Kingsgate Newsagents Parwood George Hill Road Broadstairs	1		1										
160300	Land Adjacent 2 Shaftsbury Street Ramsgate	1			1									
160315	171 Westwood Road Broadstairs	1		1										
160465	39a High Street Ramsgate	1		1										
160512	Land Rear Of 25 To 27 Buckingham Road Margate	1	1											
160517	Land Rear Of 18 Saxon Road Westgate	1			1									

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
160536	7 Grange Road Broadstairs	1		1										
160568	58 Park Road Ramsgate	1	1											
160611	36 Grange Road Ramsgate	1			1									
160638	Land Adjacent 2 Linden Avenue Broadstairs	1		1										
160718	Cliff Cottage Coastguard Cottages Pegwell Road Ramsgate	1			1									
160746	5 Ramsgate Road Broadstairs	1		1										
160837	9 Augusta Road Ramsgate	1	1											
161020	1 Dellside Wayborough Hill Minster	1		1										
161091	1 Booth Place Margate	1		1										
161102	Land Rear Of 13 And 15 Albion Street Broadstairs	1			1									
161105	Land Rear Of 24 Devon Gardens	1		1										
161209	31 Grosvenor Place Margate	1		1										
161232	Mizuri Norman Road Broadstairs	1	1											

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
161241	41 Crescent Road Ramsgate	1		1										
161299	10 Sparrow Castle, Margate	1	1											
161322	15 - 16 The Broadway Broadstairs	1		1										
161354	40 Canterbury Road West Ramsgate	1		1										
161361	7 Arthur Road Margate	1		1										
161403	59 Camden Road Broadstairs	1			1									
161407	Post Office 22-23 Cecil Square Margate	1		1										
161471	17 Parsonage Fields Monkton	1		1										
161517	Barn Owls Preston Road Ramsgate	1			1									
161628	Land Adjacent 84 Tivoli Road Margate	1			1									
161641	Land Adjacent 34 Brooke Avenue Margate	1		1										
161648	11 Northdown Road Broadstairs	1	1											
161650	Land Adjacent To 11 Northdown Road Broadstairs	1		1										

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
161681	Building Adjacent To Sheriffs Court Farm Sheriffs Court Lane Minster	1		1										
170253	42 Crescent Road Birchington	1		1										
170257	Land Adjacent Wild Thyme, Bramwell Court Minster Ramsgate	1		1										
170303	9 Augusta Road Ramsgate	1	1											
170617	6 Shakespeare Passage Margate	1	1											
170621	5 Clifton Gardens Margate	1		1										
170715	16/16a Cuthbert Road Westgate On Sea	1			1									
170903	124 High Street Ramsgate	1			1									
170916	Garages Between 22 And 26 Nash Court Gardens Margate	1	1											
170991	160a Northdown Road Margate	1		1										
171005	Land Adjacent 4 Victoria Road Margate	1		1										
171026	Public Conveniences Westbrook Promenade Margate	1			1									
171047	The Forge Bedlam Court Lane Minster Ramsgate	1			1									

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
171054	Land Adjacent 7 Southwood Gardens Ramsgate	1			1									
171065	Land Rear Of 154 Grange Road Ramsgate	1	1											
171079	83 Sea Road Westgate On Sea	1			1									
171090	27 Elm Grove Westgate On Sea	1			1									
171257	61 Norfolk Road Margate	1		1										
171271	Emmanuel Church Victoria Road Margate	1		1										
171313	1 Ethel Road Broadstairs	1		1										
171359	Homebasics 25 - 27 Queen Street Ramsgate	1			1									
171366	156 King Street Ramsgate	1		1										
171554	21 The Retreat Ramsgate	1		1										
171599	2a Park Road Ramsgate	1	1											
171664	Stone Cottage Haine Road Ramsgate	1			1									
171670	Land Adjacent 89 St Johns Avenue Ramsgate	1		1										

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
171699	146 Northdown Road Margate	1			1									
171703	Lagny Plumstone Road Acol Birchington	1	1											
171772	145 Canterbury Road Margate	1	1											
171779	3 Royal Esplanade Margate	1	1											
171799	Thanet Press Margate	1		1										
180001	Land Side Of Bayview Windsor Rd Ramsgate	1		1										
180011	King Edward Vii Dane Valley Road Margate	1		1										
180013	Land East Of The Granary Upper Hale Court Canterbury Road St Nicholas At Wade	1			1									
180061	Land Adjacent To Albion Road Neame Road Birchington	1		1										
180082	Land Adj 49 Manston Rd Ramsgate	1	1											
180150	38 Rockstone Way Ramsgate	1			1									
180167	Building 1 Bartletts Farm Cottage Potten Street ST Nicholas At Wade	1	1											
180212	17 Victoria Avenue Westgate	1			1									

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
180303	Land Adjacent To Sub Station Effingham Stret Ramsgate	1			1									
180317	Land Rear Of 10 Freemans Road Ramsgate	1	1											
180335	Land On The South West Side Of Northdown Road Broadstairs	1		1										
180338	Land Adjacent 40 Canterbury Road West Ramsgate	1		1										
180341	Land Adjacent To 59 Princess Margaret Avenue Ramsgate	1			1									
180347	12 St Johns Crescent Ramsgate	1	1											
180388	Garages Rear Of 28 Augusta Road Ramsgate	1		1										
180449	Land Adjacent 5 Westover Rd Broadstairs	1		1										
180490	45 Ellington Road Ramsgate	1	1											
180499	(Plot 13) Land Adjacent To Clifftop North Foreland Avenue Broadstairs	1		1										
180526	Land Adjacent To 47 Whitehall Road Ramsgate	1			1									
180548	3 Gallwey Avenue Brichington	1		1										
180570	18 St Mildreds Road Ramsgate	1	1											

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
180574	Morgans 46 High Street Margate	1			1									
180576	Land To The Side Of Mill Haven Mill Row Birchington	1			1									
180584	182 High Street Margate	1	1											
180605	58 Tothill Street Minster	1			1									
180610	Wellington Cottage Down Barton Road St Nicholas At Wade	1		1										
180628	21 Stone Road Broadstairs	1	1											
180672	Stable Block Adjacent To Dellside Wayborough Hill Minster	1			1									
180694	Garage Block Dundonald Road Ramsgate	1	1											
180783	Land Rear Of Walters Hall Oast Monkton Street Monkton	1	1											
180796	12 - 14 Garfield Road Margate	1		1										
180806	Plot 9 Land Adjacent To Clifftop North Foreland Avenue Broadstairs	1		1										
180829	Jims Garage Services 10 Clifton Place Margate	1	1											
180834	Cliftonville Court Edgar Road Margate	1	1											

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
180837	85 Gladstone Road Broadstairs	1	1											
180850	38 Belgrave Road Margate	1		1										
180856	Ivy Cottage The Pathway Broadstairs	1		1										
180884	Land Rear Of 7 Kingsgate Avenue Broadstairs	1		1										
180890	Land Adjacent 1 Dellside Wayborough Hill Minster	1			1									
180938	Land Adjacent 51 Carlton Avenue Broadstairs	1	1											
180941	32 Sea View Road Broadstairs	1		1										
181074	Land Rear Of 35 Nelson Place Broadstairs	1		1										
181099	Land Adjacent To 11 Manston Road Ramsgate	1		1										
181145	1 - 3 Alma Road Ramsgate	1		1										
181254	Plot 12 Land Adjacent To Clifftop And Surrounding Redriff North Foreland Avenue Broadstairs	1		1										
181280	Plot 2 Land Adjacent To Clifftop And Surrounding Redriff North Foreland Avenue Broadstairs	1		1										
181331	Kreative Kutz 43a High Street St Peters Broadstairs	1		1										

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
181365	20 Queens Avenue Birchington	1		1										
181373	Public Conveniences Viking Bay Harbour Street Broadstairs	1	1											
181417	Plot 11 Land Adjacent To Clifftop And Surrounding Redriff North Foreland Avenue Broadstairs	1		1										
181421	Land Adjacent 2 Park Place Margate	1			1									
181468	Land Adjacent 25 Upper Dane Road Margate	1		1										
181554	22 St Mildreds Road Ramsgate	1			1									
181631	68 King Street Margate	1		1										
181647	Land Rear Of 2 Eaton Road Margate	1		1										
181750	14 Welsdene Road Margate	1			1									
/05/0158	The Forge The Length St Nicholas At Wade	1			1									
181127PN 11	8 College Road Margate	1		1										
190040PN 06	44 - 46 Queen Street Ramsgate	1			1									
150185	62 High Street Minster Ramsgate	0												

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
150699	145 Canterbury Road Margate	0		0										
151335	Thalasa Cliff Road Birchington	0	0											
160340	(Land Adj To) 62 Princess Margaret Avenue Ramsgate	0												
161240	Land Adjacent 12 To 14 Fort Road Margate	0												
161295	102 Park Avenue Broadstairs	0		0										
170223	4 St James Avenue Ramsgate	0		0										
180098	Cedarholme Epple Bay Avenue Birchington	0	0											
180176	Seafields Cliff Road Birchington	0			0									
180293	Ashmount Lower Northdown Avenue Margate	0		0										
180360	10 Domneva Road Westgate On Sea	0	0											
181089	137 Monkton Road Minster	0			0									
181604	7a High Street Minster	0			0									
181675	Yelton Second Avenue Broadstairs	0												

