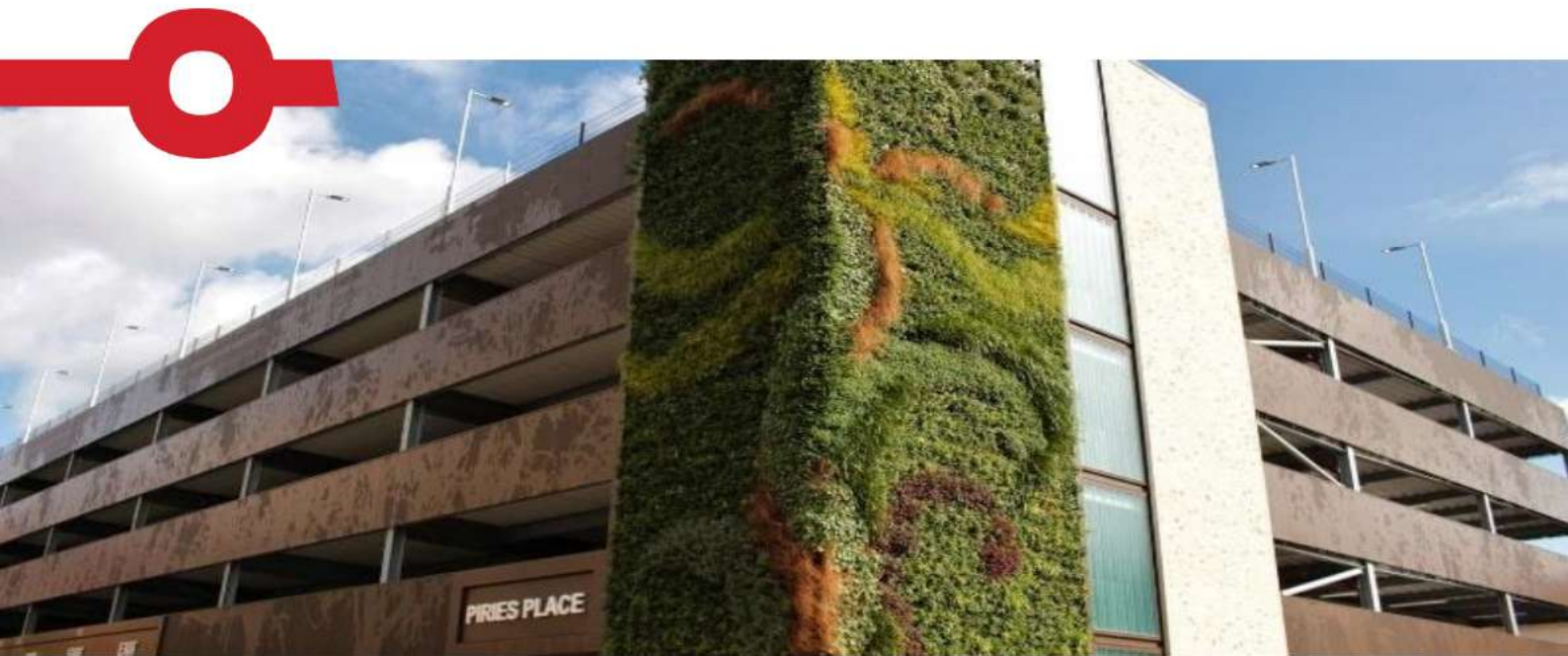


PARKING AND STREET DESIGN STUDY REPORT



HORSHAM PARKING & STREET DESIGN

PARKING AND STREET DESIGN STUDY REPORT

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1. INTRODUCTION

1.1 Overview

1.1.1 SYSTRA Ltd (SYSTRA) has been commissioned by Horsham District Council (HDC) to conduct a review of the current vehicle parking standards which are applicable to new development proposals within Horsham District. The Local Highway Authority is West Sussex County Council (WSCC), who has produced the parking standards which currently apply for developments in Horsham district.

1.1.2 It is understood HDC requires a wide-ranging assessment of current good practice in comparable parts of the UK in relation to parking standards themselves, their physical form within developments and the street scene, and an appraisal of the needs of Horsham residents and visitors, to enable a more tailored approach to vehicle parking to be considered.

1.1.3 This report incorporates an analysis of parking standards for comparable local authorities, observations from site visits to various areas of Horsham district, examination of examples of current street design as applied within the District, and an analysis of the relationship between parking provision and trip generation, providing an indication of the impacts of increasing the recommended parking provision.

1.2 Report Structure

1.2.1 Following this introductory section, the remainder of this report is structured as follows:

- **Section 2: Background Research & Review** – examines available data, including case studies from recent planning applications, to establish the features of good practice in relation to parking for private vehicles, Electric Vehicle (EV) charging provision, bicycles, accessible parking and specific provision for care homes.
- **Section 3: Relationship with Trip Generation** – Examines the relationship between parking and the level of vehicle trip generation, using the TRICS database to compare the number of trips generated with the number of parking spaces available.
- **Section 4: Site Visit & Observations** – Summarises observations of existing parking behaviour with accompanying photographs.
- **Section 5: Previous Planning Applications** – Provides comments on identified previous planning applications, and associated questions and concerns raised by consultees, members and officers
- **Section 6: Street Design Examples and Analysis** – Considers different examples of existing street design in the District with regard to parking provision.
- **Section 7: Summary & Conclusion** – Sets out the key findings of the report alongside key issues and opportunities.

2. BACKGROUND RESEARCH & REVIEW

2.1 Overview

2.1.1 This section encompasses the background research conducted to inform this report, including a comparison with the WSCC parking standards with those in similar locations to Horsham.

2.1.2 SYSTRA has also conducted an analysis of the parking standards for spaces with EV charge points and care homes across these local authorities, as specifically identified by HDC within the project brief.

2.2 Current WSCC Standards – Residential Provision

Approach to Standards – “Maximum”, “Minimum” and “Recommended”

2.2.1 It is noted that WSCC takes a slightly different approach to a majority of the local authorities which have been identified for the purposes of these exercises in relation to how car and cycle parking standards are defined. For residential car parking provision, and non-residential car and cycling provision, it is stated within the WSCC Guidance (WSCC Guidance on Parking at New Developments) at page 8 that the stated standards should be used as an initial guide for developers, who should then undertake a site-specific assessment to ensure that the use class is catered to, and that the vehicles are provided for in a sustainable way. This differs from a “maximum” or “minimum” approach, where standards set a level of parking which either must not be exceeded (but can be lower with justification) or must be met as a minimum (but can be higher with justification). SYSTRA’s experience is that where maximum and minimum standards are used, a majority of schemes comply strictly with these standards, with little variation. It is noted that residential cycle parking standards within the WSCC standards are identified as minimum requirements.

Vehicle Parking

2.2.2 The WSCC residential parking standards for cars use Parking Behaviour Zones (PBZs) to differentiate between the expected levels of parking demand expected for a particular ward. The most rural wards of Horsham district are assigned to Zone 1, with Zone 5 assigned to the town centre wards of Horsham. It should be noted that Zones 3, 4 and 5 cover wards exclusively within the built up area of Horsham town.

2.2.3 The WSCC PBZs for Horsham District have been retrieved from WSCC’s Guidance on Parking at New Developments document (September 2020) and are included within **Appendix A**.

2.2.4 For reference, the expected vehicle parking demand per dwelling from WSCC’s parking guidance document for residential land uses have been replicated in **Table 1**.

Table 1. WSCC Expected Residential Parking Demand (Spaces per Dwelling)

PARKING BEHAVIOUR ZONE	NUMBER OF BEDROOMS			
	1	2	3	4+
PBZ1	1.5	1.7	2.2	2.7
PBZ2	1.4	1.7	2.1	2.7
PBZ3	0.9	1.3	1.8	2.5
PBZ4	0.9	1.1	1.7	2.2
PBZ5	0.6	1.1	1.6	2.2

2.2.5 It should be noted that WSCC states that if the location is not regarded as typical of the PBZ (for example – sites near transport hubs), then consideration can be given to using a different PBZ that more closely relates to the location of the development.

Cycle Parking

2.2.6 WSCC acknowledges that in order to realistically promote lower levels of car ownership and use whilst avoiding unacceptable consequences, high levels of accessibility to non-car modes of travel should be provided.

2.2.7 High quality cycle storage facilities are deemed important, therefore requirements should take account of dwelling size and type, and have regard to existing levels of cycle ownership.

2.2.8 WSCC’s minimum required cycle parking for new residential developments is set out below in Table 2.

Table 2. WSCC Minimum Residential Cycle Parking Standards

DWELLING TYPE	NUMBER OF BEDROOMS			
	1	2	3	4+
Houses	1	1	2	2
Flats	0.5 if communal storage, otherwise 1		1	1

2.2.9 It is noted that the WSCC cycle parking standards apply across the whole county and make no distinction regarding the specific location of the new residential development.

2.3 Comparison with Similar Local Authorities

2.3.1 A number of local authorities covering towns similar to Horsham in population and proximity to London were identified, in order to determine the relative stringency of the parking recommendations applied by WSCC. The towns and their corresponding local authorities (district/borough/unitary authority) selected for the purposes of this analysis are listed below:

- Royal Tunbridge Wells (Tunbridge Wells Borough Council);
- Farnborough (Rushmoor District Council);
- Aylesbury (Buckinghamshire Council);
- Dunstable (Central Bedfordshire Council);
- Bishop’s Stortford (East Hertfordshire District Council);
- Braintree (Braintree District Council); and
- Rochester (Medway District Council).

Vehicle Parking - Residential

2.3.2 The vehicle parking standards for each of the boroughs / local authorities listed above have been retrieved as part of this comparison. It should be noted that these standards for Tunbridge Wells Buckinghamshire and East Hertfordshire vary by geographic area, whereas those for the remaining authorities are uniform across their entire jurisdictions. In the case of those authorities which apply different standards to different parts of their areas of jurisdiction, the standards for locations which are most comparable to the relevant parts of Horsham district have been selected.

2.3.3 It is acknowledged that the various geographical categories employed by local authorities do not match exactly to those employed by WSCC, however as close a comparison as possible has been provided.

2.3.4 The most rural and most urban parking zones from each local authority have been used to compare against WSCC’s guidelines, shown below in **Table 3** and **Table 4**.

