# Strategic Sites Masterplanning and Infrastructure Study

Paddock Wood Growth Follow-on Study



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# 1.0 INTRODUCTION

#### Overview

- 1.1 In November 2021, Tunbridge Wells Borough Council (TWBC) submitted their Pre-Submission Local Plan for examination. Key to the Local Plan were two strategic site allocations:
  - AL/CA1, AL/CA2 Tudeley Village
  - AL/CA3, AL/PW1 Land at east Capel and Paddock Wood
- 1.2 David Lock Associates (DLA) were commissioned by TWBC in July 2020 to prepare the Strategic Sites Masterplanning and Infrastructure Study to test the draft policies for strategic site allocations and provide a masterplanning evidence base for these allocations. These allocations and policies were:
  - ALFcr/CA1 Tudeley Village
  - AL/CA2 Land to east of Tonbridge/west of site for Tudeley Village
  - AL/CA3 Land at Capel and Paddock Wood (duplicate of AL/PW1)
  - AL/PW1 Land at Capel and Paddock Wood (duplicate of AL/CA3)
  - AL/PW2 Town Centre
  - AL/PW4 Land at the Memorial Field
- 1.3 This was submitted to TWBC in February 2021 and forms part of the evidence base for the Pre-Submission Local Plan. The submitted policies that were based on this work were:
  - Policy STR/SS3 Tudeley Village
  - Policy STR/SS1 Paddock Wood and east Capel
- 1.4 In November 2022, following Stage 1 and Stage 2 hearing sessions, the appointed Inspector for the Pre-Submission Local Plan set out initial findings, for the council to respond to. These findings requested the council consider significant changes to both major strategic allocations STR/SS3 and STR/SS1. These are set out in more detail below.

# Structure Plan Report Addendum

1.5 This report responds to the Inspector's findings. It updates and acts as an addendum to the Strategic Sites Masterplanning and Infrastructure Study with the latest baseline position, and considers how development at Paddock Wood could be undertaken in a sustainable and planned manner.



Figure 1: Location of proposed allocations in Paddock Wood

# **Pre-Submission Local Plan Examination**

- 1.6 The Inspector's Initial Findings of the Pre-Submission Local Plan recognised the difficulties in finding appropriate development land in a highly constrained borough. They found, however, that the previous strategy proposed was not sufficiently evidenced:
  - The allocation of Tudeley Village
  - The 'Option 1' Structure Plan which proposed development of up to 3,450 homes around Paddock Wood and required changes to the modelled flood plans (Flood Zone 2 and above). The Inspector determined that TWBC had not considered all alternatives before encroaching on modelled flood zones and that the Environment Agency's sequential test for development had not been satisfied.
  - The allocation of a significant amount of employment land at Paddock Wood, above the assessed need when taken borough-wide
- 1.7 In Tudeley Village, the Inspector was concerned about the required infrastructure for transport, the evidence for internalisation of trips and ability to deliver sustainable transport, the ability of 2,800 homes to support the level of proposed commercial floorspace, and deliverability of the housing trajectory. The high level of harm to the Green Belt and the

significance of the issues meant the Inspector did not find that exceptional circumstances for removal from the Green Belt had been justified.

- 1.8 The Inspector set out three options for consideration:
  - Provide additional information to justify the Tudeley Village allocation as submitted.
  - Modify the submitted Plan by making significant changes to the Tudeley Village allocation, and in doing so, seek to overcome the soundness issues identified.
  - Delete the allocation from the submitted Plan.
- 1.9 In Paddock Wood, the Inspector found that the proposed Structure Plan Option 1, which allocated 3,500 homes east and west of the town, had not applied the Environment Agency's sequential test appropriately, as a borough-wide assessment of alternative sites had not been undertaken prior to considering development within fluvial flood zones 2 and 3. The Inspector proposed pursuing Option 3, which removed all development from flood zones 2 and 3 to ensure soundness of the allocation.
- 1.10 In addition, the Inspector requested clarity on which parties and sites would be responsible for delivering key shared infrastructure, and for policies to be set out for each key site around Paddock Wood, responding to an overall framework, rather than a single policy.
- 1.11 The allocation of employment land in flood zone 2 and 3 to the north of Paddock Wood was found to have not considered other sites across the borough and did not provide a reasoned justification for their inclusion. Their inclusion is not linked to other parcels of development and areas of lower risk needed to be found.
- 1.12 TWBC have been asked to respond to these findings before proceeding with the Pre-Submission Local Plan to inspection.
- 1.13 For the purposes of informing a revised Local Plan, this report assumes the following:
  - Tudeley Village (STR/SS3) is removed as an allocation
  - Paddock Wood (STR/SS1) is revised and revisited in line with Option 3 of the Structure Plan,

# Response

- 1.14 This report has been prepared in response to the initial findings, as an evidence base document to support TWBC in refining their development strategy and the feasibility of development in and around Paddock Wood.
- 1.15 It primarily considers revisions to the previous Option 3 Structure Plan for Paddock Wood which excluded all development within Flood Zone 2 and above, to take into account updated baseline information, emerging proposals, and detailed comments from the Inspector's initial findings.

1.16 This report also considers and responds to the Inspector's comments on other matters particularly introducing more clarity on which site and developer is responsible for key infrastructure, and what is shared infrastructure that serves multiple sites. This is to support a more fine-grained allocation approach.

# Methodology

- 1.17 This study is intended to be read as an addendum to the 'Strategic Sites Masterplanning and Infrastructure Study' (February 2021). This was submitted as evidence to support the Tunbridge Wells Pre-Submission Local Plan in March 2021.
- 1.18 This addendum report excludes discussion of the previous proposed allocation of Tudeley Village, and concentrates solely on the draft strategic allocations to the east and west of Paddock Wood, with some land falling in Capel parish. It uses 'Option 3' as its masterplanning basis, set out on page 99 of the February 2021 report.
- 1.19 To inform an evidence base update and respond to the Inspector's comments, this study followed the below methodology to update the Structure Plan and its associated Infrastructure Framework:
  - 1. Baseline: a review of the evidence that supported the February 2021 report, with a view to establishing whether it a) remains valid and b) if there are significant enough changes to it that would materially alter the Structure Plan. Where new or revised evidence has emerged, this is detailed in this report. This stage was undertaken through a series of working meetings with TWBC, who co-ordinated key inputs such as education, highways, sports and leisure provision, and flood risk.
  - 2. Structure Plan: an update to the Option 3 masterplanning was undertaken, considering new evidence and adapting the layout and land use to respond. From this new residential capacities and infrastructure provision were determined. In key areas, informed by the new baseline evidence, supporting studies were prepared to inform the overall masterplan.
  - 3. Infrastructure Framework: an update was undertaken of Scenario 2 (Paddock Wood sites only) set out on p136 of the February 2021 report, in response to the masterplanning update to the Structure Plan.