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Application Number	Site Address	Total extant units	2019 /20	2020 /21	2021 /22	2022 /23	2023 /24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31
161638	18 Artillery Road Ramsgate	-1	-1											
170270	32 Ramsgate Road Margate	-1	-1											
170339	43 Alpha Road Birchington	-1		-1										
170403	46 Hereson Road Ramsgate	-1		-1										
170433	60 St Peters Road Margate	-1		-1										
170973	3 Augusta Road Ramsgate	-1	-1											
180005	St Peters Presbytery 117 Canterbury Road Westgate On Sea	-1			-1									
180687	2 Emptage Court Dane Hill Margate	-1	-1											
180961	11 Canterbury Road Margate	-1		-1										
181215	91 Norfolk Road Margate	-1	-1											

Appendix C - Parking Standards

Guidance on car parking provision (indicative maximum provision)

Retail	Indicative maximum spaces
Food retail up to 1,000m ²	1 per 18m ² (includes staff parking)
Food retail over 1,000m ²	1 per 14 m ² (includes staff parking)
Non food retail	1 per 25m ² (includes staff parking)
Financial and Professional services	Indicative maximum spaces
	1 per 20m ² (includes staff parking)
Restaurants & cafes	Indicative maximum spaces
Restaurants	1 per 6m ² plus 1 per two staff
Transport cafes	1 per 15m ² plus 1 per two staff
Drinking establishments	Indicative maximum spaces
	1 per 10m ² plus 1 space per two staff
Hot food takeaways	Indicative maximum spaces
	1 per 8m ² plus 1 space per two staff
Business	Indicative maximum spaces
Offices up to 500m ²	1 per 20m ²
Offices 501m ² to 2,500m ²	1 per 25m ²
Offices over 2,500m ²	1 per 30m ²
High tech/Research/Industrial	1 per 35m ²
General industrial	Indicative maximum spaces
Up to 200m ²	3 spaces
Over 200m ²	1 per 50m ²
Storage & distribution	Indicative maximum spaces
Storage & Distribution	1 per 110m ²
Wholesale Trade Distribution	1 per 35m ²
Hotels	Indicative maximum spaces
Hotels, motels, boarding & guest houses	1 per bedroom plus 1 per two staff
Other	1 per unit/pitch plus 1 per three units of five person capacity or greater plus 1 per two staff
Residential Institutions	Indicative maximum spaces
Nursing homes/residential care homes	1 per six beds or residents plus 1 per resident staff plus 1 per two other staff
Hospitals & Hospices	2 per three beds plus 1 per two staff
Residential schools, colleges or training	1 per fifteen residents plus 1 per resident staff plus 1 per two other

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centres	staff
Non residential institutions	Indicative maximum spaces
Primary & secondary schools	1 per staff plus 10%
Further & higher education	1 per seven students plus 1 per staff
Libraries/art galleries/museums/public exhibition hall	1 per 60m ²
Places of worship	1 per five seats
Medical centres/clinics/surgeries (including veterinary surgeries)	4 per consulting room/treatment room plus 1 per two staff
nurseries/crèches & playschools	1 per 4 children plus 1 space per two staff
Day care centres	1 per four attendees plus 1 per two staff
Law courts	6 per courtroom plus 1 per two staff
Assembly & Leisure	Indicative maximum spaces
Cinemas, concert halls, conference centres, bingo halls	1 per five seats
Social clubs, discotheques, dance halls, ballrooms	1 per 22m ²
Multi-activity sports & leisure centres, swimming pools, ice rinks, health & fitness centres, gymnasias	1 per 22m ² plus 1 per fifteen seats where appropriate
Marinas & other boating facilities	1 per mooring or berth
Stadia	1 per 15 seats
Bowling greens/centres/alleys, snooker halls, tennis/squash, badminton clubs	3 per lane/court table plus 1 per fifteen spectator seats where applicable
Outdoor sports facilities, playing fields	1 per two participants plus 1 per fifteen spectators
Golf courses & driving ranges	3 per hole/bay
Equestrian centres, riding stables	1 per stable
Historic house & gardens, country parks	1 per 400 visitors

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Theme parks/leisure parks	1 per two hundred visitors per annum
Other	1 per 22m ²
Other	Indicative maximum spaces
Car sales	1 per 50m ² plus 1 per two staff
Petrol filling stations	1 per 20m ²
Night clubs/casinos	1 per 22m ²
Theatres	1 per 5 seats
Retail warehouse clubs	1 per 25m ²
Amusement arcades	1 per 22m ²
Residential hostels	1 per six residents plus 1 per resident staff and 1 per two other staff
Vehicle servicing and repair	4 per service bay plus 1 per 2 staff
Taxi, vehicle hire, coach & bus depots	1 per four registered vehicles plus 1 per two staff
Open commercial use (e.g. scrap yards, recycling centres)	To be assessed individually plus 1 space per two staff

Guidance on cycle parking provision

Retail	Provision (cycle parking spaces)
Up to 1,000m ²	1 per 200m ² customer & 1 per 200m ² employees
Up to 5000m ²	1 per 400m ² customer & 1 per 400m ² employees
Over 5000m ²	1 per 2500m ² customer & 1 per 2500m ² employees
Financial and Professional services	Provision (cycle parking spaces)
	1 per 1000m ² customer & 1 per 200m ² employees
Restaurants & cafes	Provision (cycle parking spaces)
	1 per 10 seats customers & 1 per 20 seats employees
Drinking establishments	Provision (cycle parking spaces)
	1 per 10 seats customers & 1 per 20 seats employees
Hot food takeaways	Provision (cycle parking spaces)
	1 per 10 seats customers & 1 per 20 seats employees
Business	Provision (cycle parking spaces)
	1 per 200m ² employees & 1 per 1000m ² visitors
General industrial	Provision (cycle parking spaces)
	1 per 200m ² employees & 1 per 1000m ² visitors
Storage & distribution	Provision (cycle parking spaces)
	1 per 200m ² employees & 1 per 1000m ² visitors
Hotels	Provision (cycle parking spaces)
	1 per 10 bed spaces
Residential Institutions	Provision (cycle parking spaces)
Residential institutions & hospitals	1 per 10 bed spaces
Residential schools, colleges and training centres	1 per 5 students.

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Dwellings	Provision (cycle parking spaces) 1 per dwelling
Individual residential dwellings	1 per bedroom
Flats & maisonettes	1 per unit
Sheltered accommodation	1 space per 5 units
Non residential institutions	Provision (cycle parking spaces)
Primary schools	1 per 50 pupils
Secondary schools and further & higher education	1 per 5 pupils/students
Medical centres/surgeries	1 per two consulting/treatment rooms
Other (including libraries and places of worship)	1 per 50 seats or 100m ²
Assembly & Leisure	Provision (cycle parking spaces)
Leisure and entertainment venues	1 per 300 seats customers & 1 per 300 seats employees
Sports facilities	1 per 10 participants plus 10% plus 1 per 10 staff

Appendix D - Glossary

This Local Plan was produced under transitional arrangements and therefore includes definitions from the NPPF 2012.

Affordable housing: Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision.

Social rented housing is owned by local authorities and private registered providers (as defined in section 80 of the Housing and Regeneration Act 2008), for which guideline target rents are determined through the national rent regime. It may also be owned by other persons and provided under equivalent rental arrangements to the above, as agreed with the local authority or with the Homes and Communities Agency.

Affordable rented housing is let by local authorities or private registered providers of social housing to households who are eligible for social rented housing. Affordable Rent is subject to rent controls that require a rent of no more than 80% of the local market rent (including service charges, where applicable).

Intermediate housing is homes for sale and rent provided at a cost above social rent, but below market levels subject to the criteria in the Affordable Housing definition above. These can include shared equity (shared ownership and equity loans), other low cost homes for sale and intermediate rent, but not affordable rented housing.

Homes that do not meet the above definition of affordable housing, such as “low cost market” housing, may not be considered as affordable housing for planning purposes.

Air Quality Management Areas: Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.

Article 4 direction: A direction which withdraws automatic planning permission granted by the General Permitted Development Order.

Best and most versatile agricultural land: Land in grades 1, 2 and 3a of the Agricultural Land Classification.

Biodiversity Net Gain: is an approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected.

Biodiversity Opportunity Areas (BOA): BOAs are areas that were originally identified in the Kent Biodiversity Strategy 2015, as suitable areas for a combination of biodiversity enhancement, restoration and gain. They offer the best opportunities for establishing large habitat areas and/or networks of wildlife habitats and can aid in the delivery of Green Infrastructure and resilient ecological networks.

Birds and Habitats Directives: European Directives to conserve natural habitats and wild fauna and flora.

Climate change adaptation: Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities.

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions

Coastal Change Management Area: An area identified in Local Plans as likely to be affected by coastal change (physical change to the shoreline through erosion, coastal landslip, permanent inundation or coastal accretion).

Community Infrastructure Levy: A levy allowing local authorities to raise funds from owners or developers of land undertaking new building projects in their area.

Community Right to Build Order: An Order made by the local planning authority (under the Town and Country Planning Act 1990) that grants planning permission for a site-specific development proposal or classes of development.

Decentralised energy: Local renewable energy and local low-carbon energy usually but not always on a relatively small scale encompassing a diverse range of technologies.

Designated heritage asset: A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.

Development Consent Order (DCO): A DCO is the means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP). This includes energy, transport, water and waste projects.

Development Management: Development Management is the process by which planning applications are determined.

Development Plan: This includes adopted Local Plans and neighbourhood plans and is defined in Section 38 of the Planning and Compulsory Purchase Act 2004.

DPD: Development Plan Document. These are policy documents on a specific topic that make up part of the Development Plan. The Cliftonville Development Plan Document was adopted by the Council in February 2010 and is still in force.

Economic development: Development, including those within the B Use Classes, public and community uses and main town centre uses (but excluding housing development).