Table 3. Vehicle Parking Standards Comparison – Least Urbanised Areas (Spaces per Dwelling)

LOCAL AUTHORITY	STANDARD	NUMBER OF BEDROOMS			
		1	2	3	4+
West Sussex (PBZ1)	Recommended	1.5	1.7	2.2	2.7
Tunbridge Wells - Houses (Zone C)	Minimum	1	1.5	2	2.5
Tunbridge Wells - Flats (Zone C)	Minimum	1	1.5	2	2
Rushmoor	Required	1	2	2	3
Central Bedfordshire*	Minimum	1	2	3	4
Buckinghamshire (Zone C)**	Optimum	1.5	2	2.5	3
East Hertfordshire (Non-Zone 2)	Maximum	1.25	1.5	2.25	3
Braintree	Minimum	1	2	2	2
Medway	Minimum	1	1.5	2	2
Average (all authorities)		1.14	1.74	2.22	2.69
Average (Minimum / Required Only)		1	1.75	2.16	2.58

Table 4. Vehicle Parking Standards Comparison – Most Urbanised Areas (Spaces per Dwelling)

LOCAL AUTHORITY	STANDARD	NUMBER OF BEDROOMS			
		1	2	3	4+
West Sussex (PBZ5)	Recommended	0.6	1.1	1.6	2.2
Tunbridge Wells - Houses (Zone A)	Minimum	1	1	1.5	2
Tunbridge Wells - Flats (Zone A)	Minimum	1	1	1	1.5
Rushmoor	Required	1	2	2	3
Central Bedfordshire*	Minimum	1	2	3	4
Buckinghamshire (Zone A)**	Optimum	1	1.5	2	2
East Hertfordshire (Zone 2)	Maximum	0.75	1	1.5	2
Braintree	Minimum	1	2	2	2
Medway	Minimum	1	1.5	2	2
Average		0.93	1.46	1.84	2.30
Average (Minimum / Required Only)		1	1.58	1.91	2.41

*Central Bedfordshire Council requires an additional visitor space per four dwellings

**Buckinghamshire Council puts forward an optimum figure of 2.5/3.5 spaces per five-bedroom dwelling in Zone A/C

2.3.5 It is noted here that the authorities chosen have used a variety of approaches to setting their parking standards, and that care must be taken when comparing “maximum” and “minimum” standards in particular. Research has indicated that, for those authorities employing minimum standards, the method of agreeing actual parking provision at individual developments is linked to wider transport policy and the availability of active and sustainable mode alternatives. It is also noted that, to guard against development being drawn into less sustainable locations, wider housing and development policies are applied to limit new development in these areas.

2.3.6 Regarding the least urbanised/most rural areas, the WSCC guidelines were found to be generally in line with the average figure across the local authorities assessed, for two, three and four or more bedroom dwellings. For one bedrooms dwellings, the WSCC recommended 1.5 spaces per dwelling figure was more than the average parking ratio for these types of dwellings, due to most local authorities requiring a minimum of one space

per dwelling; as per the observations above, in practice the majority of authority standards examined allow for more than 1 space per dwelling at the discretion of the Local Planning Authority.

- 2.3.7 Regarding the most urbanised/least rural areas, the WSCC guidelines were found to be lower than the average figure for all dwelling sizes. The WSCC recommended 0.6 spaces per dwelling figure is considered to be comparable to the East Hertfordshire maximum standard, but lower than the minimum standards set by a majority of the authorities being considered.

Vehicle Parking – Non-Residential Land Uses

- 2.3.8 The non-residential vehicle parking standards for selected land uses within each of the towns listed above have been retrieved as part of this comparison (it is noted that Buckinghamshire is the only authority which uses a zone system for non-residential development, hence why it is represented twice in the table). It is noted that the term “maximum” in Table 5 means that, as an example, an office of 300 sqm in Rushmoor may provide a maximum of 10 standard car parking spaces, but may choose to provide fewer. Those authorities applying “optimum” or “recommended” standards allow for some flexibility above or below the stated standard, subject to appropriate justification of need and compliance with wider transport and sustainability policies.

Table 5. Non-Residential Standards Comparison (1 space per No. Sqm Floorspace)

LOCAL AUTHORITY	STANDARD	LAND USE TYPE				
		OFFICE (E)	RESTAURANTS & CAFES (E)	FOOD RETAIL (E)	NON-FOOD RETAIL (E)	GENERAL INDUSTRIAL (B2)
West Sussex	Recommended	30	5	14	14	40
Tunbridge Wells	Maximum	20-35	6	18	25	50
Buckinghamshire (Zone 1 - urban)	Optimum	25	16	23	23	64
Buckinghamshire (Zone 2 - rural)		21	10	22	22	39
Rushmoor	Maximum	30	5	14	20	45
Central Bedfordshire	Maximum	25-30	25	14-35	20-35	30-100
Braintree	Maximum	30	5	14	20	50
Medway	Maximum	30	6	18	20	50

- 2.3.9 It can be seen that the WSCC standards are relatively consistent with the other local authorities assessed, for the office land use.

- 2.3.10 For the general industrial, restaurants & cafes, non-food retail and food retail land use classes, the WSCC standards were also found to be relatively comparable to the other local authorities, but with some additional flexibility in terms of individual sites.
- 2.3.11 The WSCC recommended standards for non-food retail are noticeably more generous than the maximum standards provided by other local authorities, at a recommended one space per 14sqm. It should be noted that Central Bedfordshire stipulated a maximum range of one space per 30-100sqm.
- 2.3.12 It can be seen that for the office land use, the WSCC standards are relatively consistent with the other local authorities assessed.
- 2.3.13 For the restaurants & cafes and food retail land use classes, the WSCC standards were also found to be relatively comparable to the other local authorities, but with a tendency to require slightly more parking in general.
- 2.3.14 With the aforementioned information considered, it is concluded that the current WSCC parking provision for non-residential land uses is either in line with or slightly more generous than comparable similar local authorities. Given that the WSCC standards are stated to be recommendations rather than firm minimums or maximums, it is considered that this approach allows for some flexibility where appropriate which is of benefit to planning officers. Whilst some further modification via localised parking standards could be achieved, at present the available evidence does not indicate that there are specific issues with new developments of this type which such changes would address.

Cycle Parking

- 2.3.15 The cycle parking standards for each of the towns listed above have been retrieved as part of this comparison. The higher minimum standards for houses have been included in the table for WSCC’s figures. It is noted that East Hertfordshire decides the required cycle parking on a case by case basis and has therefore been excluded from the table.

Table 6. Cycle Parking Standards Comparison (Minimum Spaces per Dwelling)

LOCAL AUTHORITY	NUMBER OF BEDROOMS			
	1	2	3	4+
West Sussex	1	1	2	2
Tunbridge Wells	1	2	3	4
Buckinghamshire*	1	2	2	3
Rushmoor	1	2	2	2
Bedfordshire	1	2	3	4
Braintree	1	1	1	1

LOCAL AUTHORITY	NUMBER OF BEDROOMS			
	1	2	3	4+
Medway	1	1	1	1
Average	1.00	1.57	2.00	2.43

*Buckinghamshire Council puts forward a minimum figure of four spaces per five-bedroom dwelling

- 2.3.16 The WSCC standards were found to be generally lower than the average figures across the local authorities assessed, for two and four or larger bedroom dwellings. The WSCC minimum two spaces per dwelling figure for the largest properties was half that required by the local authorities with the most stringent requirements.

Summary of Parking Standards Comparison

- 2.3.17 Our analysis of comparable Local Authority standards has shown that the existing WSCC residential parking standards are consistent for less developed / more rural areas with those of the other identified authorities, but that for more urban locations the recommended provision is notably lower than the comparable standards in the selected local authority areas, especially given that many of the comparator standards are minima. It is recognised that the standards themselves should not be automatically considered to be a “perfect fit” for the other local authority areas in terms of actual parking demand in the areas which they serve and the further analysis in this report seeks to provide commentary on observed parking behaviour to address this point. However, it can be seen from the comparison that there would be some supporting precedent for slightly higher parking provision within the more developed areas of the District, and for cycle parking in all parts of the District, should this be considered to correspond to currently known or observed parking issues.

- 2.3.18 With regard to parking standards for non-residential development, a relatively high degree of consistency has been observed between authorities. This is not unexpected as offices, shops and light industrial premises tend to operate in similar ways, with specific parking demand also being met in part through local public car parks in many locations. Overall, the WSCC standards arguably would lead to slightly higher provision for most land uses, however it should be borne in mind that the comparator authorities’ standards set a minimum expectation for number of spaces, whereas WSCC sets a recommended level of car parking.

2.4 Electric Vehicles (EV)

- 2.4.1 The WSCC Guidance on Parking at New Developments document requires active charging points for electric vehicles to be provided at a minimum of 20% of all parking spaces. Ducting is required to be provided at all remaining spaces where appropriate to provide passive provision for these spaces to be upgraded in future.

2.4.2 WSCC recommends that the guidance of EV parking spaces should be reassessed when local plans and supplementary planning documents are reviewed to take account of any recent developments in this technology. The yearly values covering the period from 2018 to 2030 are set out in Table 7 below. These values should be used as a guide to the level of active EV spaces to be provided in the year of construction.

Table 7. WSCC Electric Vehicle Space Recommended Allocations

YEAR	% GROWTH INDEX	% SPACES FOR ACTIVE CHARGING
2018	0	20
2019	4	24
2020	8	28
2021	13	33
2022	17	37
2023	21	41
2024	25	45
2025	29	49
2026	33	53
2027	38	58
2028	42	62
2029	46	66
2030	50	70

2.4.3 Only one out of all of the local authorities identified in Section 2.3 specifies minimum requirements concerning active charging facilities for residential developments in their current adopted standards. Kent County Council (the Local Highway Authority for Royal Tunbridge Wells and Rochester) requires at least 20% of all dwellings within major developments with allocated parking, garages or driveways to be provided with an EV charge point, with passive provision (i.e. cabling and services installed during construction to allow charge points to be installed at a later date) for the remaining dwellings. For dwellings with unallocated parking, 20% of spaces are required to be provided with an EV charge points, with passive provision for all remaining spaces.

2.4.4 It is noted that the Kent County Council EV charging point requirements roughly match the WSCC baseline standards (base year of 2018).

- 2.4.5 The remaining local authorities do not specify exact requirements for EV charging points within their current adopted standards, mostly indicating in a broad sense that the provision of such facilities would be supported.
- 2.4.6 SYSTRA has also examined the emerging policies of the local authorities which have been considered as part of this exercise. Only Central Bedfordshire has new policy material in preparation, which is summarised as follows:
- 2.4.7 Central Bedfordshire currently have a Draft Electric Vehicle in New Development Supplementary Planning Document in preparation. This draft document was published for initial comments in June 2022, and seeks to establish requirements for EV provision in residential developments.
- 2.4.8 It is stated as a requirement that new residential dwellings include active charging points (p.7). Table 1 displays these requirements in more detail.