# **Structure of Report**

- 1.20 In line with the methodology set out above, this addendum report sets out:
  - Baseline: a review of the previous baseline and key updates
  - Structure Plan: an updated structure plan for the allocations at Paddock Wood and east Capel. This is supported by detail studies where necessary.
  - Infrastructure Framework: an updated list of key infrastructure provision to support new development, should the sites be allocated and developed.

**David Lock Associates** October 2023

#### 2.0 **BASELINE**

#### **Review**

- 2.1 This chapter sets out the updated baseline position for the sites across planning policy, technical topics and physical features. This information informs the updated Structure Plan, and associated Infrastructure Framework.
- 2.2 The Strategic Sites Masterplanning and Infrastructure Study (February 2021) report sets out the detail of how the previous baseline position was amassed, through policy review, desktop research, site visits, and technical and community stakeholder engagement.
- 2.3 The updated baseline was reviewed in collaboration with officers from TWBC, who liaised with other key stakeholders to establish policy requirements in areas such as sports provision, education and flood risk.

# **Updated Baseline**

#### Flood Risk

- 2.4 The Inspector's comments on the February 2021 Structure Plan and options were focused on the need to avoid development within areas of flood risk. The recommendation to move forward with Option 3 ('No Development within EA-Designated Flood Zones') has formed the basis of this study.
- 2.5 Since publication of the February 2021 report, the Environment Agency (EA) has updated their flood risk assessment requirements with new modelling requirements for rainfall events and uplift due to climate change. In addition, TWBC and its neighbouring authority Tonbridge and Malling Borough Council have updated their flood modelling mapping with further detail. The modelling methodology has been agreed with the EA.
- 2.6 It is thus valid to incorporate this new modelling, with its increased uplift and rainfall scenarios into the updated study, to provide additional robustness.
- 2.7 Fluvial risk on the proposed allocation sites is from two separate sources:
  - From south to north, the Paddock Wood Streams flow through and create fluvial risk, especially in the south-west of Paddock Wood, and to the western border of the eastern allocation.
  - To the north of Paddock Wood, the Medway river can flood across a very wide area of flat, low-lying farmland, creating a flood risk that floods from north to south towards the northern edge of Paddock Wood.
- 2.8 Both sources of fluvial risk have been modelled separately. The Paddock Wood streams have been modelled by JBA Consulting on behalf of TWBC, and the Medway has been modelled for TMBC to inform Kent County Council as Lead Local Flood Authority (LLFA). Both sources of data have been combined in GIS to form a composite picture around Paddock Wood.

**David Lock Associates** October 2023

- 2.9 A fluvial flood risk scenario with a +37% allowance for climate change has been chosen for robustness. This is an upper range allowance for this river basin, designed to ensure essential infrastructure and 'highly vulnerable' (e.g. residential) development will be properly considered, within Flood Zone 2.
- 2.10 In addition revised Environment Agency guidance on the intensity of rainfall events and average annual rainfall has been included in the modelling.
- 2.11 This constraint of Flood Zone 2 +37% has been applied to both Paddock Wood streams and Medway data.
- 2.12 The change in flood risk boundaries will reduce the development capacity of the sites to the west of Paddock Wood, even when compared to the previous Option 3. This will have an effect on the level of social and transport infrastructure required, which is picked up in the following updated baseline sections.
- 2.13 The extent of fluvial flood risk on the site interacts with a surface water management approach. Surface water management cannot be accommodated in fluvial flood risk areas, in the likely case that both types of flooding events coincide. Much of the allocation sites are flat, and areas that are not at risk of fluvial flooding are likely to be developed. It is therefore key that adequate provision for surface water flood risk is made.
- 2.14 At this stage of masterplanning, a high-level approach has been adopted. It is assumed attenuation of surface water is undertaken as close to source as possible (following Sustainable Drainage System (SuDS) design principles), and as such will be attenuated within identified development parcels. Typically this can require around 10% of developable area dedicated to SuDS. On very flat sites close to the water table or adjacent to fluvial flood areas, attenuation basins may have to be shallower.
- 2.15 To account for this, the assumed average density will be dropped by 15%, from 35dph to 30dph.

#### Permitted Developments and Proposals

- 2.16 Since the February 2021 report, permission has been granted for employment land development at Swatlands Farm (22/01929/OUT). This is within the masterplanning site boundaries, and it broadly accords with the principles set out in the previous Structure Plan, albeit with a slightly increased developable land area.
- 2.17 Two outline planning applications (OPAs) have been submitted for the proposed allocated sites to the east of Paddock Wood (outside the Metropolitan Green Belt boundary), by Taylor Wimpey and Persimmon. Both are based on the same joint masterplan, with each application making reference to the other, intended to be brought forward in a co-ordinated manner.

2.18 This proposal is being considered by TWBC through the determination process. It has been prepared to respond to the parameters of the previous Structure Plan. As the Inspector's comments were primarily aimed at the western sites (NW/SW of Paddock Wood), the eastern sites are broadly unaffected by changes to the Structure Plan. As such, the revised Structure Plan will be aligned with the submitted OPAs to understand the overall effect on residential capacity and facility provision around Paddock Wood, and reflect what is likely to be delivered.

#### **Education**

- 2.19 Changes in residential capacity of the site require a revisiting of the need for new schools, both primary and secondary.
- 2.20 Secondary education need was previously identified as a 2FE (form entry) expansion of the existing Mascalls Academy (for which land was available) and an additional 6FE secondary school, to be provided at the eastern edge of Tudeley Village. With the potential removal of Tudeley Village from the revised Pre-Submission Local Plan, this provision now needs to be a) revised in light of reduced need and b) located within Paddock Wood's expansion sites.
- 2.21 Due to the revised capacity and updated forecasts, Kent County Council have confirmed a need for 3FE of additional secondary provision in Paddock Wood. This is below the typical 6FE requirement for a viable new secondary school, so masterplanning will need to consider potential solutions and examine available land.
- 2.22 Primary education provision requirements has been confirmed as a maximum need of 4FE, split between 2x 2FE schools.
- 2.23 Previous requirements to provide new schools in Tudeley Village and expand provision in Five Oak Green are no longer considered by this study due to the potential removal of the Tudeley Village allocation.
- 2.24 A full supporting study is contained with chapter 3 ('Structure Plan') of this report.