Ecological networks: These link sites of biodiversity importance.

Ecosystem services: The benefits people obtain from ecosystems such as, food, water, flood and disease control and recreation.

Edge of centre: For retail purposes, a location that is well connected and up to 300 metres of the primary shopping area. For all other main town centre uses, a location within 300 metres

of a town centre boundary. For office development, this includes locations outside the town centre but within 500 metres of a public transport interchange. In determining whether a site falls within the definition of edge of centre, account should be taken of local circumstances.

EEA: Economic and Employment Assessment.

ELR: Employment Land Review.

European site: This includes candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas, and is defined in regulation 8 of the Conservation of Habitats and Species Regulations 2010.

Geodiversity: The range of rocks, minerals, fossils, soils and landforms.

Green infrastructure: A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities and biodiversity.

Green Wedge: The Green Wedges provide a clear visual break between the towns, providing a settlement separation function. The Green Wedges are distinct from other types of open space as they provide a link between the open countryside and land which penetrates into the urban areas.

GTAA: Gypsy and Traveller Accommodation Assessment. An assessment of the future need for accommodation for the gypsy and traveller community.

Heritage asset: A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest.

Heritage asset includes designated heritage assets (such as listed buildings and structures, Scheduled Ancient Monuments) and assets identified by the local planning authority (including local listing).

Historic environment: All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

HMOs: Houses in Multiple Occupation: Housing which is occupied by 3 or more unrelated individuals sharing basic amenities.

HRA: Habitats Regulations Assessment. The Conservation of Habitats and Species Regulations 2010 transposes EU Directive 92/43/EEC on the conservation of natural habitats of wild flora and fauna into UK national law. The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites. Assessments for significant effects on habitats must be carried out and mitigation measures identified.

Infrastructure Delivery Plan (IDP): IDPs are produced by planning authorities alongside their local plans, to identify the key infrastructure that is required to support the level of development proposed in the Plan. This may include utilities provision; transport infrastructure such as road or rail; or social infrastructure such as schools and medical facilities.

International, national and locally designated sites of importance for biodiversity: All international sites (Special Areas of Conservation, Special Protection Areas, and Ramsar sites), national sites (Sites of Special Scientific Interest) and locally designated sites including Local Wildlife Sites.

Landscape Character Areas: An analysis of the character of the landscape based on predetermined objective criteria and characteristics. The process of landscape characterisation involves the classification and description of areas of homogeneous character in which the constituent elements occur in repeating patterns. It is an objective analysis, describing the components that make an area different from another, conveying an informed picture of the landscape but avoiding personal preference or valued judgements about the importance of one area relative to another.

LAP: Local Areas for Play

LEAP: Local Equipped Areas for Play

Local Enterprise Partnership: A body, designated by the Secretary of State for Communities and Local Government, established for the purpose of creating or improving the conditions for economic growth in an area.

Local Green Space: Local Green Space is a designation that provides special protection for green areas of particular importance to local communities and are designated through either the local or neighbourhood process. The NPPG sets out criteria that have to be met in order for land to be designated.

Local Plan: The plan for the future development of the local area, drawn up by the local planning authorities in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004.

Localism Act: The Localism Act was introduced in 2011. Its aim was to devolve powers from central government into the hands of individuals, communities and councils.

Main town centre uses: Retail development (including warehouse clubs and factory outlet centres); leisure, entertainment facilities the more intensive sport and recreation uses (including cinemas, restaurants, drive-through restaurants, bars and pubs, night-clubs, casinos, health and fitness centres, indoor bowling centres, and bingo halls); offices; and arts, culture and tourism development (including theatres, museums, galleries and concert halls, hotels and conference facilities).

Marine Conservation Zone: Marine Conservation Zones are areas that protect a range of nationally important, rare or threatened habitats and species in waters around England.

MUGA: multi use games area.

National Planning Policy Framework (NPPF): This is the Government's statement of planning policy which must be taken into account in preparing Local Plans, which should be consistent with national policy. Where a local plan is silent on an issue planning decisions will be made in accordance with national policy.

National Planning Practice Guidance (nPPG): Planning Practice Guidance is produced by Central Government in relation to specific topics and Local Plans need to take the guidance into account in the formulation of new policy.

NEAP: Neighbourhood Equipped Areas for Play

Neighbourhood plans: A plan prepared by a Parish Council or Neighbourhood Forum for a particular neighbourhood area (made under the Planning and Compulsory Purchase Act 2004).

Older people: People over retirement age, including the active, newly-retired through to the very frail elderly, whose housing needs can encompass accessible, adaptable general needs housing for those looking to downsize from family housing and the full range of retirement and specialised housing for those with support or care needs.

Open space: All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Out of centre: A location which is not in or on the edge of a centre but not necessarily outside the urban area.

Out of town: A location out of centre that is outside the existing urban area.

People with disabilities: People have a disability if they have a physical or mental impairment, and that impairment has a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities. These persons include, but are not limited to, people with ambulatory difficulties, blindness, learning difficulties, autism and mental health needs.

Plan period: This Local Plan runs until 2031.

Planning condition: A condition imposed on a grant of planning permission (in accordance with the Town and Country Planning Act 1990) or a condition included in a Local Development Order or Neighbourhood Development Order.

Planning obligation: A legally enforceable obligation entered into under section 106 of the Town and Country Planning Act 1990 to mitigate the impacts of a development proposal.

Playing field: The whole of a site which encompasses at least one playing pitch as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2010.

Pollution: Anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity. Pollution can arise from a range of emissions, including smoke, fumes, gases, dust, steam, odour, noise and light.

Previously developed land: Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or has been occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures; land in

built-up areas such as private residential gardens, parks, recreation grounds and allotments; and land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.

Primary shopping area: Defined area where retail development is concentrated (generally comprising the primary and those secondary frontages which are adjoining and closely related to the primary shopping frontage).

Primary and secondary frontages: Primary frontages are likely to include a high proportion of retail uses which may include food, drinks, clothing and household goods. Secondary frontages provide greater opportunities for a diversity of uses such as restaurants, cinemas and businesses.

Priority habitats and species: Species and Habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.

Ramsar sites: Wetlands of international importance, designated under the 1971 Ramsar Convention.

Renewable and low carbon energy: Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and

repeatedly in the environment – from the wind, air, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Rural exception sites: Small sites used for affordable housing in perpetuity where sites would not normally be used for housing. Rural exception sites seek to address the needs of the local community by accommodating households who are either current residents or have an existing family or employment connection. Small numbers of market homes may be allowed at the local authority's discretion, for example where essential to enable the delivery of affordable units without grant funding.

SAMM: Strategic Access, Management and Monitoring Plan - plan to mitigate the additional recreational pressure at the coast as a result of new housing developments. A tariff is collected for every residential development to contribute towards measures in place to mitigate against bird disturbance.

SCI: Statement of Community Involvement.

Self-build and custom-build housing: Housing built by an individual, a group of individuals, or persons working with or for them, to be occupied by that individual. Such housing can be either market or affordable housing. A legal definition, for the purpose of applying the [Self-build and Custom Housebuilding Act 2015](#) (as amended), is contained in section 1(A1) and (A2) of that Act.

Shoreline Management Plans: A plan providing a large-scale assessment of the risk to people and to the developed, historic and natural environment associated with coastal processes.

SHLAA: Strategic Housing Land Availability Assessment providing information to assess and allocate the best sites for new homes.

SHMA: Strategic Housing Market Assessment.

Site of Special Scientific Interest (SSSI): Sites designated by Natural England under the Wildlife and Countryside Act 1981.

Special Areas of Conservation (SAC): Areas given special protection under the Habitats and Conservation of Species Regulations 2017 (as amended).

Special Protection Areas (SPA): Areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds, protected under the Habitats Regulations 2017 (as amended).

Stepping stones: Pockets of habitat that, while not necessarily connected, facilitate the movement of species across otherwise inhospitable landscapes.

Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA): A procedure (set out in the Environmental Assessment of Plans and Programmes Regulations 2004) which requires the formal environmental assessment of certain plans and programmes which are likely to have significant environmental effects. The SA broadens this out to assess the economic, social and environmental effects.

Sui Generis: Certain uses do not fall within any use class and are considered 'sui generis'. Such uses include: betting offices/shops, pay day loan shops, theatres, larger houses in multiple occupation, hostels providing no significant element of care, scrap yards. Petrol filling stations and shops selling and/or displaying motor vehicles. Retail warehouse clubs, nightclubs, launderettes, taxi businesses and casinos.

Supplementary Planning Documents (SPD): Documents which add further detail to the policies in the Local Plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary Planning Documents are a material consideration in planning decisions but are not part of the development plan.

Sustainable transport modes: Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport.

Town centre: Area defined on the local authority's proposal map, including the primary shopping area and areas predominantly occupied by main town centre uses within or adjacent to the primary shopping area. References to town centres or centres apply to city centres, town centres, district centres and local centres but exclude small parades of shops of purely neighbourhood significance.

Transport assessment: A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.

Transport statement: A simplified version of a transport assessment where the transport issues arising out of development proposals are limited and a full transport assessment is not required.

Travel plan: A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed.

Use Classes: The [Town and Country Planning \(Use Classes\) Order 1987](#) (as amended) puts uses of land and buildings into various categories known as 'Use Classes'.