Table 8. Central Bedfordshire - Proposed Provision of EV Charging Points in New Residential Developments

LAND USE	EV REQUIRMENT	SPEED OF CHARGER
New residential dwellings with garage or private driveway Use Class C3	One active EV charging point per dwelling	7.4kW minimum
New residential buildings without a garage or private driveway OR that will have associated parking that is situated within a communal (open or covered) car park, for example flats. Use Class C3	All spaces to be active EV charging points where: There are fewer parking spaces than the number of dwellings; or The number of parking spaces are equal to the total number of dwellings. In addition, all remaining spaces must have passive provision installed.	7.4kW minimum
Car club provision in residential or mixed-use developments Use Class C3	100% of car club spaces active EV charging.	7.4kW minimum
All disabled parking within any residential new development	100% of spaces active EV charging	7.4kW minimum

2.4.9 SYSTRA’s own experience with regard to negotiating electric car charging facilities enables us to make the following further observations:

- Developers frequently face competing demands when planning for electric vehicles, namely that it is almost always cheaper and more straightforward from a physical perspective to install equipment and cabling during initial construction, but that unless the developer also plans to retain and manage the development, financially the impetus is always to incur as little cost as possible
- All parties (developers, local authorities and highway authorities) have to contend with the fact that EV technology is evolving at a very fast pace, and that stipulations made within planning conditions or Section 106 agreements can potentially fall “out of step” with current best practice
- Because of the above points, local authority planners can be reticent to press for higher EV provision, despite the fact that national policy and wider technological change means that car parking spaces without EV provision which serve development will (in SYSTRA’s opinion) rapidly become of less “value” and less useful as petrol and diesel vehicles are phased out; we expect that this will become explicit within the next 10 to 15 years based on current government policies and the shift in car manufacturing to electric as the primary “market”.

2.4.10 We are particularly conscious that there is a lack of consistent advice for local highway authorities in terms of on-street provision, particularly in terms of how responsibility for infrastructure and methods of either funding or collecting revenue for the electricity itself is managed. WSCC are seeking to address this issue directly through their emerging West Sussex Transport Plan (WSTP) and further commentary on these proposals is provided below.

2.4.11 Whilst this is, in this case, ultimately a matter for WSCC, we would recommend that HDC could effectively support WSCC by requiring all new parking spaces directly serving new developments to provide passive EV infrastructure (such as cabling), which should include an estimate of the expected power needs and demonstrate that any future additional requirements (in terms of electrical plant) can be accommodated within the site. In our view, this represents a reasonable compromise between the work required of a given developer, and the ability for sites to eventually provide the charging facilities which will inevitably shift from being a “nice extra” to “essential” for most vehicle owners. We consider that an approach along these lines will help to avoid future problems with a lack of access to charging, and complement WSCC’s own planned future work and emerging policy in relation to on-street EV provision.

2.4.12 Finally, we consider it important that EV charging provision should always (for residential developments of significant size, or primarily flatted / apartment developments) include some provision for electric cycles and/or mobility scooters, as in our view these will also increase in popularity and represent an excellent additional option for short and medium-distance trips; this is based on our recent experience with clients delivering residential development and associated discussions with local authority planners. We consider that the WSCC requirement for 20% active provision is consistent with current good practice.

2.5 Care Homes

2.5.1 The current WSCC parking standards for care homes are relatively ambiguous, stating that vehicle and cycle parking provision should be based on a site-specific assessment incorporating a travel plan and specific operational needs.

2.5.2 The parking standards for care homes for the local authorities assessed are displayed below in **Table 9**.

Table 9. Care Home Parking Standards

LOCAL AUTHORITY	VEHICLE SPACES PER BEDS (MAX)	VEHICLE SPACES PER STAFF (MAX)	CYCLE PARKING (MIN)
Kent County Council	1 space per 6 beds	1 space per 1 resident staff 1 space per 1 other staff	1 space per 10 beds
Buckinghamshire Council	1 space per 3 beds	Not stated	Not stated
Rushmoor District Council	1 space per 4 beds	1 space per 1 staff	1 space per 6 staff
Central Bedfordshire Council	1 space per 4 beds	1 space per 2 staff	Not stated
Braintree District Council	1 space per 3 beds	1 space per FTE staff	1 space per 5 staff

2.5.3 It is noted that the parking standards for care home residents and their visitors vary across the local authorities, ranging from the most stringent maximum ratio of one space per six beds (Kent County Council), to the most generous maximum ratio of one space per three beds (Buckinghamshire Council).

2.5.4 The maximum parking spaces per staff member are relatively consistent across the local authorities, at one space per staff member. Central Bedfordshire Council was the only local authority to require a lower maximum ratio.

2.5.5 The minimum cycle parking standards for care homes vary across the local authorities. Of the three authorities that specified minimum cycle parking standards for this land use, Rushmoor and Braintree District Councils calculated by the number of staff whereas Kent County Council calculated by the number of beds.

2.5.6 From a practical perspective, SYSTRA has previously worked with Care Home providers to take new proposals through the planning system in various areas. It is consistently stressed by the operators that their residents are not always previous “locals” and that therefore a significant proportion of visitors are required to drive. As with all developments which have a significant requirement for care and medical staffing, shift times can vary but will almost always include overnight provision and it is essential that

access for medical vehicles is maintained at all times. Our view is therefore that any parking standards specifically designed for Care Homes should be given as guidelines and that the operators of proposed new care homes should be encouraged to demonstrate their site's specific staffing requirements and visiting expectations as part of the Transport Statement or Transport Assessment accompanying the relevant planning application, so that parking can be agreed which is sufficient to allow the care home to operate safely and efficiently, but is not so great as to discourage local staff and visitor trips by other modes, and addresses local planning requirements to make use of development land in an efficient manner.

2.6 Emerging Policy – West Sussex Transport Plan 2022-2036

2.6.1 During the course of preparation of this study, WSCC has commenced consultation on their draft West Sussex Transport Plan (WSTP 2022-2036). The draft WSTP sets out proposed policies which will cover all modes of transport within West Sussex over the next 15 years; these policies are designed to increase access to (and use of) sustainable and active travel modes, whilst also maintaining critical local highway networks and making provision for planned new development (as set out in the relevant adopted and emerging district local plans).

2.6.2 Paragraph 5.5 of the executive summary states that the aims of the WSTP for Horsham District are as follows:

- Deliver improvements within existing highway land to provide bus priority at signal-controlled junctions;
- Deliver small scale 'tactical' highway improvements on A24 and A264 as development comes forward;
- Facilitate the introduction of on-street electric vehicle charging infrastructure, initially in Horsham, Billingshurst, Southwater, Colgate and Ruserp;
- Prioritise active travel modes where development takes place;
- Deliver priority cycle routes;
- Give greater priority to shared transport services on strategically important corridors in the medium term;
- Investigate an integrated approach to resolving capacity issues on the A264;
- Consult on removing a section of A272 from the PRN;
- Tackle use of inappropriate rural routes using behavioural initiatives; and
- Work with strategic partners to improve rail services to London and along the Arun Valley line in the long term.

2.6.3 Paragraph 2.27 of the main report states that "in April 2021, there were 194 publicly accessible electric vehicle charging points in West Sussex including 43 rapid (43kw or above) chargers (taken from DfT: Electric Vehicle Charging Device Statistics (April 2021)). The charging points tend to be located in or near urban areas and there are clusters of facilities in Crawley and Worthing".

2.6.4 The importance of tackling Climate Change is heavily stressed within the consultation document. In particular, paragraph 4.3 accepts that certain journeys will continue to need to be made by car due to the rural nature of large parts of the County, but that as a result electrification of vehicles will be essential, and that wherever it is practical to do so, use of active and sustainable modes will need to be enabled through behavioural change.

- 2.6.5 Paragraph 4.32 draws attention to the potential of micro-mobility solutions to improve active and sustainable choices for short trips. This is relevant to consideration of district-specific parking provision and street design, as charging will be required for modes such as e-bikes and e-scooters, particularly in developments where garages or other storage spaces are not provided.
- 2.6.6 It is stated at paragraph 6.17 that one of the aims for the road network strategy for the County is to “Through a third-party provider, facilitate the introduction of electric vehicle charging infrastructure, initially in areas where communities rely on on-street parking as outlined in the Electric Vehicle Strategy”. As noted above, WSCC will need to develop these proposals to suit the various communities within West Sussex which they will serve.
- 2.6.7 Paragraphs 7.82 to 7.100 set out the proposed approach to the transport strategy for Horsham district within the WSTP. In particular paragraph 7.94 states the following:
- “In the future, once Horsham Local Plan development takes place, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, ambitious sustainable transport and demand management interventions are needed in Horsham and the surrounding area that will reduce car travel, particularly at peak times.”*
- 2.6.8 This indicates that any change in local policy which would be perceived as potentially clashing with this objective. We consider that this does not preclude the development of local parking standards, and offer some further analysis in Section 3 which seeks to support this position.
- 2.6.9 Paragraph 7.96 re-iterates the commitment to introduce on-street EV charging at selected locations within Horsham district.
- 2.6.10 It is noted that the WSTP does not make any direct reference to WSCC (or other) parking standards and does not propose any changes to the existing adopted parking standards.

2.7 Summary

- 2.7.1 It can be seen that the WSCC vehicle parking standards for residential developments in rural areas generally fall in line with the average specified parking ratios, across a number of local authorities covering towns similar in nature to Horsham. The WSCC standards were found to be less generous than average when considering developments in town centre locations, in particular for one and two bedroom dwellings.
- 2.7.2 The WSCC minimum cycle parking standards were found to be generally less than the average figure across the assessed local authorities, with the potential to be made more stringent.
- 2.7.3 The WSCC standards regarding charging points for EVs were found to be in line with the assessed local authorities which gave specific requirements. It is noted that the emerging WSTP sets out new guidance for EV charging provision and also commits to implementing substantial new on-street EV charging facilities over the life of the plan.
- 2.7.4 It is acknowledged that the current WSCC parking standards for care homes are relatively ambiguous. The assessed local authorities provided a varying range of parking spaces per

resident bed, from one space per three to six beds, with the staff requirements more consistent at a maximum of one space per staff member.