# Transport and Movement

- 2.25 The change in allocations and reduction in potential capacity on the sites at Paddock Wood have an effect on the required level of transport infrastructure provision. This is primarily focused on a reduction in the need for new highways construction.
- 2.26 As a basis, the masterplanning will proceed by modifying the 'Scenario 2' Infrastructure Schedule, which set out required infrastructure should only the Paddock Wood sites come forward. This is in response to the potential removal of Tudeley Village from the Pre-Submission Local Plan allocations.

- 2.27 Reflecting the priorities for enhanced sustainable transport options, the overall level of active travel and public transport provision remains unchanged. The masterplanning process revises alignments for these connections in line with revised development layouts.
- 2.28 Off-site highways provision has been re-examined as part of TWBC's Stage 3 highways modelling (undertaken by SWECO). This considers the updated capacity figures of the sites and tests off-site vehicle traffic mitigation measures across the local highways network.
- 2.29 The previous Scenario 2 infrastructure schedule excluded the Five Oak Green bypass, on the basis that it was primarily needed to support development at Tudeley Village.
- 2.30 The Tunbridge Wells LCWIP (Part 2) has developed detailed proposals for Paddock Wood, and was published after the February 2021 report. These broadly relate to the existing built up area and where connections can be made to the growth areas. As part of the previous study, liaison was undertaken with the LCWIP team to ensure that inter-urban routes and Paddock Wood infrastructure was aligned.

#### **Sports and Leisure Provision**

- 2.31 The change in residential capacity on the sites around Paddock Wood and revisions to flood risk boundaries mean that a re-examination of new and enhanced sports and leisure provision is required.
- 2.32 Previously, the Strategic Sites Masterplanning and Infrastructure Study set out a proposal that new indoor and outdoor sports facilities in Paddock Wood would be located at a combined Sports Hub, located in the south-west of the growth sites (in the preferred Option 1). Intensification of existing sites was explored as an option.
- 2.33 This preferred option of a sports hub has been revisited due to the following changes in the baseline position:
  - The need to provide land for a secondary school within Paddock Wood, previously located at Tudeley Village
  - Changes in the flood risk boundaries in the area of the proposed sports hub
  - A significant drop in residential capacity from the previous projected figure of 3,450 homes, meaning less provision of land is required in policy
- 2.34 Since the publication of the February 2021 Structure Plan, two outline planning applications for the land to the east of Paddock Wood have been submitted (see above) which does not include land allocated for sports provision, instead making reference to the previous draft Structure Plan, supporting the Pre-Submission Local Plan which had located it all in the west. To ensure that the town is adequately provisioned for sports facilities, both indoor and outdoor, a review of existing sites and opportunities to intensify them has been undertaken.

- 2.35 Stakeholder feedback with Paddock Wood Town Council has discussed the potential of sites in the town for intensification, including Putlands Leisure Centre and Green Lane sports ground.
  - Providing space for indoor facilities
  - · Providing additional outdoor spaces
  - Replacing some existing pitches with facilities that can be used more intensively (e.g. artificial pitches)
- 2.36 In addition, new land for sports pitches will be required within the growth areas, at a reduced level from the February 2021 Structure Plan due to the facilities provided within existing Paddock Wood and the reduced residential capacity.
- 2.37 A full supporting study and strategy is set out in chapter 3, 'Structure Plan'.

# **Employment Provision**

- 2.38 The Inspector found that the previous Pre-Submission Local Plan did not have sufficient justification for the allocation of all the employment land at Paddock Wood. It was considered that the borough was over-providing land for employment purposes based on its own evidence base.
- 2.39 The need for employment land at Paddock Wood is distinct and clear, with a local market requirement established through the supporting SQW study commissioned as part of the February 2021 report. However, it is considered prudent by TWBC to reduce the amount of land allocated in a revised draft, not least due to the flood risk presented on all potential employment sites in Paddock Wood.
- 2.40 Given the recently permitted development at Swatlands Farm (details set out above), this means reconsideration is limited to the previous layouts set out in the Structure Plan of the site to the north (Keylands) or to the east of the railway line at Transfesa Road. These need to consider the comments of the inspector regarding allocation of developable land within Flood Zones 2 and 3.



Figure 2: Approved layout plan for Swatlands Farm (22/01929/OUT)

- 2.41 The Inspector's primary concern in relation to the employment allocations is with them being in higher flood risk zones. Along with the residential and community proposals, he does not consider the location of new employment uses in areas at higher risk of flooding as justified.
- 2.42 The Inspector also notes that:
  - "Given that the employment allocations are not linked to other parcels (i.e. they are coming forward in isolation by separate developers) what is the justification for their redevelopment?" (ID-012. para. 49)
- 2.43 To address the latter point, it is necessary to review and, where necessary, provide further evidence to demonstrate that the scale of employment land provisions is appropriate for the amount of housing growth and that local job growth will be achieved in line with planned housing growth to ensure a balanced and sustainable settlement. This will provide a basis for considering potential sites in line with the 'sequential test' and, if necessary, the 'exception test' in relation to development in flood risk areas.
- 2.44 TWBC have assessed that there is insufficient employment land available in the borough should projected Flood Zone 2 (plus climate change uplift) land be excluded, activating the exception test to develop on Flood Zone 2 in these circumstances.

- 2.45 An alternative approach has been considered by TWBC, for allocation of some land within the north-western parcel at Paddock Wood outside of Flood Zone 2. Although technically possible to undertake this, it has been rejected as a feasible option for developable employment land due to:
  - Proximity to proposed housing, especially given the demand for large, trafficintensive B8 units in Paddock Wood
  - Access difficulties, requiring HGV access to be shared with new residential homes in the new allocation
  - Landscape issues, being very visible from the Medway valley
  - Deliverability issues, as the landowner has not promoted it for employment uses and is pursuing a residential-led use
- 2.46 As a result the previously promoted sites at Paddock Wood in flood zone 2 can be considered, assuming development within gross site boundaries is limited to Flood Zone 2. On this basis masterplanning of parcels of land within Land east of Transfesa Road has been considered in this report.
- 2.47 The full methodology on employment land provision will be published in a TWBC Economic Development Topic Paper.

# **Previous Baseline**

- 2.48 Other matters arising in the previously assessed baseline are still considered valid, and do not require changes to the Structure Plan (although they will continue to inform design decisions driven by other factors). This includes:
  - Land ownership and control
  - Permitted growth (other than the additions outlined above)
  - Air quality and noise
  - Community provision (other than the changes outlined above)
  - Ecology
  - Green infrastructure
  - · Health infrastructure
  - Housing
  - Town centre
  - Heritage
  - Landscape
  - Minerals
  - Sustainability
  - Utilities
- 2.49 The previously submitted draft Strategic policies and proposed allocation policies are undergoing a review, to be informed by the results of this evidence base report.