Part A	<p>A1 Shops A2 Financial and professional services A3 Restaurants and cafés A4 Drinking establishments A5 Hot food takeaways</p>
Part B	<p>B1 Business B2 General industrial B8 Storage or distribution</p>
Part C	<p>C1 Hotels C2 Residential institutions C2A Secure Residential Institution C3 Dwellinghouses C4 Houses in multiple occupation</p>
Part D	<p>D1 Non-residential Institutions D2 Assembly and leisure</p>

Wildlife corridor: The term 'wildlife corridor' is used to refer to any linear feature in the landscape that can be used for migration or dispersal of wildlife. Wildlife corridors offer the possibility of linking habitats and reducing the isolation of populations.

Windfall sites: Sites which have not been specifically identified as available in the Local Plan process. They normally comprise previously-developed sites that have unexpectedly become available.

Air Transport Movements 2019
Comparison with Previous Year (a)

Table 6

	<-----2019----->			<-----2018----->			<-----Percentage Change----->		
	Total	Passenger Aircraft	Cargo Aircraft	Total	Passenger Aircraft	Cargo Aircraft	Total	Passenger Aircraft	Cargo Aircraft
London Area Airports									
GATWICK	282,896	282,848	48	283,186	283,186	-	-	-	..
HEATHROW	479,811	477,083	2,728	480,339	477,367	2,972	-	-	-8
LONDON CITY	80,931	80,931	-	78,037	78,037	-	4	4	..
LUTON	112,745	110,628	2,117	106,666	105,081	1,585	6	5	34
SOUTHEND	19,162	19,162	-	17,088	17,088	-	12	12	..
STANSTED	183,147	172,939	10,208	185,077	175,599	9,478	-1	-2	8
Total London Area Airports	1,158,692	1,143,591	15,101	1,150,393	1,136,358	14,035	1	1	8
Other UK Airports									
ABERDEEN	78,209	76,549	1,660	81,552	79,943	1,609	-4	-4	3
BARRA	1,366	1,365	1	1,390	1,389	1	-2	-2	-
BELFAST CITY (GEORGE BEST)	34,625	34,625	-	35,845	35,845	-	-3	-3	..
BELFAST INTERNATIONAL	47,230	42,984	4,246	46,115	42,747	3,368	2	1	26
BENBECULA	1,974	1,917	57	1,960	1,960	-	1	-2	..
BIGGIN HILL	325	325	-	202	202	-	61	61	..
BIRMINGHAM	102,515	100,288	2,227	104,553	101,829	2,724	-2	-2	-18
BLACKPOOL	4,014	4,014	-	4,724	4,724	-	-15	-15	..
BOURNEMOUTH	4,973	4,973	-	4,096	4,096	-	21	21	..
BRISTOL	62,556	62,556	-	66,147	66,147	-	-5	-5	..
CAMPBELLTOWN	1,064	1,063	1	1,069	1,069	-	-	-1	..
CARDIFF WALES	16,688	16,687	1	17,009	17,008	1	-2	-2	-
CITY OF DERRY (EGLINTON)	3,063	3,063	-	2,324	2,324	-	32	32	..
DONCASTER SHEFFIELD	9,520	9,270	250	8,797	8,650	147	8	7	70
DUNDEE	1,212	1,212	-	1,215	1,215	-	-	-	..
EAST MIDLANDS INTERNATIONAL	56,053	32,851	23,202	56,947	34,728	22,219	-2	-5	4
EDINBURGH	127,335	122,219	5,116	125,426	120,395	5,031	2	2	2
EXETER	14,528	14,032	496	13,512	13,020	492	8	8	1
GLASGOW	79,276	78,607	669	85,877	85,191	686	-8	-8	-2
HUMBERSIDE	7,340	7,215	125	7,618	7,481	137	-4	-4	-9
INVERNESS	12,733	12,473	260	12,007	11,896	111	6	5	134
ISLAY	2,021	2,021	-	1,832	1,831	1	10	10	..
ISLES OF SCILLY (ST.MARYS)	10,692	9,782	910	10,587	9,771	816	1	-	12
KIRKWALL	11,256	11,212	44	11,840	11,782	58	-5	-5	-24

	Total	Passenger Aircraft	Cargo Aircraft	Total	Passenger Aircraft	Cargo Aircraft	Total	Passenger Aircraft	Cargo Aircraft
Other UK Airports									
LANDS END (ST JUST)	8,310	7,389	921	8,587	7,704	883	-3	-4	4
LEEDS BRADFORD	29,746	29,746	-	31,525	31,525	-	-6	-6	..
LERWICK (TINGWALL)	904	904	-	955	955	-	-5	-5	..
LIVERPOOL (JOHN LENNON)	34,976	34,732	244	35,914	35,886	28	-3	-3	771
LYDD	13	13	-	58	58	-	-78	-78	..
MANCHESTER	195,926	195,230	696	194,131	193,451	680	1	1	2
NEWCASTLE	40,169	39,751	418	42,412	42,083	329	-5	-6	27
NEWQUAY	8,206	8,206	-	7,631	7,631	-	8	8	..
NORWICH	19,729	19,729	-	20,575	20,575	-	-4	-4	..
OXFORD (KIDLINGTON)	-	-	-	3	2	1
PRESTWICK	4,542	3,778	764	4,760	4,085	675	-5	-8	13
SCATSTA	4,820	4,820	-	8,081	8,081	-	-40	-40	..
SOUTHAMPTON	32,529	32,508	21	35,750	35,731	19	-9	-9	11
STORNOWAY	5,858	5,761	97	6,903	6,903	-	-15	-17	..
SUMBURGH	12,600	12,595	5	10,474	10,474	-	20	20	..
TEESIDE INTERNATIONAL AIRPORT	3,630	3,630	-	3,802	3,799	3	-5	-4	..
TIREE	1,600	1,597	3	1,769	1,762	7	-10	-9	-57
WICK JOHN O GROATS	1,397	1,397	-	1,526	1,526	-	-8	-8	..
Total Other UK Airports	1,095,523	1,053,089	42,434	1,117,500	1,077,474	40,026	-2	-2	6
Total All Reporting UK Airports	2,254,215	2,196,680	57,535	2,267,893	2,213,832	54,061	-1	-1	6
Non UK Reporting Airports									
ALDERNEY	4,702	4,683	19	4,955	4,934	21	-5	-5	-10
GUERNSEY	23,030	21,219	1,811	20,930	19,160	1,770	10	11	2
ISLE OF MAN	13,530	12,997	533	14,097	13,566	531	-4	-4	-
JERSEY	24,972	24,034	938	23,804	22,546	1,258	5	7	-25
Total Non UK Reporting Airports	66,234	62,933	3,301	63,786	60,206	3,580	4	5	-8

Notes

- (a) Excludes Air Taxi operations.
- (b) Coventry resumed Commercial activity October 2011.
- (c) Plymouth Airport closed December 2011
- (d) Penzance Heliport closed October 2012

Please note that figures may change overtime as each new version is produced. Information relating to an airport that has ceased to handle regular traffic/closed will be excluded from this table completely. For data concerning historical years it is recommended that you use earlier produced versions of this table.



Air Cargo Market Analysis

June 2021

Air cargo remains dynamic and further growth is likely ahead

- June 2021 was another month of strong air cargo performance, as industry-wide cargo tonne-kilometres (CTKs) grew 9.9% compared to June 2019 and air cargo drivers point to further growth ahead.
- Supply chain conditions remain favourable, with low inventories-to-sales ratio, resilient demand for goods and more affordable air cargo compared to container shipping, all combining to make air cargo a competitive mode of transport. Besides, the shift of consumer spending from goods to services has so far not been as strong as feared.
- Africa and North America remain the strongest regions. Airlines in all regions but Latin America have posted growth in CTKs in recent months.

UK Business Counts 2020

Information on businesses in Kent

Related documents

[Business Demography](#) – Looking at the counts business activity during the course of the whole of the financial year

[Construction Industries in Kent](#) – the number of construction businesses in Kent and the people employed in the sector

[Creative Industries in Kent](#) - the number of creative businesses in Kent and the people employed in the sector

Further Information

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The UK Business data is published annually by the Office for National Statistics (ONS) and is based on output from the VAT and PAYE administrative systems.

The information provided by the UK Business dataset gives a snap shot of businesses and is broken down by size band, industry, turnover and age of business.

An additional dataset from ONS is the Business Demography dataset. This is also based on VAT and PAYE data but this information measures any activity during the course of the year, so leads to slightly higher counts of businesses. It provides information on business births, deaths and survival rates.

Information on this dataset can be found in the bulletin “Business Demography”.

Kent Summary

- As at March 2020 there were 64,005 enterprises in Kent
- Kent has a significantly higher proportion of enterprises (17.1%) in the construction industry than is seen nationally (12.8%)
- The highest proportion of enterprises in Kent (17.2%) are within the Professional, scientific and technical sector
- The majority of enterprises in Kent (90.2%) are micro enterprises (with 0-9 employees)
- The majority of enterprises in Kent (99.4%) are classed as companies which operate within the private sector.

Introduction

The UK Business data is produced from a snapshot of the Inter Departmental Business Register (IDBR) - usually taken during March - and provides the basis for the Office for National Statistics (ONS) to conduct surveys of businesses.

The main administrative sources for the IDBR are VAT trader and PAYE employer information passed to the ONS by HM Revenue & Customs under the Value Added Tax Act 1994 for VAT traders and the Finance Act 1969 for PAYE employers; details of incorporated businesses are also passed to ONS by Companies House. ONS Survey data and survey information from the Department of Enterprise, Trade and Investment – Northern Ireland (DETINI) and the Department for Environment, Food and Rural Affairs (DEFRA) farms register provide auxiliary information. Construction statistics formerly produced by the Department for Business Innovation & Skills are now produced by ONS.

The IDBR combines the information from the three administrative sources with this survey data in a statistical register comprising over two million enterprises. These comprehensive administrative sources combined with the survey data contribute to the coverage on the IDBR, which is one of its main strengths, representing nearly 99 per cent of UK economic activity.