3. RELATIONSHIP WITH TRIP GENERATION

3.1 Overview

3.1.1 SYSTRA recognises that much of the discussion and debate around car parking provision has historically related to the relationship between parking provision and the actual use of cars by their owners, particularly in regards to residential parking provision. In order to provide some additional context to the parking standards review, SYSTRA has conducted an analysis investigating the relationship between parking provision and vehicle trip generation, to inform HDC of the possible impacts of increasing or decreasing the recommended parking provision for new developments.

3.2 TRICS Analysis

3.2.1 The TRICS database has been used to generate sets of trip rates which match the general characteristics of the WSCC PBZs for Horsham district. To achieve this, the detailed site information available within TRICs has been interrogated so that a bespoke set of sites has been selected to represent each PBZ. All sets used trip rates generated from sites in England, Scotland and Wales only, excluding those located in Greater London.

3.2.2 Privately owned houses were selected for PBZs 1 and 2, due to the rural nature of these zones. To account for various dwelling sizes, those with four or more bedrooms were placed in a separate set of sites. PBZs 3 and 4 included both houses and flats, due to the more urbanised nature of these zones.

3.2.3 Data relating to the number of dwellings and the number of parking spaces was retrieved for each site, enabling the calculation of the average parking provision per dwelling for each set of sites.

3.2.4 The average trip rates and average parking provision associated with each set of sites assessed is included below in Table 10. For the purposes of this analysis, the AM peak departure trip rate and the PM peak arrival trip rates were used, in line with conventional commuting patterns.

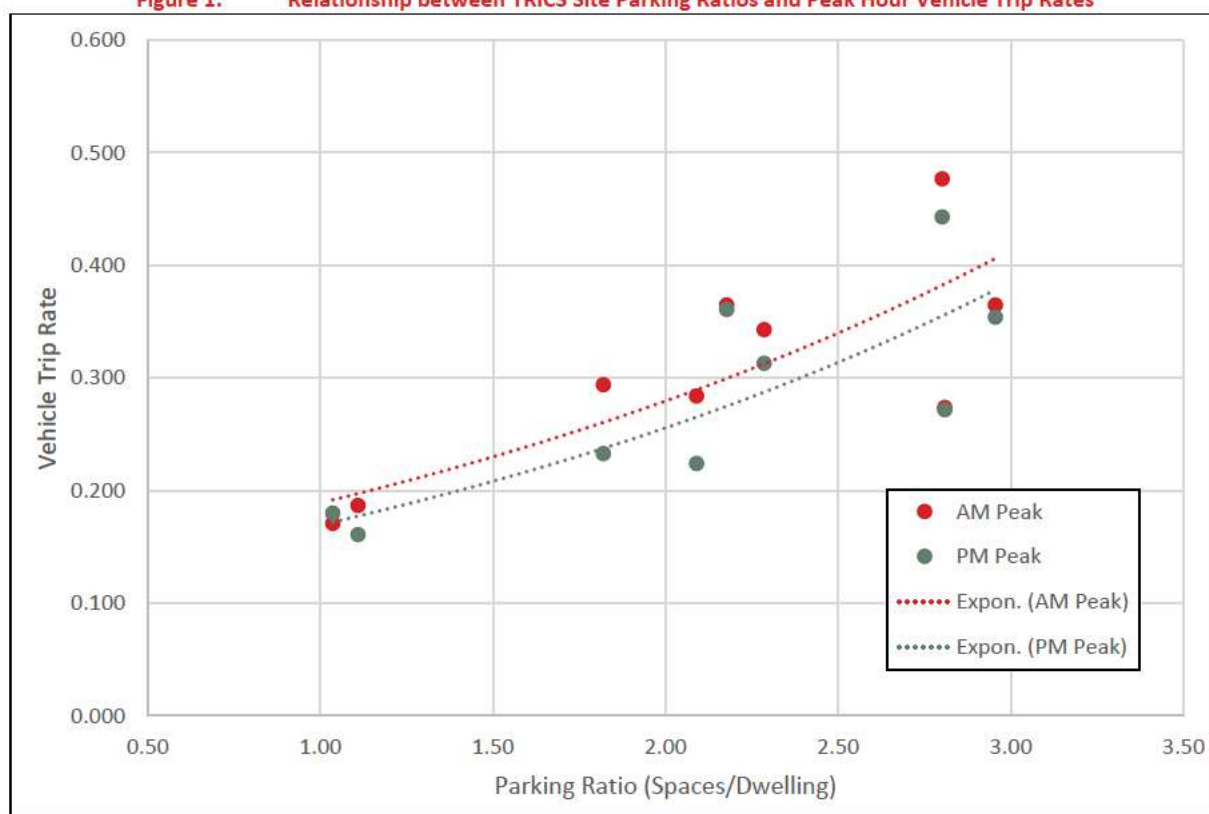
Table 10. TRICS Sites Vehicle Trip Rates and Parking Ratio Comparison

CATEGORY	PARKING PROVISION	AM PEAK DEPARTURE TRIP RATE	PM PEAK ARRIVAL TRIP RATE
PBZ1 (1-3 Bedrooms)	2.09	0.284	0.224
PBZ1 (>3 Bedrooms)	2.81	0.274	0.272
PBZ2 (1-3 Bedrooms)	2.29	0.343	0.313
PBZ2 (>3 Bedrooms)	2.96	0.365	0.354
PBZ3 (1-3 Bedrooms)	2.18	0.365	0.361

CATEGORY	PARKING PROVISION	AM PEAK DEPARTURE TRIP RATE	PM PEAK ARRIVAL TRIP RATE
PBZ3 (>3 Bedrooms)	2.80	0.477	0.443
PBZ3 (Flats)	1.11	0.187	0.161
PBZ4 (Houses)	1.82	0.294	0.233
PBZ4 (Flats)	1.04	0.171	0.180
PBZ5	1.08	0.150	0.275

3.2.5 The relationship between the sites' parking ratios and peak hour trip rates has been plotted in Figure 1 below. It is noted that the data for PBZ5 has been excluded, due to only one site being returned in this category.

Figure 1. Relationship between TRICS Site Parking Ratios and Peak Hour Vehicle Trip Rates



3.2.6 It can be seen that, as would be expected, there is a general increase in peak hour vehicle trips when higher numbers of parking spaces are provided, suggesting that amending the recommended parking provision for a particular PBZ has the potential to result in a corresponding change in vehicle trips.

3.2.7 However, it is important to note that correlation between two data sets does not immediately imply causation; it stands to reason that households with access to a larger

number of vehicles will use them. What the analysis also shows is that there are significant differences in the vehicle trip rate between sites which have similar ratios of parking; we consider that this is an important finding as it provides evidence that increasing parking provision does not automatically lead to a linear increase in car trips. We have examined the data for the sites which are “clustered” in terms of parking ratio, and it is evident that access to a variety of public transport services, and accessibility on foot or by cycle to key local services such as schools, are associated with the sites which have lower numbers of car-based trips for a given ratio of car parking. SYSTRA is of the view that it is highly likely that there is a causal link between these factors; those who do not have reasonable alternatives to car travel are more likely to both own and use vehicles.

- 3.2.8 Whilst these observations are not unexpected or surprising, we consider it essential to acknowledge that the impacts of parking policy on car-based travel are closely linked to other policies (and their outcomes) in relation to sustainable travel modes; the available evidence strongly supports this. Any consideration of new local parking standards for Horsham District would therefore benefit from a parallel appraisal of policy around provision for sustainable modes, to ensure that sustainable travel choices are facilitated and the impacts of vehicle trips are managed.

4. SITE VISIT & OBSERVATIONS

4.1 Overview

- 4.1.1 In order to obtain the most up to date information possible on parking conditions within Horsham district, a site visit was undertaken. The site visit occurred on Monday 16th May 2022 between 8:30 and 16:00. It is acknowledged that the site visit took place predominantly during working hours and may not reflect parking conditions outside of these times; in particular it is noted that different patterns of parking may be present during the evenings and overnight.
- 4.1.2 Prior to the visit, a number of data sites were selected, which encompass residential streets within all five PBZs as defined by WSCC, in addition to key locations such as council-operated multi-storey car parks in Horsham town centre, residential streets in close proximity to Littlehaven station and recently completed residential developments at Kilnwood Vale and Highwood Mill.
- 4.1.3 The nature of the data collected was predominantly qualitative, encompassing the nature of parking provision at the data site, observed parking behaviours and an estimation of parking occupancy.
- 4.1.4 The locations where data was collected on the site visit across Horsham district are shown in **Figure 2** below. A map focusing on the locations within Horsham town is shown in **Figure 3**.