2.50 This report will inform an updated viability assessment, which will replace the previous viability and market commentary baseline.

# 3.0 STRUCTURE PLAN

#### **Overview**

3.1 This chapter sets out an updated Structure Plan that responds to the change in baseline conditions and the preferred approach highlighted by the Inspector's comments on the Pre-Submission Local Plan.

# **Key Constraints and Opportunities**

- 3.2 Following the process of updating the baseline position with TWBC and other stakeholders, key physical site constraints, context and opportunities were plotted on an updated plan (Figure 2). As with the previous Structure Plan, key features include:
  - Fluvial flood risk, with an updated set of data for both the River Medway and Paddock Wood streams
  - Views and the need for consideration of edges, especially in the west, north and from the AONB
  - Active and sustainable travel links and opportunities into the existing town and surrounds
  - Existing sports facilities with the potential for intensification
  - Setting of heritage assets and location of existing green infrastructure networks

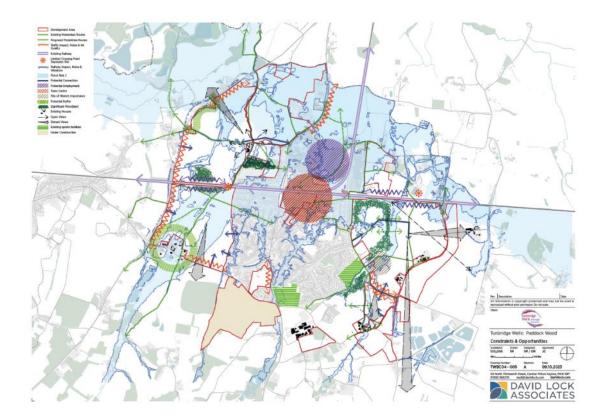


Figure 3: Constraints and key design considerations

3.3 Key masterplanning opportunities and design parameters were updated from the February 2021 report, considering the potential for development, connections, and revisions due to baseline changes. These are shown in Figure 3.

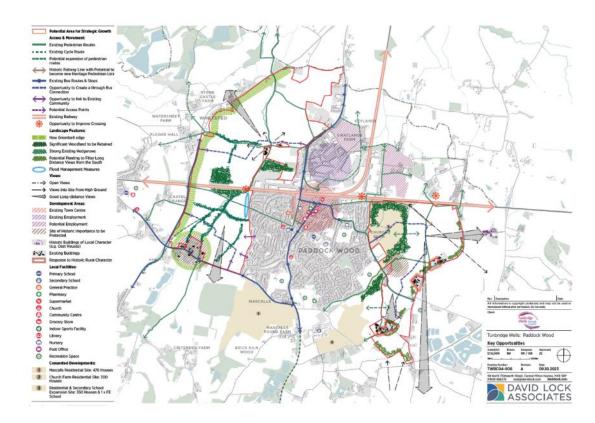


Figure 4: Key design opportunities and parameters

# **Structure Plan**

3.4 The updated Structure Plan is set out in Figure 4. This sets out the key development parameters for the proposed allocations, and key interventions and connections for the wider area.

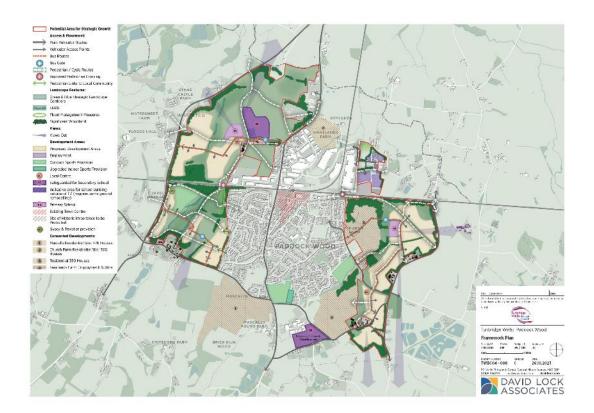


Figure 5: Structure Plan for Paddock Wood

- 3.5 When compared to the previous Option 3 Structure Plan, a number of significant changes have been made in response to the Inspector's findings and change in baseline:
  - No residential or employment development within Flood Zone 2 extents plus a higher level climate change uplift
  - A reduction in the developable land for new homes in the north west
  - A safeguarded site for a new 6FE secondary school located in the north west
  - The previous sports hub has been removed and replaced with a smaller sports facility, some residential development
  - Intensified sports provision at two existing locations Putlands and Green Lane
  - A reconfiguration of facilities, connections and developable land in the east to match the submitted OPAs east of Paddock Wood and at Swatlands Farm
  - Realigned connectivity to consider the change in developable areas
  - Revised employment land allocation
- These changes have resulted in a reduction of potential residential capacity. Based on a lowend average density of 30dph, and a high-end density of 32dph, total capacity is now 2,373 to 2,532 homes, based on a total residential developable area of 79.13ha. These densities are reduced compared to typical 35dph densities used for parcel testing due to the approach taken toward handling surface water drainage (see Baseline section). More detail is set out later in this chapter under Land Use and Capacity.

#### **Green and Blue Infrastructure**

- 3.7 The interlinked green and blue infrastructure provision on the sites is shown in Figure 5. In the west, this infrastructure is primarily for the purposes of sustainably and resiliently managing flood waters and water flows, and providing co-benefits in terms of open space provision, natural setting for development, and habitats for increased biodiversity. In the east, green infrastructure is focused around creating an appropriate setting for development, providing quality open space for recreation, and ensuring habitats for biodiversity net gain. This approach strongly reflects the two distinct characters of Paddock Wood's planned expansion.
- 3.8 Surface water management, as noted previously, is to be managed within development parcels, outside of fluvial flood zones.
- 3.9 Other principles from the previous Structure Plan are retained, with areas to the west of the town seeing a significant increase in the amount of land set aside for open space, due to the approach taken to mitigate flood risk in line with the Inspector's initial findings. The previous proposal to provide wetland habitats and a destination park for nature and recreation still remain.
- 3.10 The previous Structure Plan proposed a range of floodwater management measures, including embankments, conveyancing enhancements and other approaches. Due to the approach taken to remove all development from Flood Zone 2 (plus uplift) these are no longer necessary for development to be considered. However, the placement of primary streets on causeways with culverted channels over the flood plain (as before) will need to be carefully modelled to ensure it has no effect on the flood plain and floodwater storage areas.
- 3.11 Schools in the northwest have been located so that their playing fields form an extension of the green infrastructure network. Secondary school playing fields have been placed in Flood Zone 2 areas (noted below).