The latest data is published for 2020 and is based upon the 2007 revision to the Standard Industrial Classification UKSIC (2007). Detailed information about the types of industry which make up each of the industrial sectors is available from the [UK Standard Industrial Classification of Economic Activities](#) published by the Office for National Statistics.

This bulletin looks at the main tables available from the UK Business data, which relate to VAT/PAYE enterprises.

This bulletin will be updated in Autumn 2021.

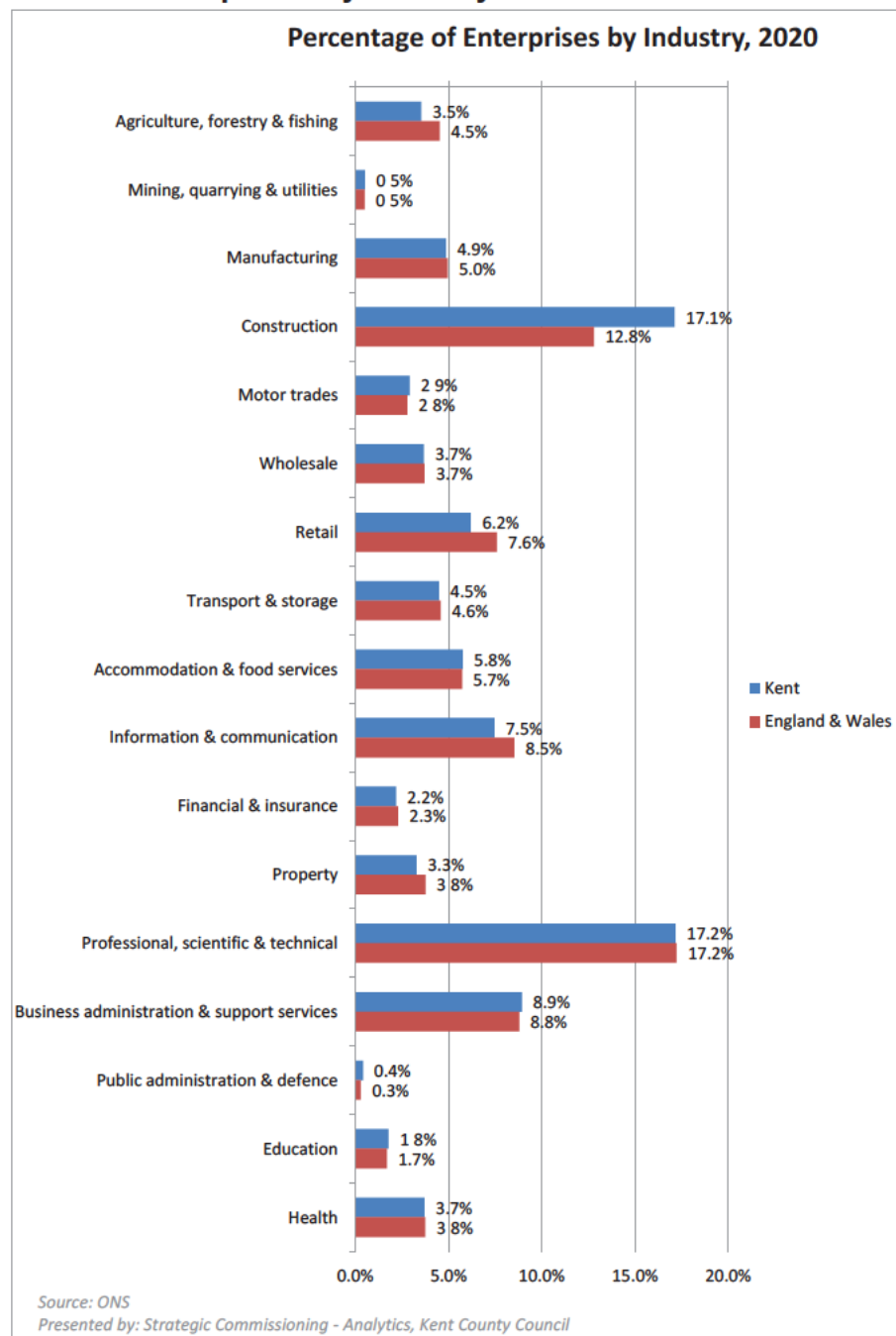
Analysis

Enterprises by Industry

The UK Business data shows us the number of enterprises by broad industrial group.

Overall Kent has a similar profile to England and Wales although does show a noticeably higher proportion of enterprises in the Construction Industry and lower proportions in Agriculture and Fishing, Retail and Information & Communications industries. This is shown in Chart 1.

Chart 1: Enterprises by Industry



Tables 1 and 2 on the following two pages show the number and percentage of businesses by industry in Kent local authority districts and Kent as a whole. Regional and national figures are also presented for comparison.

Table 1: Number of VAT and/or PAYE based enterprises in 2020 by broad industrial group

UK SIC 2007

	Agriculture, forestry & fishing	Mining, quarrying & utilities	Manufacturing	Construction	Motor trades	Wholesale	Retail	Transport & storage	Accommodation & food services	Information & communication	Financial & insurance	Property	Professional, scientific & technical	Business administration & support services	Public administration & defence	Education	Health	Arts, entertainment, recreation & other services	Total
Ashford	420	40	330	965	160	430	345	190	265	430	385	250	1,070	595	40	95	230	335	6,575
Canterbury	170	25	250	805	150	190	425	150	415	370	85	195	945	450	20	110	250	400	5,400
Dartford	25	20	205	1,005	150	165	235	395	270	545	75	175	755	390	10	80	155	200	4,855
Dover	190	25	190	620	115	95	290	155	295	180	45	80	515	295	35	75	150	225	3,570
Folkestone & Hythe	210	15	175	580	130	100	310	135	355	210	40	125	595	295	20	70	145	240	3,750
Gravesham	45	20	195	890	120	105	265	385	250	260	45	100	545	380	5	70	150	215	4,045
Maidstone	305	45	370	1,455	240	300	410	560	345	480	145	250	1,250	645	35	125	290	395	7,650
Sevenoaks	205	30	305	1,090	195	240	365	135	255	615	155	270	1,380	685	25	115	215	425	6,710
Swale	220	45	350	995	185	160	315	310	320	260	55	150	675	405	25	85	175	285	5,020
Thanet	65	20	235	725	125	110	355	135	410	245	55	120	545	330	10	85	165	315	4,050
Tonbridge and Malling	130	40	285	1,065	165	230	265	205	255	545	155	170	1,235	640	30	115	215	315	6,055
Tunbridge Wells	285	15	230	775	125	235	395	120	270	650	155	220	1,480	615	15	110	240	395	6,330
Kent	2,270	335	3,120	10,970	1,860	2,360	3,975	2,880	3,700	4,785	1,395	2,105	11,000	5,725	265	1,145	2,380	3,735	64,005
Medway	75	35	450	2,075	270	300	620	725	495	550	115	225	1,225	730	15	160	365	450	8,885
Kent + Medway	2,345	370	3,570	13,045	2,125	2,665	4,600	3,605	4,200	5,335	1,510	2,330	12,225	6,455	280	1,310	2,745	4,185	72,890
South East LEP	5,990	890	9,050	32,400	5,480	6,505	11,160	8,605	9,475	12,975	3,505	5,865	28,490	15,560	610	3,115	6,430	10,305	176,410
South East Region	11,785	1,780	18,705	57,980	11,155	14,470	31,050	14,910	19,780	45,685	8,560	14,250	81,095	36,995	1,250	7,685	14,865	26,370	418,370
ENGLAND AND WALES	113,185	12,745	123,855	319,750	69,640	93,060	189,745	114,390	143,050	213,185	57,535	94,080	430,690	219,655	7,570	42,285	93,945	158,460	2,496,825

Source: ONS
Presented by: Strategic Commissioning - Analytics, Kent County Council

Table 2: Percentage of VAT and/or PAYE based enterprises in 2020 by broad industrial group