Figure 2. Horsham District Site Visit Locations

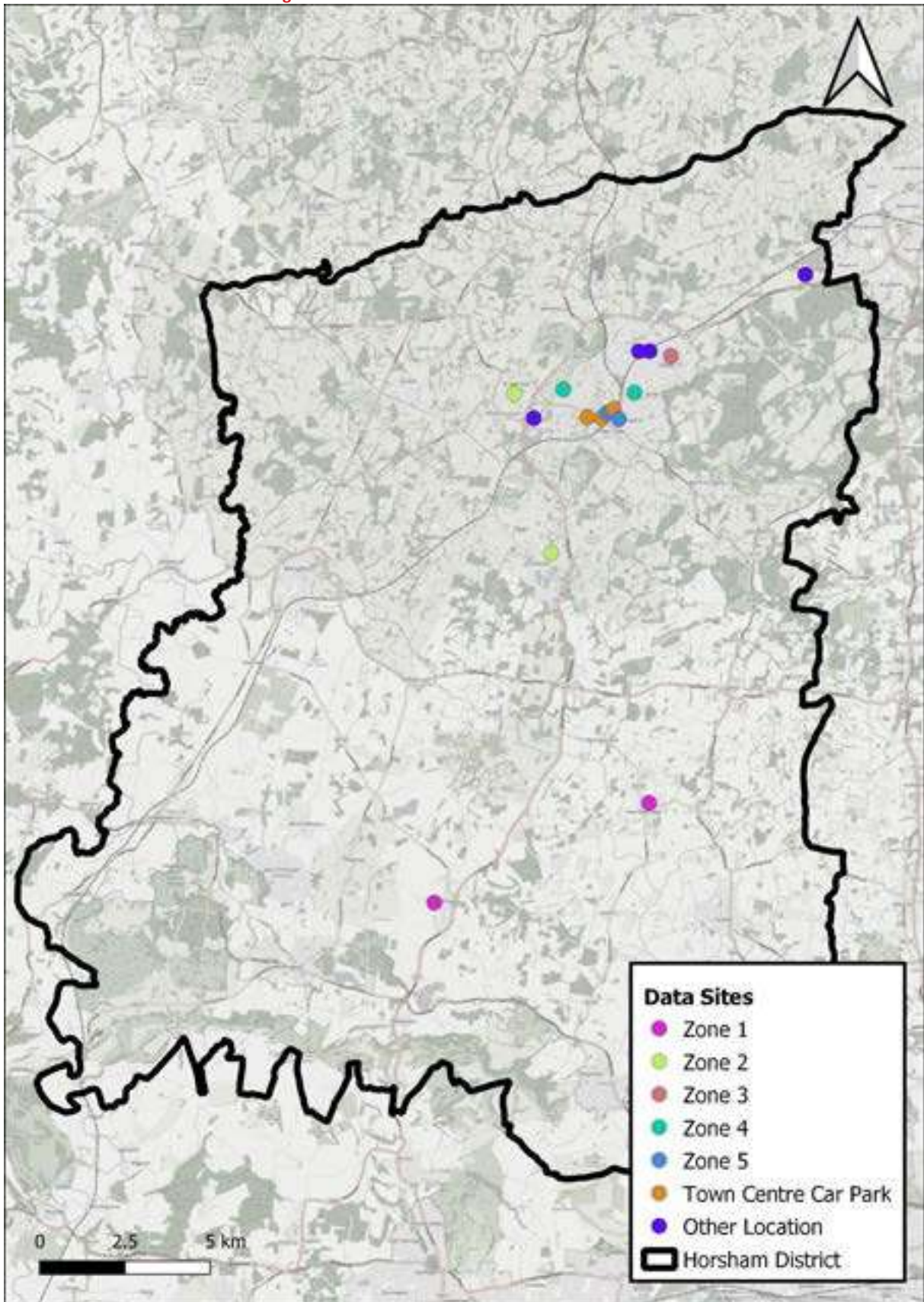
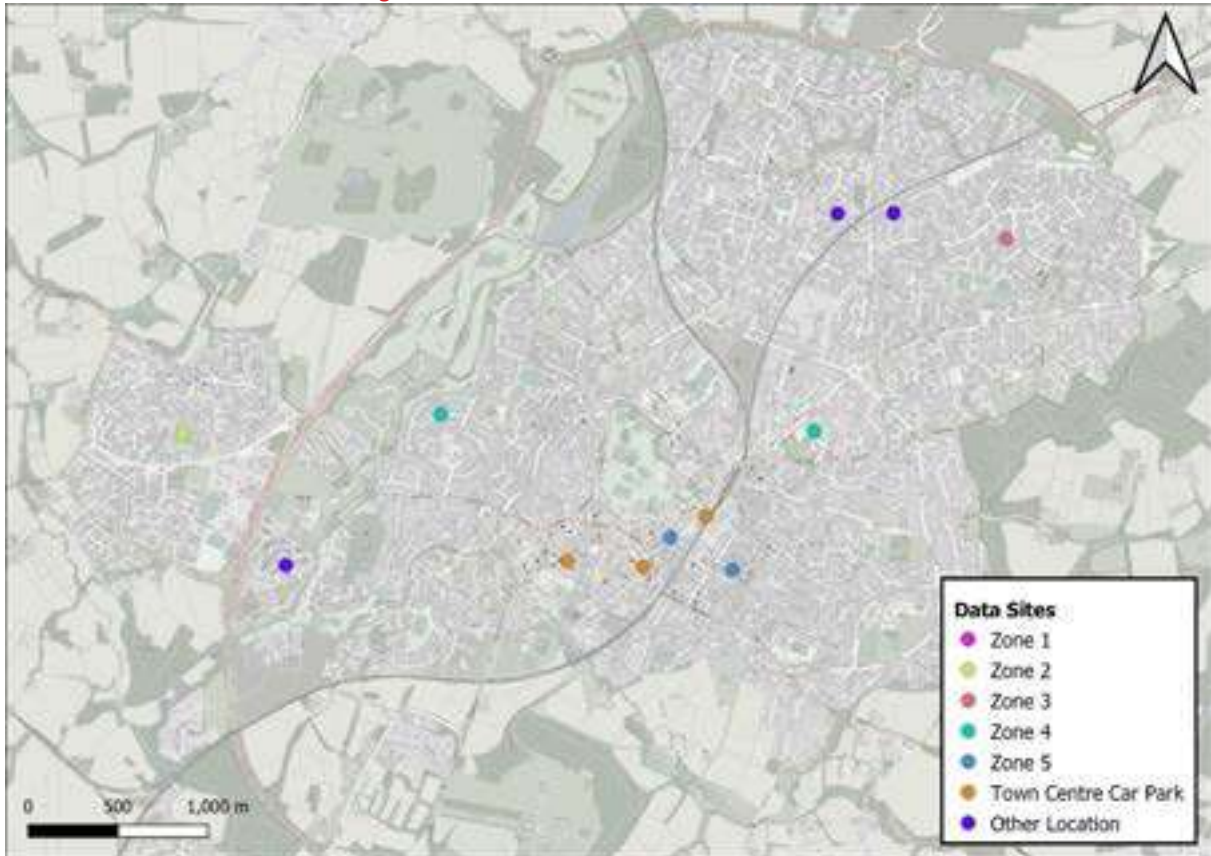


Figure 3. Horsham Town Site Visit Locations



4.2 PBZ1 Sites

St Michael's Way, Partridge Green

- 4.2.1 St Michael's Way is a residential street in the village of Partridge Green, which is located in the south of Horsham district.
- 4.2.2 On-street parking was noted to be unrestricted on this street, with approximately 40% of provision used at the time of visit.
- 4.2.3 The majority of residential properties lining this street were noted to include off-street parking spaces, with approximately 50% of these occupied at time of visit.
- 4.2.4 Degradation to the grass strips alongside the road is noted; this is considered likely to be associated with either parking of large vehicles (such as those used for construction or related deliveries) or over-running by vehicles seeking to pass other parked vehicles (again this is likely to be associated with large vehicles rather than regular traffic).
- 4.2.5 The section of road observed is shown below in **Figure 4**.

Figure 4. St Michael's Way, Partridge Green



Meiros Way, Ashington

- 4.2.6 Meiros Way is a residential street in the village of Ashington, which is located in the south of Horsham district. The road appears to be unadopted by the Local Highway Authority, with alternative surfacing material used rather than standard black asphalt surfacing.
- 4.2.7 The majority of the residential properties lining this street were noted to include at least two off-street parking spaces, most of which were occupied by a single vehicle.
- 4.2.8 Although there were no signed parking restrictions observed, it was noted that there was very little usage of on-street parking. A few lay-bys were observed, with these relatively well used.
- 4.2.9 The section of road observed is shown below in Figure 5.

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Figure 5. Meiros Road, Ashington



4.3 PBZ2 Sites

Thelton Avenue

4.3.1 Thelton Avenue is a residential street in Broadbridge Heath, located directly west of Horsham town.

4.3.2 No signed parking restrictions were observed on this street, with on-street parking noted on both sides of the carriageway. A deep parking lay-by was observed, allowing vehicles to be parked perpendicular to the carriageway, as shown in Figure 6.

Figure 6. Thelton Avenue, Broadbridge Heath



- 4.3.3 The nature of the residential properties on this street was deemed to be varied, with both those providing off-street parking and those requiring parking on-street observed.
- 4.3.4 The on-street parking provision as observed to be relatively well-used, with an estimated 70% of these spaces occupied. Almost all of the private driveways were noted to be occupied by vehicles.
- 4.3.5 The section of road observed is shown in **Figure 7** below.

Figure 7. Thelton Avenue, Broadbridge Heath



Cedar Drive, Southwater

- 4.3.6 Cedar Drive is a residential street in Southwater, located south of Horsham town.
- 4.3.7 No signed parking restrictions were observed on this street. Properties generally provided generous levels of off-street parking, with lay-bys also present. Parking occupancy at the time of the site visit was noted to be light.
- 4.3.8 The section of road observed is shown in Figure 8 below.

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Figure 8. Cedar Drive, Southwater



4.4 PBZ3 Sites

Clovers End, Horsham

- 4.4.1 Clovers End is a residential cul-de-sac street in the Littlehaven area of Horsham, located approximately 3.5km north east of the town centre. No signed parking restrictions were observed on this street.
- 4.4.2 The nature of the residential properties on this street was deemed to be varied, with both those providing off-street parking and those requiring parking on-street observed. A lay-by was observed on one side of the carriageway.

4.4.3 Occupancy levels for the on-street parking provision were deemed to be generally high, at approximately 70%. The occupancy levels for properties with off-street parking provision were deemed to be lower.

4.4.4 The section of road observed is shown in Figure 9 below.

Figure 9. Clovers End, Horsham



4.5 PBZ4 Sites

Kingslea, Horsham

4.5.1 Kingslea is a residential street located approximately 1.5km north east of Horsham town centre. No signed parking restrictions were observed on this street.

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- 4.5.1 Kingslea Primary School is located on the western section of Kingslea, with an off-street car park provided for staff. Almost all of the properties included off-street parking spaces, most of which were noted to be occupied.
- 4.5.2 On-street parking was observed with parking lay-bys present. Occupancy of these spaces was deemed to be low.
- 4.5.3 The section of road observed is shown in Figure 10 below.

Figure 10. Kinglsea, Horsham



Croft Way, Horsham

- 4.5.4 Croft Way is a residential street located approximately 1.5km north west of Horsham town centre. No signed parking restrictions were observed on this street.

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- 4.5.5 On-street parking was observed on one side of the road, despite no restrictions on the opposite side. Occupancy was estimated at around 25% .
- 4.5.6 Most properties included off-street parking spaces, which were observed to be well utilised with some properties containing up to three vehicles.
- 4.5.7 The grass strips adjacent to the carriageway were observed to be in good condition.
- 4.5.8 The section of road observed is shown in **Figure 11** below.

Figure 11. Croft Way, Horsham



4.6 PBZ5 Sites

Cambridge Road, Horsham

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- 4.6.1 Cambridge Road is a residential street located approximately one kilometre east of Horsham town centre.
- 4.6.2 Signed parking restrictions were observed, with parking on-street restricted to permit holders only, Monday to Saturday, 08:00-22:00. The majority of properties observed did not include off-street parking spaces.
- 4.6.3 Occupancy levels of the on-street parking provision was deemed to be high; however, the observed parking was seen to be within the permitted areas, with no illegal parking activity observed.
- 4.6.4 It is noted that roadworks were ongoing at the time of the site visit, on the adjacent Clarence Road, which was partially closed.
- 4.6.5 The section of road observed is shown in **Figure 12** below.