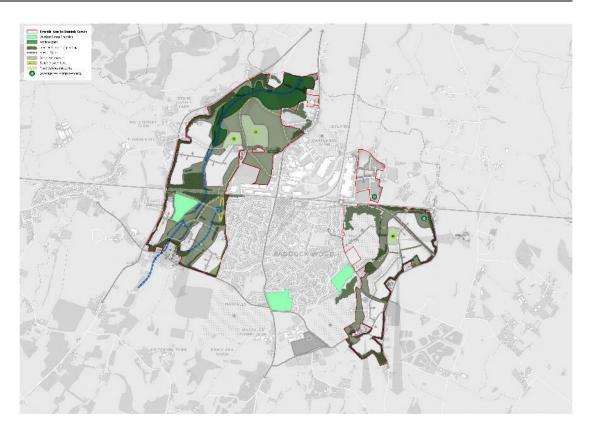


Figure 6: Green and blue infrastructure provision

# **Movement**

- 3.12 Sustainable mobility is prioritised in the Structure Plan, and is broadly similar to the approach adopted by the previous Structure Plan. Active travel connections into the existing town are set out, aligned with the corridors identified in the Paddock Wood LCWIP. The new neighbourhoods are served by key primary corridors running E-W (in the west) and N-S (in the east), with a finer grain of active travel networks providing local connectivity.
- 3.13 The addition of a new secondary school to the northwest (see study on options in following section) places greater importance on the north-south movements across the railway line, particularly for active travel. Secondary schools are significant destinations, and thus improvements to active travel provision on the existing Maidstone Road bridge, and a new north-south bridge between the western sites will be essential to ensuring the school can be accessed.
- 3.14 The primary street network has been slightly realigned to reflect changes in development area, but retain their design to allow an electric hopper bus loop to operate via bus gates, serving the expansion areas and connecting them to the town centre, northern employment area and railway station. Such routes would facilitate future sustainable transport innovations.

- 3.15 To the east of the town, bus and active travel links can be achieved through the permitted Countryside development; this route is feasible for smaller buses. This approach is confirmed in the outline planning application submitted for this site.
- 3.16 A proposed town bus route (WSP) aligns with the proposed network of connections set out in this Structure Plan.



Figure 7: Mobility networks and infrastructure improvements

# **Community Wellbeing**

3.17 There has been change to the spatial layout of the main items of community infrastructure. Local centres, which would provide shops and community spaces commensurate with the size of their neighbourhoods, have been slightly relocated to ensure they retain walkable catchment from their surrounding homes.

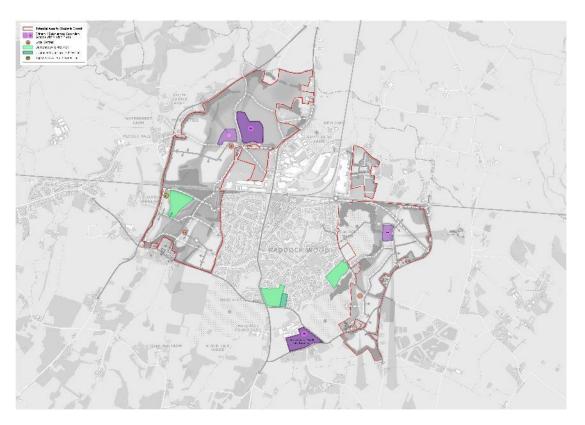


Figure 8: Community facilities provision

- 3.18 The previous sports hub has been changed to a provision for outdoor sports playing fields within the western areas, and existing sites within Paddock Wood are upgraded with new provision. A detailed study is presented below.
- 3.19 A new secondary school is located in the northwest of the town. The site, up to 7.6ha, is suitable to accommodate a 6FE school with potential to expand to 7 or 8FE if needed in the long-term. A detailed study of location and provision options is set out below.
- 3.1 Policy also requires provision of a serviced Gypsy & Traveller site of 3 pitches. Location of this facility remains flexible within the Structure Plan, however an indicative location, pending detail studies on appropriate access, has been placed close to the A228 in the northwestern quadrant.

# Secondary school provision

- 3.2 The additional need to accommodate secondary school provision for the growth within Paddock Wood has been a major consideration in updating the Structure Plan. Kent County Council have assessed a need for an additional 3FE of secondary education provision arising from the allocations and their anticipated capacity. To accommodate this, there are two options:
  - Expansion of an existing school in this case Mascalls Academy in the south of Paddock Wood, as the only existing secondary school in the town. This would, when

- added to other growth planned at the school, make it a 12FE school and one of the largest in the county.
- A new school within the growth sites. To be viable, secondary schools would need to be 6FE. Additional funding would need to be sourced to ensure capital funding of a school, as the growth at Paddock Wood is only projected to need 3FE.
- 3.3 Both options present challenges and opportunities.
- 3.4 Expansion of the existing Mascalls site is contingent on availability of land, operational issues of running such a large school, and willingness by the academy trust to undertake such expansion. It is likely that this would entail construction of an entirely new school on expansion land, and then the demolition of older buildings once this is complete. This would need substantial capital funding to complete. Issues would also arise spatially from a concentration of provision in one location.
- 3.5 Land may be available for such an expansion, provided by an adjacent house builder landowner. TWBC are working to confirm whether this would be sufficient, and whether operational issues can be satisfied to render this option feasible.
- 3.6 The alternative, a new school within the growth sites would present different challenges. It would require land for a minimum of 6FE provision, and requires transport infrastructure so that pupils can get to school by sustainable modes. Although the large playing fields required for secondary schools may be located within Flood Zone 2 areas (1 in 1000 annual chance of flooding), buildings need to be located in Flood Zone 1 (less than 1 in 1000 chance).
- 3.7 A 6FE secondary school could be constructed in a phased manner, with 4FE initially provided with expansion space for an additional 2FE retained.
- 3.8 A new 6FE secondary school site needs to be a minimum of 6ha, and ideally up to 7.5ha to comply with site guidelines set out in the Department for Education's BB103 space guidance. Up to 7.5ha also ensures that any future expansion beyond 6FE in the longer-term could be accommodated more feasibly.
- 3.9 This study has considered two location options for the secondary school within the growth sites, considering flood zones, accessibility and co-location with other facilities.
  - Option 1: a secondary school located in the south-west of Paddock Wood, adjacent to the A228
  - Option 2: a secondary school located in the north-west of Paddock Wood, adjacent to a planned local centre and a potential primary school