UK SIC 2007

	Agriculture, forestry & fishing	Mining, quarrying & utilities	Manufacturing	Construction	Motor trades	Wholesale	Retail	Transport & storage	Accommodation & food services	Information & communication	Financial & insurance	Property	Professional, scientific & technical	Business administration & support services	Public administration & defence	Education	Health	Arts, entertainment, recreation & other services
Ashford	6.4	0.6	5.0	14.7	2.4	6.5	5.2	2.9	4.0	6.5	5.9	3.8	16.3	9.0	0.6	1.4	3.5	5.1
Canterbury	3.1	0.5	4.6	14.9	2.8	3.5	7.9	2.8	7.7	6.9	1.6	3.6	17.5	8.3	0.4	2.0	4.6	7.4
Dartford	0.5	0.4	4.2	20.7	3.1	3.4	4.8	8.1	5.6	11.2	1.5	3.6	15.6	8.0	0.2	1.6	3.2	4.1
Dover	5.3	0.7	5.3	17.4	3.2	2.7	8.1	4.3	8.3	5.0	1.3	2.2	14.4	8.3	1.0	2.1	4.2	6.3
Gravesham	5.6	0.4	4.7	15.5	3.5	2.7	8.3	3.6	9.5	5.6	1.1	3.3	15.9	7.9	0.5	1.9	3.9	6.4
Maidstone	1.1	0.5	4.8	22.0	3.0	2.6	6.6	9.5	6.2	6.4	1.1	2.5	13.5	9.4	0.1	1.7	3.7	5.3
Sevenoaks	4.0	0.6	4.8	19.0	3.1	3.9	5.4	7.3	4.5	6.3	1.9	3.3	16.3	8.4	0.5	1.6	3.8	5.2
Shepway	3.1	0.4	4.5	16.2	2.9	3.6	5.4	2.0	3.8	9.2	2.3	4.0	20.6	10.2	0.4	1.7	3.2	6.3
Swale	4.4	0.9	7.0	19.8	3.7	3.2	6.3	6.2	6.4	5.2	1.1	3.0	13.4	8.1	0.5	1.7	3.5	5.7
Thanet	1.6	0.5	5.8	17.9	3.1	2.7	8.8	3.3	10.1	6.0	1.4	3.0	13.5	8.1	0.2	2.1	4.1	7.8
Tonbridge and Malling	2.1	0.7	4.7	17.6	2.7	3.8	4.4	3.4	4.2	9.0	2.6	2.8	20.4	10.6	0.5	1.9	3.6	5.2
Tunbridge Wells	4.5	0.2	3.6	12.2	2.0	3.7	6.2	1.9	4.3	10.3	2.4	3.5	23.4	9.7	0.2	1.7	3.8	6.2
Kent	3.5	0.5	4.9	17.1	2.9	3.7	6.2	4.5	5.8	7.5	2.2	3.3	17.2	8.9	0.4	1.8	3.7	5.8
Medway	0.8	0.4	5.1	23.4	3.0	3.4	7.0	8.2	5.6	6.2	1.3	2.5	13.8	8.2	0.2	1.8	4.1	5.1
Kent + Medway	3.2	0.5	4.9	17.9	2.9	3.7	6.3	4.9	5.8	7.3	2.1	3.2	16.8	8.9	0.4	1.8	3.8	5.7
South East LEP	3.4	0.5	5.1	18.4	3.1	3.7	6.3	4.9	5.4	7.4	2.0	3.3	16.1	8.8	0.3	1.8	3.6	5.8
South East Region	2.8	0.4	4.5	13.9	2.7	3.5	7.4	3.6	4.7	10.9	2.0	3.4	19.4	8.8	0.3	1.8	3.6	6.3
ENGLAND AND WALES	4.5	0.5	5.0	12.8	2.8	3.7	7.6	4.6	5.7	8.5	2.3	3.8	17.2	8.8	0.3	1.7	3.8	6.3

Source: ONS

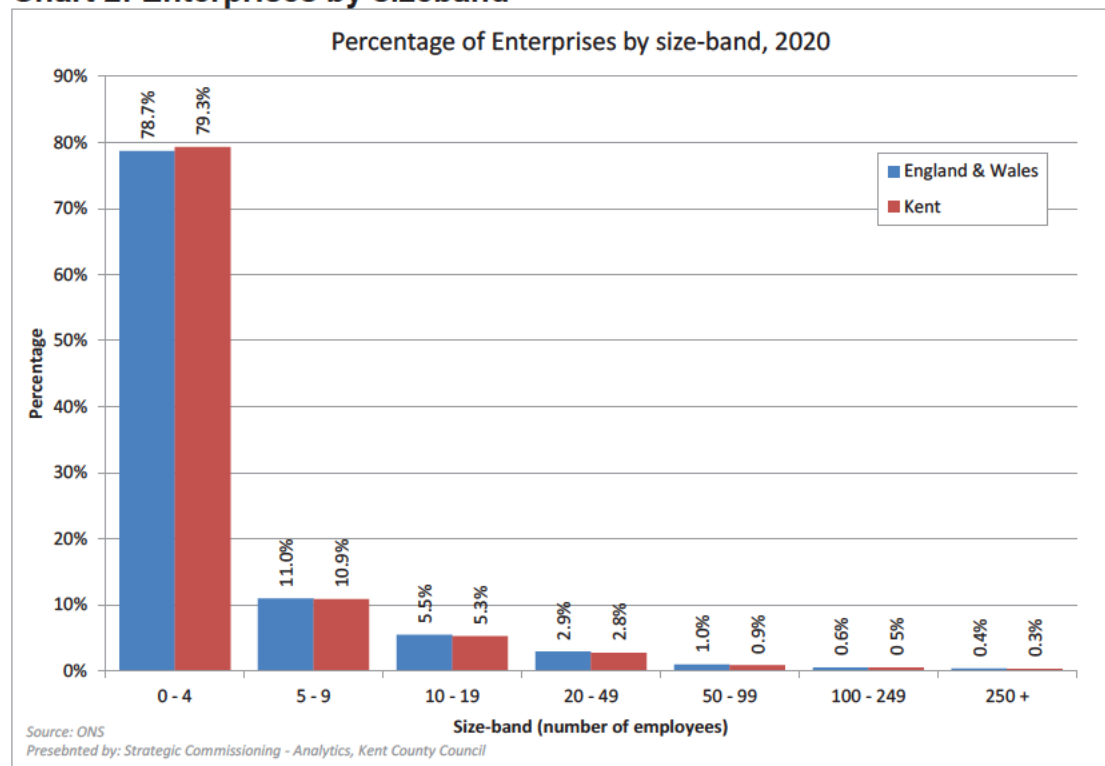
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Enterprises by employee size

The majority of enterprises are classed as micro businesses i.e. they have 0 - 9 employees. In Kent 90.2% of enterprises are classed as micro, 89.7% in England and Wales.

Chart 2 shows the proportion of enterprises in Kent and England and Wales by employment size.

Chart 2: Enterprises by sizeband



Tables 3 and 4 show an even greater breakdown of the number and percentage of enterprises by the number of employees.

The data shows that while the majority of enterprises are micro businesses employing up to 9 people, most of these actually have 0 - 4 employees (88.0% of micro businesses in Kent).

Kent has a slightly higher proportion of enterprises with 0 – 4 employees and slightly lower proportion with 5 – 9 employees than is seen nationally.

Table 3: Number of VAT and/or PAYE based enterprises by employment sizeband

2020	Employment size							TOTAL
	0 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100 - 249	250 +	
Ashford	5,355	650	315	165	50	30	20	6,575
Canterbury	4,120	680	330	160	60	25	25	5,400
Dartford	3,995	420	200	135	50	30	20	4,855
Dover	2,740	445	215	95	40	25	5	3,570
Folkestone & Hythe	2,905	460	205	130	30	15	10	3,750
Gravesham	3,300	420	165	100	25	20	10	4,045
Maidstone	6,095	785	430	190	70	55	30	7,650
Sevenoaks	5,380	715	345	165	60	30	20	6,710
Swale	3,875	620	285	140	50	35	15	5,020
Thanet	3,140	490	235	120	30	30	5	4,050
Tonbridge and Malling	4,780	625	325	200	65	35	25	6,055
Tunbridge Wells	5,085	655	330	175	50	30	10	6,330
Kent	50,765	6,955	3,385	1,775	575	350	210	64,005
Medway	7,155	935	445	205	60	50	35	8,885
Kent + Medway	57,920	7,890	3,825	1,980	635	400	240	72,890
South East LEP	140,350	19,125	9,235	4,750	1,535	890	520	176,410
South East Region	334,935	42,650	21,560	11,590	3,735	2,285	1,620	418,370
ENGLAND AND WALES	1,964,640	274,145	136,585	73,320	24,585	13,770	9,785	2,496,825

Source: ONS

Presented by: Strategic Commissioning - Analytics, Kent County Council

Table 4: Percentage of VAT and/or PAYE based enterprises by sizeband

2020	Employment size							TOTAL
	0 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100 - 249	250 +	
Ashford	81.4	9.9	4.8	2.5	0.8	0.5	0.3	100
Canterbury	76.3	12.6	6.1	3.0	1.1	0.5	0.5	100
Dartford	82.3	8.7	4.1	2.8	1.0	0.6	0.4	100
Dover	76.8	12.5	6.0	2.7	1.1	0.7	0.1	100
Gravesham	77.5	12.3	5.5	3.5	0.8	0.4	0.3	100
Maidstone	81.6	10.4	4.1	2.5	0.6	0.5	0.2	100
Sevenoaks	79.7	10.3	5.6	2.5	0.9	0.7	0.4	100
Shepway	80.2	10.7	5.1	2.5	0.9	0.4	0.3	100
Swale	77.2	12.4	5.7	2.8	1.0	0.7	0.3	100
Thanet	77.5	12.1	5.8	3.0	0.7	0.7	0.1	100
Tonbridge and Malling	78.9	10.3	5.4	3.3	1.1	0.6	0.4	100
Tunbridge Wells	80.3	10.3	5.2	2.8	0.8	0.5	0.2	100
Kent	79.3	10.9	5.3	2.8	0.9	0.5	0.3	100
Medway	80.5	10.5	5.0	2.3	0.7	0.6	0.4	100
Kent + Medway	79.5	10.8	5.2	2.7	0.9	0.5	0.3	100
South East LEP	79.6	10.8	5.2	2.7	0.9	0.5	0.3	100
South East Region	80.1	10.2	5.2	2.8	0.9	0.5	0.4	100
ENGLAND AND WALES	78.7	11.0	5.5	2.9	1.0	0.6	0.4	100