Figure 12. Cambridge Road, Horsham



Norfolk Road, Horsham

- 4.6.6 Norfolk Road is a street with residential and commercial properties, located approximately 500m north east of Horsham town centre.
- 4.6.7 Signed parking restrictions were observed, with parking on-street restricted to permit holders only, Monday to Saturday, 09:00-21:00. Double yellow lines were observed on the southern side of the carriageway, to prevent parking on both sides blocking through traffic. No illegal parking was observed on these sections.
- 4.6.8 The majority of residential properties observed did not include off-street parking spaces. The commercial properties generally provided off-street parking for staff and customers.
- 4.6.9 Occupancy levels of the on-street parking provision were deemed to be high.

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4.6.10 The section of road observed is shown in **Figure 13**.

Figure 13. Norfolk Road, Horsham



4.7 Littlehaven Station

4.7.1 Littlehaven station is located approximately 2.5km north east of Horsham town centre and serves the northern areas of the town.

Swallowtail Road

4.7.2 Swallowtail Road is a residential street located approximately 200m west of Littlehaven station. No signed parking restrictions were observed on this street.

4.7.3 The majority of properties observed did not include off-street parking spaces. Parking was observed in shared areas at the end of short cul-de-sacs as shown in Figure 14, or designated areas off street, shown in Figure 15.

Figure 14. Swallowtail Road



Figure 15. Swallowtail Road



4.7.4 The properties that did include dedicated off-street parking were observed to be generally well-occupied by vehicles.

Farhalls Crescent

4.7.5 Farhalls Crescent is a residential street and is located approximately 400m east of Littlehaven station. No signed parking restrictions were observed on this street.

4.7.6 The majority of properties included off-street parking spaces which were observed to be generally well-occupied. Parking on-street was observed on one side of the carriageway in order to not block through traffic. Occupancy of the on-street spaces was estimated at approximately 20%.

4.7.7 The section of street observed is shown in **Figure 16** below.

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Figure 16. Fairhalls Crescent



4.8 Town Centre Car Parks

4.8.1 The current provision for general car parking which is presently made in Town Centre car parks within Horsham has been examined as part of the site visit appraisals. This is because the availability and quality of public town centre parking has a bearing on how likely people are to drive into the town centre (if they have the means to do so) and how frequently they will make such journeys; this in turn influences car ownership and related parking behaviour in residential contexts.

4.8.2 The availability, convenience and cost of public car parking also directly influences on-street parking demand and behaviour associated with other town centre uses (including residential uses). Given the importance of town centre streets for movement by non-

motorised modes, appropriate town centre car (and cycle) parking provision is considered to be an essential component of the overall parking strategy for the district.

Piries Place

4.8.3 Piries Place is a multi-storey car park located on the eastern edge of Horsham town centre. The total capacity is 516 spaces across five levels, including the following:

- 11 Parent and child bays;
- 12 Disabled bays; and
- 8 EV charging bays.

4.8.4 Piries Place is open 24 hours a day, seven days a week. Charges apply 07:00 to 20:00 Monday to Saturday and 09:00 to 17:00 on Sunday. Payment is on return, by cash or card at machines, or by card only at the exit barriers. Season tickets and Autopay are also accepted.

4.8.5 The non-standard types of parking bays described above were all located on the ground floor (Level 0), shown in **Figure 17**. It was estimated that this level was 60% occupied, with one vehicle using the EV charging spaces. Most of the parent and child bays were observed to be used.

Figure 17. Piries Place Car Park, Horsham



4.8.6 All levels above Level 0 consisted of entirely standard parking spaces. The occupancy of Level 1 was estimated at 90%, with each of the levels above estimated at 20% or below.

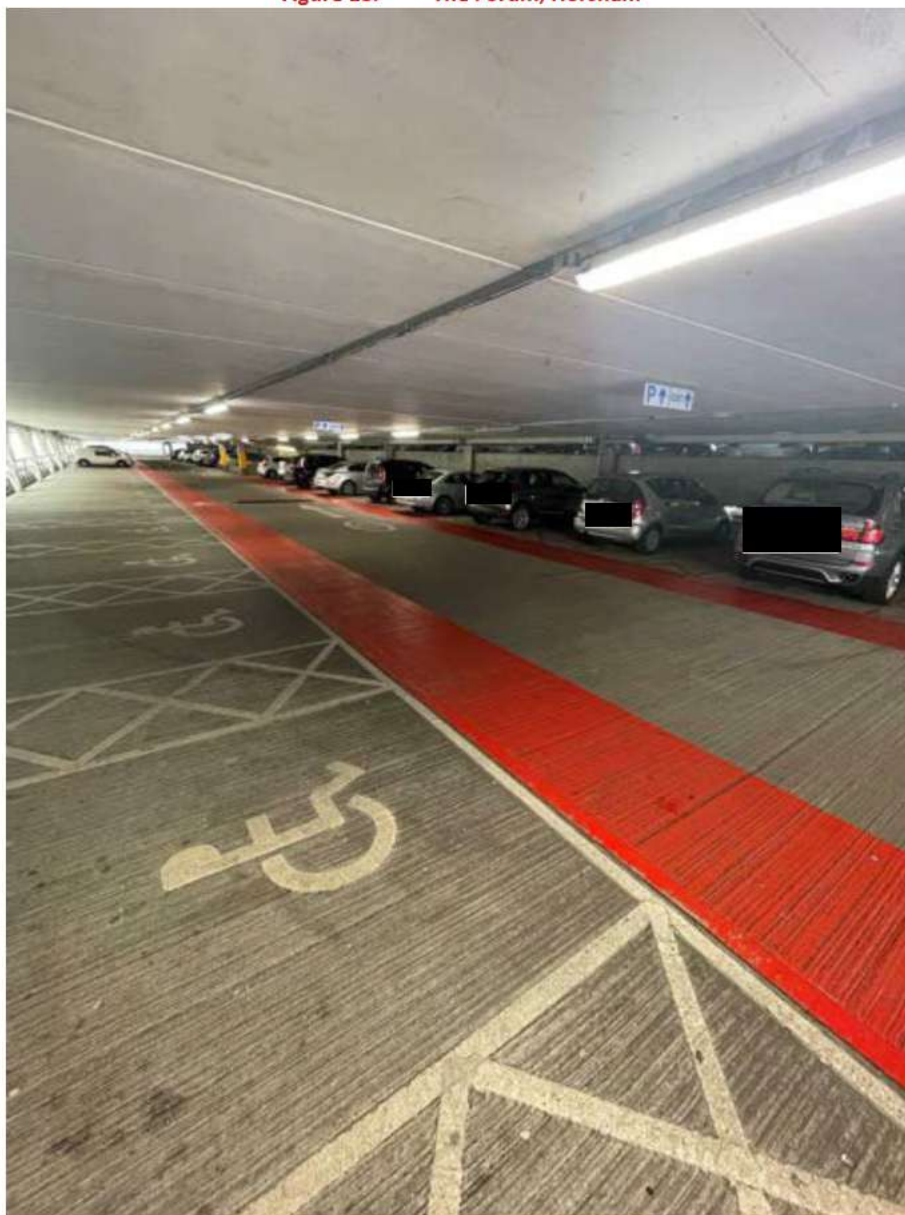
The Forum, Blackhorse Way, Horsham

4.8.7 The Forum is a multi-storey car park located on Blackhorse Way the western edge of Horsham town centre. The total capacity is 472 spaces across five levels, including the following:

- 12 Parent and child bays;
- 16 Disabled bays; and
- Motorcycle parking area.

- 4.8.8 The Forum is open from 06:00 to 22:00 every day, with Levels 5 and above closing at 20:00. Charges apply 08:00 to 20:00 Monday to Saturday and 09:00 to 17:00 on Sunday. Payment is on return, by cash or card at machines, or by card only at the exit barriers. Season tickets and Autopay are also accepted.
- 4.8.9 It was estimated that 30% of the disabled parking (shown in Figure 18 below) was occupied at the time of visit, with nearly all of the parent and child spaces noted as occupied. The remainder of the spaces were also an estimated 90% full on the lower levels. The upper levels were deemed to have slightly less occupancy, with a steady flow of vehicles observed arriving.

Figure 18. The Forum, Horsham



BT Exchange

- 4.8.10 The BT Exchange is a car park located immediately south of Horsham station. The total capacity is 81 spaces. The facility is open 24 hours a day, seven days a week. Charges apply 06:00 to 17:00 Monday to Saturday and 09:00 to 17:00 on Sunday. Payment is on return by cash or card at machines, the MiPermit website or the RingGo app.
- 4.8.11 At the time of visit, the car park was deemed to be approximately 20% occupied, with the occupied spaces clustered nearer the access point on to North Street. The car park is shown in Figure 19 below.

Figure 19. BT Exchange Car Park



Town Centre Car Parking and relationship to future wider parking policy

- 4.8.12 In examining examples of current Town Centre car parking provision (both off-street and within PBZ5 areas) specific consideration has been given to how the style of parking provision and its current level of occupancy can inform future parking policy development.
- 4.8.13 Existing on-street parking at the PBZ5 sites is noted to be operating at high levels of occupancy, but with relatively few observed examples of illegal or disruptive parking activity. As these sites also tend to benefit from better levels of accessibility to pedestrian networks and public transport services, this local sample suggests that the observed relatively low level of car ownership at these properties (as inferred from the on-street activity) is workable in practice where sufficient support is in place for trips by alternative modes.
- 4.8.14 This has relevance to any future discussion around addressing concerns in relation to parking provision in other PBZ areas; namely that, in theory, where it can be established that there is sufficient evidence of ongoing and repeated issues with parking availability, future development could seek to either address this via amended parking standards, or by amended (and strengthened) requirements for other transport modes, and/or local provision of services. It is noted that this also applies to the consideration of potential solutions to existing issues and that there may be benefits to both existing and new communities in pursuing policies which are stronger in reducing the need for car use.
- 4.8.15 In addition, off-street car parking facilities which have been examined for the purposes of this study indicate that there is some “buffer” capacity available; policy choices which would have impacts on the need for, and use of, parking in the wider district could include re-allocation of some of this space to support denser town centre residential development (thus reducing pressure for residential development in other parts of the district, or allowing the council to be more selective around where such development is permitted, pushing back on proposals which would be more car-dependant).