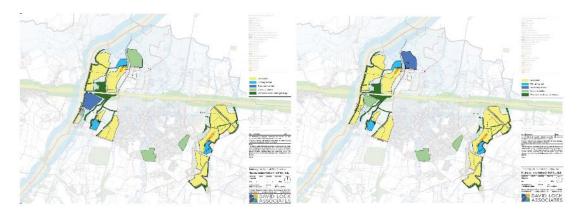


Figure 9: Option 1 (left) and Option 2 (right) masterplanning concepts

- 3.10 Option 2 is the preferred approach and has been incorporated into the Structure Plan. This is due to it performing more highly on a number of measures:
  - Land use and capacity: Option 2 maximises the overall capacity of the growth areas by making more efficient use of land through the location of playing fields in Flood Zone 2, and enabling more accessible development parcels that can be served by common infrastructure.
  - Co-location of facilities: Option 2 co-locates with a local centre, primary school and a node of active travel routes, meaning it can provide additional vibrancy and activity at this location to maximise placemaking potential.
  - Sustainable travel potential: Option 1 is located next to a major road and is distant from a significant amount of growth in Paddock Wood. Although Option 2 is also located at the edge of the town, it is located more closely to a larger quantum of planned growth, and at the node of a range of active travel routes. Option 2 is north of the railway line, which means that improvements to north-south active travel infrastructure will be essential to successfully realising this option.
- 3.11 A further supporting study has tested Option 2, to determine whether the space requirements for secondary school buildings can be accommodated within the modelled Flood Zone 1. This has taken site ground area requirements set out in the DfE's BB103 guidance documents for a 6FE secondary school and tested whether this can be accommodated within Flood Zone 1 on the suggested site in the northwest.
- 3.12 The initial feasibility study indicates that the site would need minor remodelling to raise some land out of the modelled Flood Zone 2 (plus uplift). However it is possible that with detailed design and configuration this may not be necessary. Detailed site design and modelling would be required in all instances.
- 3.13 An alternative layout could place the buildings both primary and secondary schools to the west of the stream, and playing fields for both schools on the flood zone 2 land to the east.

  This could avoid the need to remodel any land, but would require a bridge link between the

main school buildings and their playing areas over the Paddock Wood stream that runs south to north.



Figure 10: Alternative schools arrangement

3.14 As a result of this options-based approach, two safeguarded secondary allocation areas are shown on the Framework Plan, and the safeguarded land within the northwestern parcel is in place in the instance that the feasibility work for Mascalls expansion (currently ongoing) draws a negative conclusion.

# Sports and leisure provision

- 3.15 A key aspect of the previous Structure Plan and Infrastructure Framework was the focus on provision of new sports and leisure facilities to support growth and enhance the town's provision. This responded to needs identified in the Infrastructure Delivery Plan, which informed the masterplanning that led to the February 2021 report. This plan located the new provision at a single 'hub' facility in the southwest of the growth areas.
- 3.16 In light of the revised overall approach to growth, changes in flood risk information, the need to provide a new secondary school, and a reduced overall capacity of the growth sites, a different approach has been adopted to maximise improvements to provision for the town. This approach is providing improvements to existing facilities as well as new provision of outdoor sports facilities within the growth sites. Such an approach balances the need for

improvements with the need to provide appropriate land for residential development that can help viably support these improvements and provide contributions.

- 3.17 There are three key aspects to sports and leisure provision arising from growth:
  - The need for new indoor sporting facilities to complement and improve Putlands Leisure Centre, potentially including a new swimming pool for the town
  - The need to provide land for outdoor sporting facilities in line with TWBC's Open Space policies
  - Whether existing land that provides outdoor sporting facilities within Paddock Wood
    is being used to best effect, and whether changes to existing sites could provide
    additional capacity for sports that can serve both the existing town and new growth
- 3.18 A review of existing open spaces and sports facilities within Paddock Wood was undertaken to determine which sites had potential for intensification and improvements.

Table 1: Appraisal of existing sports provision in Paddock Wood

Name	Size (ha)	Pros	Cons
Memorial Park	2.3	Accessible by a variety of modes of travel	<ul> <li>No existing sports provision</li> <li>Location hosts community centre</li> </ul>
Putlands	5.0	<ul> <li>Accessible by a variety of modes of travel</li> <li>Main leisure centre already in this location</li> <li>Existing centre in need of improvement</li> </ul>	<ul> <li>Lots of existing provision, change would cause disruption</li> </ul>
St. Andrew's	1.9		<ul><li>Poor access</li><li>Local park character</li><li>Small</li></ul>
Green Lane	3.4	<ul> <li>Near new homes in the east</li> <li>Accessible by a variety of modes of travel</li> <li>Not very intensively used at present</li> <li>Existing sports provision</li> </ul>	<ul> <li>Potential impact on existing residents</li> </ul>

3.19 As a result of this high-level appraisal, Putlands and Green Lane were taken forward to design stage to understand how much additional capacity could be incorporated.



Figure 11: Potential upgrades to existing sports sites

3.20 The design concept sets out the following potential for provision changes at the existing sites:

Table 2: Potential provision changes at existing sites

Site	Existing	Proposed	
Previous		Indoor sports centre with 6x25m	
'Sports Hub'		pool, gym, changing areas,	
proposal (for		sports halls and studio rooms	
reference)			
		Football:	
		2x U9/10	
		2x U11/12	
		1x U13/14 2x Senior	
		ZX Seriiui	
		Rugby: 1x senior	
		Cricket: 1x senior (overlap with	
		rugby and U9/10 football pitches)	
		Netball/Tennis: 6x	
		·	
		4G Astro Pitch (artificial, suitable	
		for football and other sports): 1x	
		Trim Trail Exercise Stations	
Putlands	Existing indoor leisure centre with	Existing indoor leisure centre with	
	changing facilities	changing facilities	
	4 lane athletics track	Indoor sports centre with 4x25m	
		swimming pool, gym, changing	

	Lawn bowls	areas, sports halls and studio
		rooms
	Football: 1x senior	
		6 lane athletics track
	Rugby: 1x senior (undersized)	
		Lawn bowls
	Skatepark	
	'	4G Astro Pitch (artificial, suitable
		for football and other sports): 1x
		Netball/Tennis: 4x
		,
		Larger Skatepark
Green Lane	Changing pavilion	Expanded changing facilities
	and the second s	
	Football:	Football:
	1x 5-a-side	2x senior
	1x senior	
Remaining		Football
difference		2x U9/10
from Sports		2x U11/12
Hub proposal		1x U13/14
man proposar		1x senior
		2x Tennis/Netball courts
		2
		Rugby: 1x senior
		Cricket: 1x senior