Source: ONS

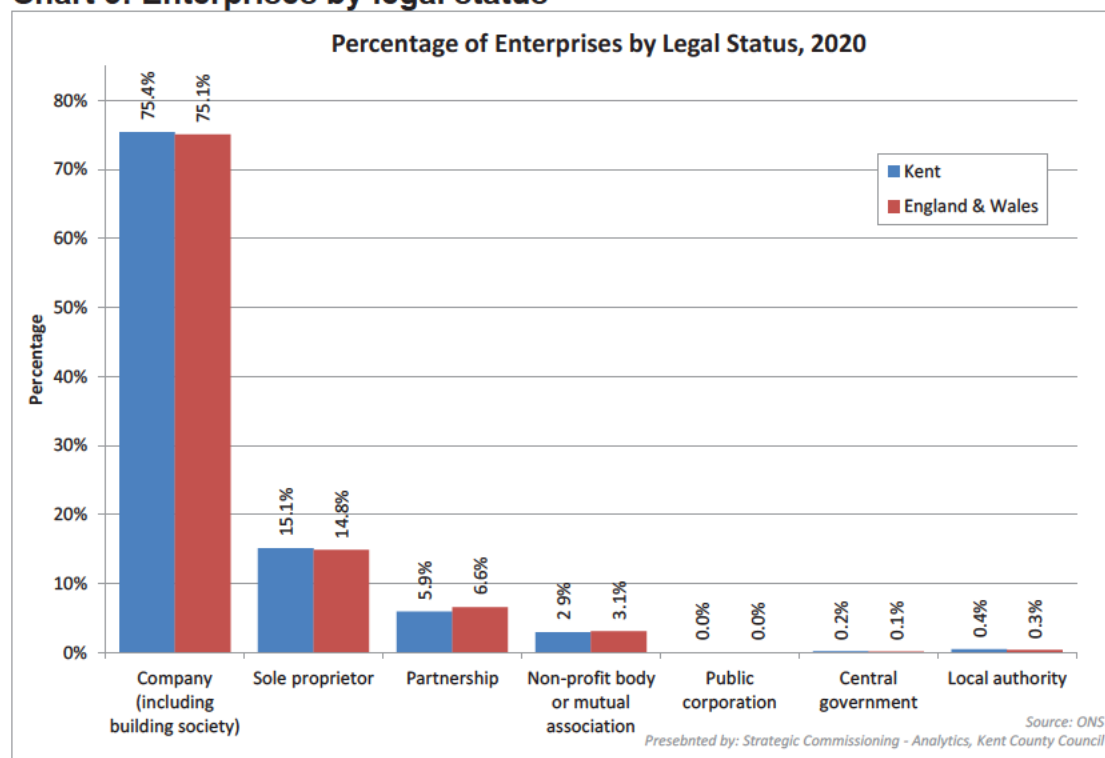
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Enterprise by status

The data also shows the number of enterprises by legal status. The legal status of units is classified by ONS in accordance with National Accounts Sector Classifications. All enterprises engage in financial transactions, paying out and receiving money for reasons such as buying and selling goods and services, paying taxes, or collecting tax revenues. Using information received from Companies House and the administrative sources from HM Revenue & Customs, the National Accounts Sector Classification determines whether a body or enterprise is in the private or public sector, and if public, whether they are government bodies or public corporations, and whether certain transactions count as taxes or service fees.

Chart 3 shows the proportion of enterprises by legal status in Kent compared to England and Wales in 2020.

Chart 3: Enterprises by legal status



The majority of enterprises are private sector companies. In Kent they account for 75.4% of all enterprises, just below England and Wales as a whole (75.1%).

Kent has a slightly higher proportion of sole proprietor enterprises (15.1%) than is seen nationally and a slightly lower proportion of partnerships (5.9%).

Tables 5 and 6 show the legal status of enterprises in Kent local authority districts and Kent as a whole. They also present information at regional and national level for comparison.

Table 5: Number of VAT and/or PAYE based enterprises by legal status

2020	Private sector				Public sector			TOTAL
	Company (including building society)	Sole proprietor	Partnership	Non-profit body or mutual association	Public corporation	Central government	Local authority	
Ashford	4,630	935	505	455	0	10	40	6,575
Canterbury	3,855	935	400	180	0	10	20	5,400
Dartford	4,095	520	120	95	0	15	10	4,855
Dover	2,285	785	345	105	5	10	35	3,570
Folkestone & Hythe	2,605	715	305	95	0	10	20	3,750
Gravesham	3,290	520	145	75	0	5	5	4,045
Maidstone	5,910	1,095	415	180	0	10	35	7,650
Sevenoaks	5,320	875	320	160	0	5	25	6,710
Swale	3,665	875	325	110	0	15	25	5,020
Thanet	2,890	760	285	95	0	10	10	4,050
Tonbridge and Malling	4,835	770	260	150	0	5	30	6,055
Tunbridge Wells	4,890	885	365	170	0	5	15	6,330
Kent	48,270	9,670	3,795	1,875	5	110	280	64,005
Medway	6,975	1,295	360	215	0	20	20	8,885
Kent + Medway	55,245	10,960	4,155	2,095	5	135	300	72,890
South East LEP	135,715	25,230	10,135	4,340	10	340	640	176,410
South East Region	326,790	56,450	21,610	11,635	20	475	1,390	418,370
ENGLAND AND WALES	1,874,040	370,275	163,965	76,240	145	3,560	8,595	2,496,825

Source: ONS

Presented by: Strategic Commissioning - Analytics, Kent County Council

Table 6: Percentage of VAT and/or PAYE based enterprises by legal status

2020	Employment status							TOTAL
	Company (including building society)	Sole proprietor	Partnership	Non-profit body or mutual association	Public corporation	Central government	Local authority	
Ashford	70.4	14.2	7.7	6.9	0.0	0.2	0.6	100
Canterbury	71.4	17.3	7.4	3.3	0.0	0.2	0.4	100
Dartford	84.3	10.7	2.5	2.0	0.0	0.3	0.2	100
Dover	64.0	22.0	9.7	2.9	0.1	0.3	1.0	100
Folkestone & Hythe	69.5	19.1	8.1	2.5	0.0	0.3	0.5	100
Gravesham	81.3	12.9	3.6	1.9	0.0	0.1	0.1	100
Maidstone	77.3	14.3	5.4	2.4	0.0	0.1	0.5	100
Sevenoaks	79.3	13.0	4.8	2.4	0.0	0.1	0.4	100
Swale	73.0	17.4	6.5	2.2	0.0	0.3	0.5	100
Thanet	71.4	18.8	7.0	2.3	0.0	0.2	0.2	100
Tonbridge and Malling	79.9	12.7	4.3	2.5	0.0	0.1	0.5	100
Tunbridge Wells	77.3	14.0	5.8	2.7	0.0	0.1	0.2	100
Kent	75.4	15.1	5.9	2.9	0.0	0.2	0.4	100
Medway	78.5	14.6	4.1	2.4	0.0	0.2	0.2	100
Kent + Medway	75.8	15.0	5.7	2.9	0.0	0.2	0.4	100
South East LEP	76.9	14.3	5.7	2.5	0.0	0.2	0.4	100
South East Region	78.1	13.5	5.2	2.8	0.0	0.1	0.3	100
ENGLAND AND WALES	75.1	14.8	6.6	3.1	0.0	0.1	0.3	100

Source: ONS

Presented by: Strategic Commissioning - Analytics, Kent County Council

Turnover

Turnover figures provided to ONS for the majority of traders is based on VAT returns for a 12 month period. For 2020 this relates to a 12 month period covering the financial year 2019/2020. For other records, in particular members of VAT group registrations, turnover may relate to an earlier period or survey data.

For traders who have registered more recently, turnover represents the estimate made by traders at the time of registration.

The turnover figures on the register generally exclude VAT but include other taxes, such as the revenue duties on alcoholic drinks and tobacco. They represent total UK turnover, including exempt and zero-rated supplies.

Turnover bands shown in the analyses relate to the latest year for which information is available. Traders may be registered below the VAT threshold or may choose not to de-register should their turnover fall below the threshold.

Table 7 shows the VAT registration thresholds since 2004/05.

Table 7 - VAT registration thresholds

Operative dates	VAT Registration Threshold
1 Apr 2004 - 31 Mar 2005	£58,000
1 Apr 2005 - 31 Mar 2006	£60,000
1 Apr 2006 - 31 Mar 2007	£61,000
1 Apr 2007 - 31 Mar 2008	£64,000
1 Apr 2008 - 31 Mar 2009	£67,000
1 Apr 2009 - 31 Mar 2010	£68,000
1 Apr 2010 - 31 Mar 2011	£70,000
1 Apr 2011 - 31 Mar 2012	£73,000
1 Apr 2012 - 31 Mar 2013	£77,000
1 Apr 2013 - 31 Mar 2014	£79,000
1 Apr 2014 - 31 Mar 2015	£81,000
1 Apr 2015 - 31 March 2016	£82,000
1 Apr 2016 - 31 March 2017	£83,000
1 Apr 2017 - 31 March 2018	£85,000
1 Apr 2018 - 31 March 2019	£85,000
1 Apr 2019 onwards	£85,000

Source: HMRC

A higher proportion of enterprises in Kent (64.0%) have a turnover of £100k and above than is seen nationally (62.5%).

Tables 8 and 9 present the turnover data for Kent local authority districts and Kent as a whole. Regional and national figures are also presented for comparison.