4.9 Other Sites

Kilnwood Vale

- 4.9.1 Kilnwood Vale is a relatively new development located on the outskirts of Crawley, located approximately eight kilometres north east of Horsham. Observations were made in Phase 1 of the development, which has been built out and occupied. It is noted that some of the remaining phases are still under construction at time of writing.
- 4.9.2 This location was identified in correspondence with HDC as having dealt with parking in a positive manner, maintaining an effective balance between off-street parking, on-street parking and soft-landscaping. There are also generally well considered parking courtyards to limit the requirement for parking on-street. It is noted that the road carriageways are relatively wide and do not generally include any measures to restrict vehicle speeds.
- 4.9.3 No signed parking restrictions were observed at this location, with the road and pavement surfacing varying from the typical Local Highway Authority black asphalt. At the time of

the visit, relatively little parking on-street was observed, with each property providing off-street spaces, as shown in Figure 20.

Figure 20. Kilnwood Vale



Highwood Mill

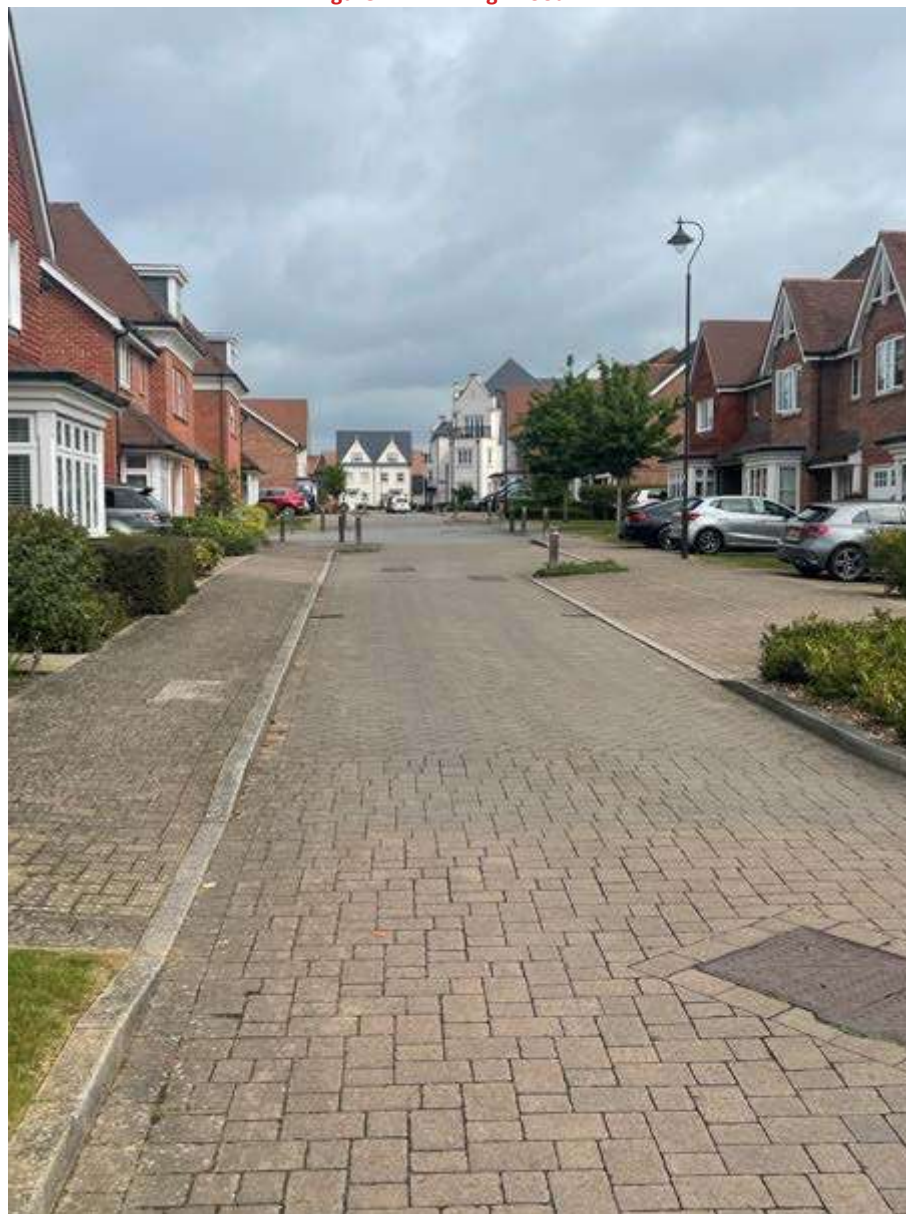
4.9.4 Highwood Mill is a relatively new development located approximately two kilometres west of Horsham town centre. Correspondence with HDC raised the challenge at this location of balancing sufficient off-street parking against avoiding sterile streets, where parking on-street is physically limited by the design of specific bays and the provision of a narrower road corridor. It is also noted that bollards and small build-outs have been included in the street design, presumably to reduce vehicle speeds.

4.9.5 No signed parking restrictions were observed at this location, with the road surfacing varying from the typical Local Highway Authority black asphalt. At the time of visit,

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relatively little parking on-street was observed, with each property providing off-street spaces, as shown in **Figure 21**.

Figure 21. Highwood Mill



4.10 Summary

4.10.1 The majority of locations observed were not deemed to be under a high degree of parking stress at the time of the site visit. Where high levels of on-street parking were observed, this was considered to be primarily due to the surrounding residential properties not providing off-street parking spaces. It is noted that these developments are older than much of the more recent residential development in the district and therefore reflect a time when car ownership levels were significantly lower than is currently typical; as such, changing the current car parking standards as defined by WSCC would not affect these existing residential areas.

- 4.10.2 With regard to the newer residential locations, it is noted that almost all properties are provided with either driveway parking, space within parking courts, or specific on-street bays. As such, the use of general on-street parking during the day appears well within the available capacity.
- 4.10.3 It is acknowledged that the site visit took place during a time where a significant number of residents would likely have been at work and therefore the parking stress levels could potentially be higher in the evenings than what was observed. Further dedicated parking surveys would need to be undertaken to establish whether such issues do exist, and if so to what extent they result in either disruption to vehicle movement, or cause any problems for pedestrians, cyclists, or public transport services

5. PREVIOUS PLANNING APPLICATIONS

5.1 Parking and Street Design as part of recent Planning Applications

5.1.1 Planning and policy officers at HDC have provided SYSTRA with details of a series of recent planning applications where parking or street design issues have been raised as concerns by consultees. SYSTRA has reviewed these applications and some brief commentary is provided to reflect the analysis contained in this study.

5.2 Vehicular Parking

Kilwood Vale Development (Phase 1, DC/10/1612 and Phases 6a and 6b, DC/19/0426)

5.2.1 The latest phase of this multi-phase application (6a and 6b) has been identified as attracting some of the strongest criticisms, primarily due to the perceived poor result of the approved street design. It is noted that housing density is acknowledged as part of the reasoning behind the design, but in practice it is understood that the layout of parking courts has created a poor environment and the street layout is considered to be inferior to that within Phase 1. Whilst both cited phases include a mix of on-street parking, private driveways and parking courts, it is felt that the design within Phase 1 is more successful at combining these elements.

5.2.2 SYSTRA’s view, from having visited the sites, is that the changes made within Phase 6a and 6b appear to be related to an effort to reduce the complexity of the street and court layouts, possibly to assist with future maintenance costs which are a contentious subject for a majority of local highway authorities. We agree that there is a tension in providing natural surveillance and activity (as identified by HDC officers) and preventing parking from dominating the street as experienced by those not travelling in vehicles; elsewhere we have observed that providing smaller parking areas (including building these into the street scene as Echelon parking with appropriate planting to soften the connection with the pedestrian space) can offer a better method to gain the benefits of activity associated with the parking spaces whilst avoiding large “blank” areas of asphalt or concrete.

5.2.3 We would note specifically that we have observed increasing tensions in parking provision between “occupier” parking and that intended for servicing and general visiting needs. Appropriate use of parking restrictions is found to be more successful nearer to town and village centre areas, whereas it is accepted that active enforcement is more difficult in less developed areas.

5.2.4 It has additionally been noted that the approach taken to parking within the Highwood Development (also visited for the purposes of this study) is considered by HDC officers to have led to confusion over where parking is and is not appropriate; SYSTRA agrees that this example represents a situation where the street scene is not as “legible” as it could be. Specifically, the use of break-outs and bollards to achieve traffic calming effects has been implemented in a manner which makes it difficult for drivers to be sure as to where parking is both allowed and will not obstruct other traffic. In this instance, the absence of street signage or markings to guide parking activity works against what is considered to

be the original intent of the scheme; these types of measure should be used sparingly but consistently to assist all road users.

Century House, Horsham (DC/17/2148)

- 5.2.5 This application is described by HDC officers as including “demolition of an old office block and erection of a large block of flats (49 units) near Horsham Station”. Officers have noted that there was debate at the relevant Planning Committee about the parking only equating to 0.77 spaces per dwelling (38 spaces for 49 units). Given its central location in Horsham, this provision was in accordance with the WSCC Parking Calculator and therefore officers did not identify this as a reason for refusal.
- 5.2.6 SYSTRA’s analysis of car parking standards in different comparable areas has identified that WSCC’s standards are slightly lower for developed areas. However, we also note that car ownership as recorded by 2011 Census and TRICS surveys does not support the view that every owner of a town-centre location flat will own a vehicle, and as such in practice the number of spaces provided is likely to be sufficient.
- 5.2.7 It is further noted that, at present, SYSTRA is not aware of any specific operating developments where overspill parking has been demonstrated to occur on a regular basis. We would note specifically that application DC/20/0576 (Norfolk Lodge Horsham) is understood to have been refused by the planning committee on parking impacts against the recommendation of officers, and that this was subsequently permitted at appeal; our conclusions from the work undertaken for this initial report is that there is not currently sufficient evidence of a widespread objective shortage of parking to support the position which is acknowledged as strongly held by residents within this area and potentially in other parts of the District. We would also note that changing parking standards to allow more parking (i.e. though the allocation of additional street parking permits in new developments) could be perceived as unfair by existing residents in areas which are already subject to parking controls and could lead to more applications for conversion of existing front gardens and similar areas, which by our understanding is not the intention behind the Council’s investigation of these topics. SYSTRA recommends that, should the Council wish to pursue an SPD or local parking standards further, additional targeted data collection would be necessary to draw out and contextualise the issues raised by existing residents. (It is recognised that applications DC/20/0789 and DC/19/1639 offer very similar examples of these issues and the consultee comments for each application have a large amount of common ground in terms of concerns and reasons for objection, and that there have historically been very similar comments from Members in relation to Phase 1A of the North Horsham Development DC/16/1677).