- 3.21 In addition to the intensification of the existing sites, 4.5ha of land in the southwest of the growth areas is allocated for formal sports provision. This provision is in line with the required land provision set out in TWBC's Open Space Policy, but only for the western expansion sites. The previous 9.2ha allocated covered all expansion sites, including those in the east, but did not provide any upgrade or improvements to existing facilities within the town.
- 3.22 This land should aim to accommodate a reasonable proportion of the difference in provision between the Feb 2021 Sports Hub proposal and the new provision that can be accommodated within the existing sites (as set out in grey at the bottom of Table 2).
- 3.23 Given the reduced level of planned growth this previous level of provision may not be necessary. TWBC is progressing discussions with Sport England on the required and appropriate level of provision for the town.
- 3.24 It is anticipated that trim trail exercise stations can be accommodated successfully throughout the extensive green open space network created within the growth sites in the west and east.
- 3.25 The design study below sets out how the area for sports in the southwest could be successfully laid out. As well as a clubhouse that includes changing facilities, this demonstrates provision of:
  - Football

- o 2x U9/10
- o 1x U11/12
- o 1x senior
- 4x Tennis/Netball courts
- Rugby: 1x senior
- Cricket: 1x senior (overlap with rugby and football pitches)

Adult football pitch (grass)

Adult football pitch (grass)

July 7 foreithal pitch (grass)

July 7 foreithal pitch (grass)

Adult rugby pitch (grass)

Car park with circa IZD car parking spaces.

In Idiative primary street alignment.



Figure 12: Test layout for outdoor sports provision in growth sites

- 3.26 This approach satisfies the vast majority of provision set out in the original Structure Plan. Further intensification of use could occur, for example by the replacement of the grass football pitch with an artificial surface, which can be used for more hours each week, supporting greater levels of participation and provision.
- 3.27 Town-wide, the reduction in additional provision over the previous Sports Hub proposal is as follows:
  - Football
    - o 1x U11/12
    - o 1x U13/14
- 3.28 There is provision of an additional 2x tennis/netball courts when compared with the previous Sports Hub proposal.
- 3.29 No provision has been made for dual/community use of the sports facilities at the proposed secondary school, due to the uncertainty as to whether this could be secured in practice.

This approach could be pursued to further augment the sports and leisure provision for the town overall.

3.30 In addition, the Memorial Ground football pitch is undergoing an upgrade to allow dual-use, which has not been included in this study, providing further uplift in overall provision.

# **Land Use and Capacity**

3.31 A revised land use budget, based on the Structure Plan, has been produced to assess capacity of the site to support new development.

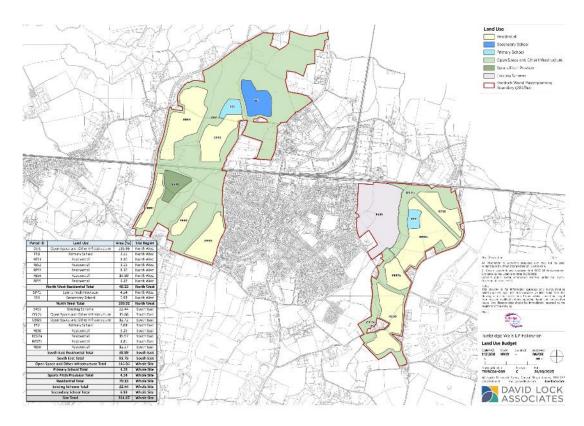


Figure 13: Land use budget for Structure Plan

3.32 A combined land use budget for the sites is presented below.

Table 3: Land use budget and capacity, combined sites

Land Use	Area (ha)	Capacity
Residential	79.13	2374 homes (@30dph)
		2532 homes (@32dph)
Primary School	4.59	2x 2FE
Secondary School	6.93	1x 6FE
Sports Pitch Provision	4.54	See sports provision study
		above
Open Space and Other	143.29	
Infrastructure		
Employment	4.25ha	21,300m2 @ 0.5 FAR

3.33 Development is grouped into northwest and southwest sites (split at the railway line), and northeast and southeast sites (split at a developer land control boundary to provide clarity

on delivery in each parcel), with employment set out separately as part of the above overall budget. The capacity of each of these is set out below.

Table 4: Land use budget and capacity, northwestern site

NORTHWEST Land Use	Area (ha)	Capacity
Residential	24.17	725 homes (@30dph)
		773 homes (@32dph)
Primary School	2.55	1x 2FE
Secondary School	6.93	1x 6FE

Table 5: Land use budget and capacity, southwestern site

SOUTHWEST Land Use	Area (ha)	Capacity	
Residential	16.06	482 homes (@30dph)	
		514 homes (@32dph)	
Sports Pitch Provision	4.54	See sports provision study	
		above	

Table 6: Land use budget and capacity, northeastern site

NORTHEAST Land Use	Area (ha) Capacity	
Residential	21.82	654 homes (@30dph)
		698 homes (@32dph)
Primary School	2.04	1x 2FE
Sports Pitch Provision	-	See sports provision study
		above

Table 7: Land use budget and capacity, southeastern site

SOUTHEAST Land Use	Area (ha)	Capacity
Residential	17.08	512 homes (@30dph)
		546 homes (@32dph)
Sports Pitch Provision	-	See sports provision study
		above

#### 4.0 INFRASTRUCTURE FRAMEWORK

#### **Overview**

- 4.1 This chapter presents an updated infrastructure framework, necessary for the successful delivery of the strategic growth sites at Paddock Wood.
- 4.2 The infrastructure framework enables the testing of the allocations for viability purposes, to provide confidence, at this stage of planning, that they are viable and deliverable.

# **Key Revisions**

- 4.3 The revised Infrastructure Schedule is based on Scenario 2, presented in the February 2021 Strategic Sites Masterplanning and Infrastructure Study. Scenario 2 set out the required infrastructure should only the Paddock Wood sites come forward. With the potential removal of Tudeley Village from the Local Plan strategy, this forms the basis for the updated framework and infrastructure schedule.
- 4.4 Within Scenario 2, viability testing was carried out for the previous report based on Option 3 (capacity of 2840 homes). This schedule has been revised based on the updated Structure Plan and anticipated level of development.
- 4.5 Key revisions to the schedule from the previous Scenario 2 schedule are:
  - A reduced number of homes (2532) based on the anticipated site capacity, and a reduced delivery rate to 250 homes/annum. This is based on 5 developer outlets, each delivering 50 homes per year. These are anticipated to be 2x in the east, 2x in the northwest, and 1x in the southwest.
  - Updated education provision for primary and secondary schools
  - Updated items for sports provision, based on the strategy of enhancing existing facilities set out, and a smaller provision of playing fields on-site
  - Updated measurements based on the Structure Plan
  - Revised off-site and on-site active travel provision, in line with Paddock Wood LCWIP
- 4.6 Anticipated high-level costs have been revised from the 2021 figures where possible.