Chart 4: Percentage of VAT and/or PAYE enterprises by turnover

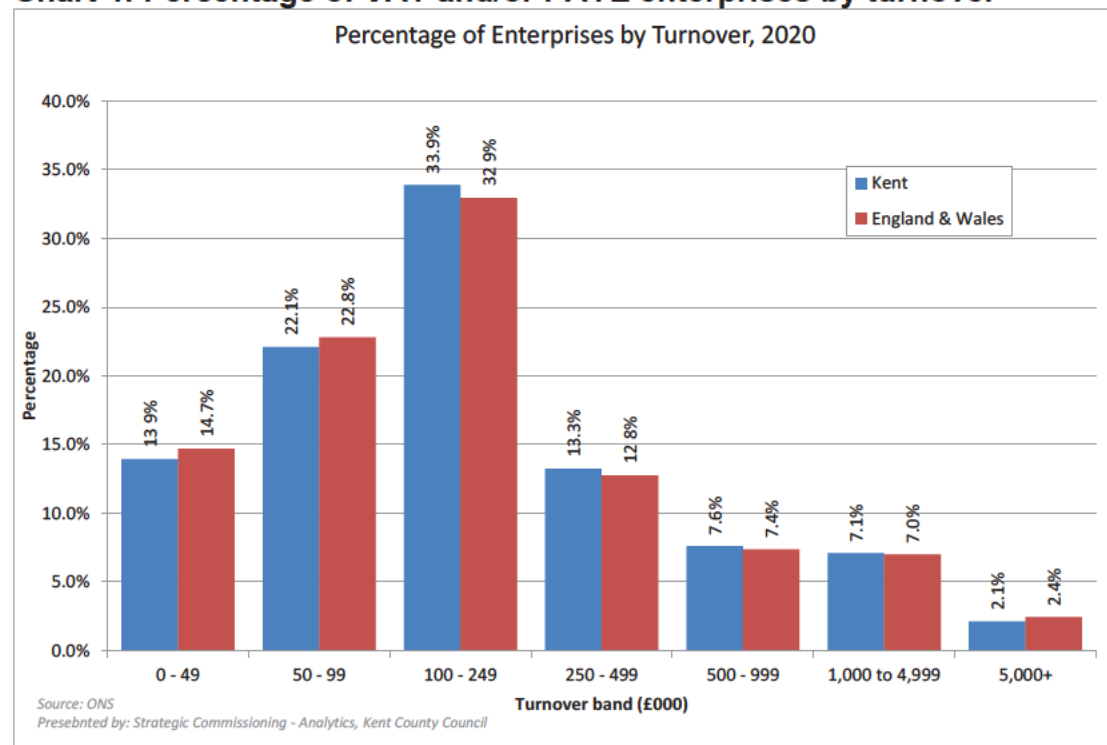


Table 8: Number of VAT and/or PAYE enterprises by turnover

	Turnover size (£ thousand)							TOTAL
	0 to 49	50 to 99	100 to 199	200 to 499	500 to 999	1,000 to 4,999	5,000+	
2020								
Ashford	1,265	1,310	1,995	790	650	460	100	6,575
Canterbury	700	1,210	1,865	720	430	380	95	5,400
Dartford	580	1,355	1,630	545	265	365	115	4,855
Dover	505	750	1,205	495	290	245	75	3,570
Folkestone & Hythe	550	845	1,285	520	255	250	50	3,750
Gravesham	535	1,055	1,325	550	265	255	60	4,045
Maidstone	1,110	1,695	2,515	1,025	570	550	185	7,650
Sevenoaks	850	1,365	2,360	915	550	480	190	6,710
Swale	685	1,110	1,645	705	390	390	100	5,020
Thanet	465	915	1,475	590	305	240	55	4,050
Tonbridge and Malling	775	1,240	2,090	800	455	485	215	6,055
Tunbridge Wells	905	1,290	2,305	835	440	430	120	6,330
Kent	8,920	14,140	21,695	8,485	4,870	4,535	1,360	64,005
Medway	1,110	2,425	2,820	1,135	665	570	165	8,885
Kent + Medway	10,030	16,565	24,515	9,620	5,530	5,105	1,525	72,890
South East LEP	22,975	40,695	60,340	23,035	13,315	12,385	3,660	176,410
South East Region	60,645	93,400	144,580	51,765	29,655	28,575	9,750	418,370
ENGLAND AND WALES	367,095	569,300	822,570	318,560	183,715	174,965	60,615	2,496,825

Source: ONS
Presented by: Strategic Commissioning - Analytics, Kent County Council

Table 9: Percentage of VAT and/or PAYE enterprises by turnover

2020	Turnover size (£ thousand)							TOTAL
	0 to 49	50 to 99	100 to 199	200 to 499	500 to 999	1,000 to 4,999	5,000+	
Ashford	19.2	19.9	30.3	12.0	9.9	7.0	1.5	100
Canterbury	13.0	22.4	34.5	13.3	8.0	7.0	1.8	100
Dartford	11.9	27.9	33.6	11.2	5.5	7.5	2.4	100
Dover	14.1	21.0	33.8	13.9	8.1	6.9	2.1	100
Gravesham	14.7	22.5	34.3	13.9	6.8	6.7	1.3	100
Maidstone	13.2	26.1	32.8	13.6	6.6	6.3	1.5	100
Sevenoaks	14.5	22.2	32.9	13.4	7.5	7.2	2.4	100
Shepway	12.7	20.3	35.2	13.6	8.2	7.2	2.8	100
Swale	13.6	22.1	32.8	14.0	7.8	7.8	2.0	100
Thanet	11.5	22.6	36.4	14.6	7.5	5.9	1.4	100
Tonbridge and Malling	12.8	20.5	34.5	13.2	7.5	8.0	3.6	100
Tunbridge Wells	14.3	20.4	36.4	13.2	7.0	6.8	1.9	100
Kent	13.9	22.1	33.9	13.3	7.6	7.1	2.1	100
Medway	12.5	27.3	31.7	12.8	7.5	6.4	1.9	100
Kent + Medway	13.8	22.7	33.6	13.2	7.6	7.0	2.1	100
South East LEP	13.0	23.1	34.2	13.1	7.5	7.0	2.1	100
South East Region	14.5	22.3	34.6	12.4	7.1	6.8	2.3	100
ENGLAND AND WALES	14.7	22.8	32.9	12.8	7.4	7.0	2.4	100

Source: ONS

Presented by: Strategic Commissioning - Analytics, Kent County Council

Broad Industry Group																		
	01-03 : Agriculture,fore stry & fishing	05-39 : Production	41-43 : Construction	45 : Motor trades	46 : Wholesale	47 : Retail	49-53 : Transport & Storage (inc postal)	55-56 : Accommodation & food services	58-63 : Information & communication	64-66 : Finance & insurance	68 : Property	69-75 : Professional, scientific & technical	77-82 : Business administration & administration & support services	84 : Public administration & defence	85 : Education	86-88 : Health	90-99 : Arts, entertainment, recreation & other services	Total
E07000114	65	255	725	125	110	355	135	410	245	55	120	545	330	10	85	165	315	4,050
%	1.6	6.3	17.9	3.1	2.7	8.8	3.3	10.1	6.0	1.4	3.0	13.5	8.1	0.2	2.1	4.1	7.8	100.0

	<p>offsetting, are exempted from the offsetting requirements of the CORSIA, while retaining simplified reporting requirements. The requirement to monitor, report and verify CO₂ emissions from international aviation is thus independent from the offsetting requirement.</p> <p>The data reported by States will be used for the calculation of the CORSIA baseline (see question 2.17 for more details on CORSIA’s baseline) as well as for the calculation of the aeroplane operators’ offsetting requirements, where applicable.</p>
2.11	<p>Can an aeroplane operator have offsetting requirements, even if its State of registration does not participate in CORSIA offsetting?</p>
	<p>Yes. Because of the CORSIA’s route-based approach, an operator operating on routes between participating States would be subject to the offsetting requirements under the CORSIA, no matter whether its State of registration participates in CORSIA offsetting or not.</p>
2.12	<p>What would happen to the CORSIA emissions coverage if an operator of a non-participating State flies on the routes between participating States (e.g. fifth-freedom traffic right)?</p>
	<p>Because of the CORSIA’s route-based approach, these routes between participating States would be subject to the coverage of emissions offsetting requirements under the CORSIA. Thus, an operator of a non-participating State would be subject to offsetting requirements if it had a flight between two participating States, and emissions from such flights would be added to the coverage of CORSIA’s offsetting requirements.</p>
2.13	<p>What would happen to the CORSIA emissions coverage if a State without an operator undertaking international flights decides to participate in the CORSIA offsetting?</p>
	<p>States without an operator flying international flights are encouraged to participate in all phases of the CORSIA. If such a State decides to participate, international flights to and from that State to other participating States are additionally included for the CORSIA’s offsetting requirements, due to the route-based approach. The total international emissions covered by CORSIA offsetting would ultimately increase.</p>
	<p>Key design element 3: CORSIA offsetting requirements and eligible emissions units</p>
2.14	<p>What is offsetting and how does it work, in general?</p>
	<p>In general, offsetting is done through the purchase and cancellation of emissions units (see question 4.20), arising from different sources of emissions reductions achieved through mechanisms, programmes or projects. The buying and selling of eligible emissions units happens through the carbon market. The price of the emissions units in the carbon market is influenced by the law of supply (availability of emissions units) and demand (level of offsetting requirements).</p> <p>“Cancelling” means the permanent removal and single use of an emissions unit so that the same emissions unit cannot be used more than once. This is done after an aeroplane operator has purchased emissions units from the carbon market.</p> <p>For CORSIA, an aeroplane operator is required to meet its offsetting requirements by cancelling CORSIA Eligible Emissions Units in a quantity equal to its total final offsetting requirements for a given compliance period. CORSIA Eligible Emissions Units are to be determined by the ICAO Council, and up-to-date information on eligible units is made available on the ICAO CORSIA website (see question 4.21).</p>
2.15	<p>How are an aeroplane operator’s offsetting requirements calculated?</p>
	<p>Paragraph 11 of the Assembly Resolution A40-19 addresses the distribution of the total amount of CO₂ emissions to be offset in a given year among individual aeroplane operators. This is accomplished by introducing a dynamic approach for the distribution</p>