# **Schedule and Key Infrastructure Plan**

**Table 8: Infrastructure Schedule** 

No	Infrastructure Item	Site / Off Site	When?
	Strategic Transport		
	Highway Infrastructure		
1	Colts Hill Improvements	Off Site	Medium
2	A228 Whetsted Road/A228 Bransbridges Road/B2160 Maidstone Road roundabout	Off Site	Short

_	A228 Maidstone Road / Whetsted Road priority	Off Ste	Short
3 4	junction; A228 Maidstone Road / B2017 Badsell Road (Colts Hill) roundabout	Off Site	Short
5	B2017 Badsell Road / B2160 Maidstone Road signalised junction;	Off Site	Short
6	B2160 Maidstone Road / Commercial Road priority junction	Off Site	Short
7	Shuttle signal Bridge Paddock Wood High Street	Off Site	Medium/Long
	Internal primary street	East	Short/Medium/Long
	Internal primary street between the A228 and B2160 Maidstone Road	North West	Short/Medium/Long
8	Roundabout Access with A228	North West	Short
9	Priority access with Maidstone Road	North West	Short
	1x Road/bus/cycle/ped 'causeway' over floodplain	North West	Short
	Internal primary street	South West	Short/Medium/Long
10	Access with A228	South West	Medium
	Access with Badsell Road	South West	Short/Medium
11	2x Road/bus/cycle/ped 'causeways' over floodplain	South West	Medium
	Bus / cycle / ped 'causeway' to Countryside	East	Short/Medium
12	Crossing on the A228	Off Site	Short
	Sustainable Transport		
	Pedestrian/Cycle Route to Tunbridge Wells - A228 Route	Off Site	Medium
	Pedestrian and cycle improvements - Stantec assumed upgrades and PJA presentation routes	Off Site	Short
	Cycle storage improvements at Paddock Wood Station	Off Site	Short
	Proposed cycleway/footway routes through site	East	Short
	3m shared cycleway/footway along internal link road	East	Short/Medium/Long
	Bus stops on site along internal road	East	Short/Medium
	Hop Pickers Line integration to the Pedestrian and cycle infrastructure.	East	Short
	Proposed cycleway/footway route	North West	Short
	3m shared cycleway/footway along internal link road	North West	Short/Medium/Long
	Bus stops on site along link road	North West	Short
	Pedestrian/cycle Bridge across Railway	North West/South West	Medium

3m shared cycleway/footway along internal link road	South West	Short/Medium/Long	
Bus stops on site along access road	South West	Medium	
New bus route subsidy support (5 years)	Off Site	Short/Medium/Long	
Pedestrian/cycle route through site	South West	Medium	
Improvement to NE existing pedestrian/cycle bridge over Railway	Off Site	Long	
Travel Plan contribution	Paddock Wood All	Short/Medium/Long	
Utilities			
Electricity - New Connections	Paddock Wood All	Short/Medium/Long	
Electricity - Diversion of Existing Utilities	Paddock Wood All	Short	
Gas - New Connections	Paddock Wood All	Short/Medium/Long	
Gas - Diversion of Existing Utilities	Paddock Wood All	Short	
Telecoms - New Connections	Paddock Wood All	Short/Medium/Long	
Telecoms - Diversion of Existing Utilities	Paddock Wood All	Short	
Water - New Connections	Paddock Wood All	Short/Medium/Long	
Water - Diversion of Existing Utilities	Paddock Wood All	Short	
Sewage Works Upgrade	Off-Site	Medium/Long	
Foul Water - New Connections	Paddock Wood All	Short/Medium/Long	
Foul Water - Diversion of Existing Utilities	Paddock Wood All	Short	
Electric vehicle infrastructure	Paddock Wood All	Short/Medium/Long	
Other			
Groundworks	Paddock Wood All	Short/Medium/Long	
SuDS	Paddock Wood All	Short/Medium	
Climate Change Adaptation per Unit	Paddock Wood All	Short/Medium/Long	
3 Pitch Gypsy & Traveller Site	Paddock Wood All	Medium	
Education			

4FE primary provision, as 2x2FE - costs done per pupil place	Paddock Wood All	Medium	
4FE Contribution towards new secondary school (on site)	Off Site	Medium	
Public Open Space			
Allotments			
Allotment provision	Paddock Wood All	Short/Medium/Long	
Amenity			
Amenity space	Paddock Wood All	Short/Medium/Long	
Children's Play			
Children's Play area capital	Paddock Wood All	Short/Medium/Long	
Other Open Space			
Sports pitches contribution (per Open Space SPD)	Paddock Wood All	Short/Medium/Long	
Community			
Health provision			
Primary Care contribution	Off Site	Short/Medium/Long	
New health centre facility	Off Site	Long	
Indoor Leisure Facilities			
Indoor Sports centre inc. pool - Dry side fitness facilities, extension to Putlands SC - 4 lane pool, 4-court hall, health/fitness gym, studio	Off Site	Medium	
Upgrades to Putlands - all-weather pitch, 4x tennis/netball	Off Site	Medium	
Upgrades to Green Lane - pavilion, rugby, football	Off Site	Medium	
Athletics track upgrade to make the existing entire track 6 lane	Off Site	Medium	

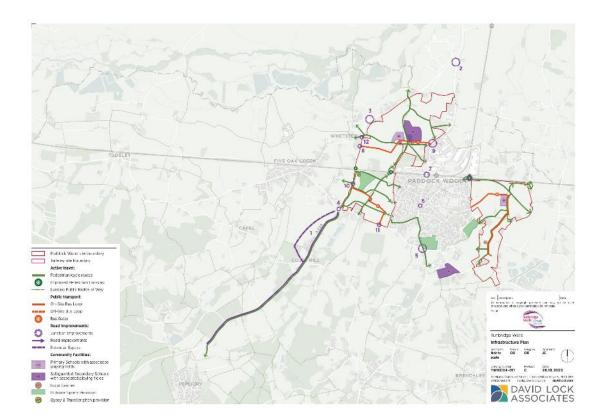


Figure 14: Infrastructure provision for Paddock Wood sites