Brangwyn, Henfield (DC/20/0085)

- 5.2.8 This is a relatively small application for the creation of two additional flats via extension of an existing property; it has been identified for review by SYSTRA as the proposed parking arrangement was cited alongside a number of other issues as a reason for refusal of the application. However, this was understood to have not been given material weight by the Inspector at the subsequent review.

- 5.2.9 The design of internal parking areas (i.e. those which are not to be part of the public highway) receives relatively little attention compared to “public” highway design. The appeals system means that any reason given for rejection has to be supported appropriately in policy, and/or to demonstrably lead to unacceptable impacts to the safety of development users and visitors, or the general public.
- 5.2.10 Consideration must also be given as to whether, when a design is criticised by officers, a realistic alternative exists. National planning policy previously did not encourage or support local planners in refusing applications purely on issues of “quality” in parking or landscaping provision if the relative quantitative measures had been met; this has recently been addressed in part through the strengthening of the importance of design matters within the current version of NPPF and its associated PPG documents. SYSTRA is aware of examples of scheme development (particularly on smaller schemes) where options for design appear to have been poorly or incompletely considered, and where it is possible that the stronger requirements and guidance would have resulted in better outcomes in these circumstances.
- 5.2.11 SYSTRA’s view is that it is welcome that recent changes to planning policies have given extra weight to design matters. It is noted that, where a quantitative standard does not exist, or can be technically complied with in multiple ways, there will continue to be potential for disagreement between planners and scheme designers; it remains to be seen what justifications and alternative proposals will be supported by PINS where a refusal is appealed that includes “poor design” as a stated reason. We would therefore propose that there is increased importance now placed on greater interaction with these elements at the planning stage between developers and officers, and potentially that a concise “library” of examples of what local planners actively deem to be good design be put together using primarily local schemes to assist that process. SYSTRA considers that this should not only reduce instances of poor design being pursued against the Council’s wishes, but would also provide a firm basis for the defence of design-based reasons for refusal.

5.3 Cycle Parking

- 5.3.1 The provision of cycle parking within developments is often felt to be relegated to the status of a minor consideration, which is addressed after other “more important” matters have been dealt with. In SYSTRA’s experience, this is perhaps not the whole story; when site layouts are presented to local authorities at the pre- or planning application stages, it is frequently the case that the reviewing officer(s) will start by looking at vehicle access, particularly the needs of large servicing vehicles, and require amendments which will necessitate the re-arrangement of other elements of the site layout. Since building footprints are often “fixed” from a very early stage, cycle stores have a tendency to get moved, reduced, or squeezed in under-sized areas.
- 5.3.2 HDC officers have commented specifically that the conditioning of cycle provision leads to “last minute” designs for cycle storage, and that pressure is then placed on them to approve perceived sub-standard provision. Examples of this include application DC/21/2076 (78 Park Street, Horsham), where the design submitted is considered by HDC officers to be unrealistic in terms of its capacity to accommodate the required number of cycles, and application DC/22/0096 (Roundstone Caravan Park, Horsham) where indication of cycle parking provision is noted by HDC officers to have been removed

subsequent to pre-application discussions. SYSTRA has reviewed these two applications highlighted as potential examples of “bad” cycle provision by HDC; we are in agreement that the quality of the submissions is lacking, and would suggest that a simple “parameter plan” or similar should be prepared and attached with any condition prior to determination to demonstrate that sufficient space (either inside or outside the proposed buildings) will be provided. We also note that some authorities (particularly those in London) provide specific criteria on the dimensions of cycle parking spaces, including cycle stand spacing, cycle “sheds” and lockers, and stacked cycle racks; this would potentially offer a means for officers to justify comments on cycling requirements and ensure cycling provision is fit for purpose.

5.3.3 It is further noted that an example of “good” design has been provided by HDC by way of application DC/21/2394 (141 Shooting Field). It is specifically recognised that, whilst the total number of spaces is lower than typically required by the current standards, the quality of provision is high and works in harmony with other elements of the site and building design. SYSTRA notes that we are increasingly seeing councils adopt a degree of flexibility with regard to overall cycle parking numbers where there is clear evidence that site constraints prevent full provision to a high standard; whilst there is a lack of recent data to draw on, anecdotally we are aware from our conversations with clients who manage properties (such as housing associations) that stores which hold fewer cycles and are conveniently located with proper overlooking or other surveillance and security measures are used more frequently than large, inconvenient stores or racks. This supports the importance of cycle parking standards and design guidance working together to deliver both quality and appropriate quantities of cycle parking in new developments.

6. PARKING AND STREET DESIGN – EXAMPLES & ANALYSIS

6.1 Overview

6.1.1 To build on the initial commentary on street design presented in Sections 4 and 5 of this report, Section 6 presents some selected examples of Parking and Street Design in existing areas of Horsham District. These examples provide more detailed comments on how elements of the design could have been approached differently, and how this would potentially translate into a form of local guidance. Examples from elsewhere are included where it is considered appropriate to illustrate the options being discussed.

6.1.2 Relevant text from national and local parking policy and design guidance has been detailed below, along with certain areas identified in the site visit, where it was deemed that elements of the parking arrangements could be improved.

6.2 National Policy & Design Guidance

Manual for Streets

6.2.1 With regard to on-street parking, the Department for Transport’s Manual for Streets document (2007) specifies that an arrangement of discrete parking bays adjacent to the running lanes is often the preferred way of providing on-street parking. It has little effect on passing traffic and minimises obstructions to the view of pedestrians crossing the street (paragraph 8.3.12).

6.2.2 Breaking up the visual impact can be achieved by limiting on-street parking to small groups of about five spaces. These groups can be separated by kerb build-outs, street furniture or planting (paragraph 8.3.14).

6.2.3 Indicating on-street car-parking spaces clearly through the use of road markings or changes of surfacing material can help to encourage good parking behaviour (paragraph 8.3.19). It is noted that where regulated on-street parking is provided, it cannot be allocated to individual dwellings, although such spaces can be reserved for particular types of users, such as disabled people.

6.2.4 The carriageway width to access echelon or perpendicular spaces conveniently, depends on the width of the bay and the angle of approach. For a 2.4 m wide bay, these values are typically:

- 6m (90 degrees);
- 4.2m (60 degrees); and
- 3.6m (45 degrees).

6.2.5 With regard to cycle movement and parking within the street scene, MfS leads from a position that cycling should be an activity which is perceived by street users as a natural and regular activity, and that within quieter (particularly residential) street design, cyclists should feel safe to cycle on the road (or shared space area) without the need for formal cycle lanes (para 6.4.8). For busier routes, newer standards (including LTN 1/20) are the

most comprehensive, but the general principle of cyclists occupying a high position in the street “hierarchy” is maintained.

6.2.6 MfS recommends that street cycle parking should be limited to visitor and short-stay parking, with simple solutions (such as Sheffield stands) considered to consistently represent the best design options. In terms of framing specific design guidance, it is recommended that on-street cycle parking should be closer to the carriageway than buildings (so that it is easily seen and overlooked by passing street users) with a spacing between stands of 1 metre. Larger, more complicated structures are generally not recommended, except in specific circumstances (such as cycle parking near a station or other transport node).

6.2.7 Residential cycle parking design is considered to be best achieved within the curtilage of proposed developments; SYSTRA notes that whilst MfS associates higher cycle ownership with houses than flats, this pattern has become less pronounced over time. Internal storage for cycles is stated to be preferred over external storage; SYSTRA notes that external stores are frequently subject to degradation over time from weather effects (and in some cases vandalism) and that subsequently their use heavily declines or stops altogether.

6.2.8 MfS also offers a suggested “checklist” of the elements that a local design code should seek to address (page 33):

Design codes Street-related design elements and issues which a design code may relate to include:

- *the function of the street and its position in the Place and Movement hierarchy, such as boulevards, high streets, courtyards, mews, covered streets, arcades or colonnades;*
- *the principal dimensions of streets;*
- *junctions and types of traffic calming;*
- *treatments of major junctions, bridges and public transport links;*
- *location and standards for on-and off-street parking, including car parks and parking courts, and related specifications;*
- *street lighting and street furniture specifications and locations;*
- *specifications for trees and planting;*
- *location of public art; • drainage and rainwater run-off systems;*
- *routeing and details of public utilities; and • arrangements for maintenance and servicing.*

Car Parking – What Works Where

6.2.9 Car Parking – What Works Where is a report produced by English Partnerships, from 2006. It is acknowledged that this document is relatively dated, however certain advice remains

relevant to the issues which have been identified in Horsham and relevant text is therefore reproduced here for context and informative purposes.

- 6.2.10 The report discusses the innovation known as the “Homezone”, consisting of areas within urban environments where traffic does not dominate, with other distributor routes made free for movement. This is achieved through physical measures restricting the dominance of traffic and enabling play, socialising, slow-moving vehicles and car parking.
- 6.2.11 Outdoor seating, trees and planters are positioned adjacent to vehicle routes, with carriageway surfacing materials indicating use by pedestrians and cyclists as well as vehicles. Car parking is in clearly delineated spaces and does not dominate the street scene.
- 6.2.12 It is noted that in more recent times, neighbourhoods known as Low Traffic Neighbourhoods (LTNs) have taken many of the “Homezone” principles outlined here in prioritising streets for people over vehicles, and developed these concepts further, in particular with regards to the accommodation of public transport and servicing activity. These matters are discussed further below where relevant.

6.3 Parking Types and their role in new Street Spaces

- 6.3.1 Vehicle parking within street environments serves a number of important purposes; typically, streets are required to accommodate short term (i.e. less than 2 hours) parking for a wide range of different vehicle types, and to also provide for less frequent longer-stay parking (for example, parking for tradesmen working at a property). Increasingly, new streets are also required to accommodate a degree of residential parking activity, either directly (bays or within the carriageway) or indirectly (providing access to parking courts).
- 6.3.2 It is essential that parking provision (including provision for disabled residents and visitors) is guided by street design principles which reflect local aspirations as well as general good practice, and that the corresponding parking standards which scheme developers are required to apply are compatible with these. It has been recognised by HDC officers from examples of previous development within Horsham that the quality and arrangement of street parking is just as important as the quantity, and that providing parking space in a manner which encourages desirable parking behaviour (and discourages disruptive behaviour) is likely to reduce some of the issues over which local members and residents have reported and expressed concern.
- 6.3.3 Specifically with regard to unallocated street parking provision, Horsham district already has a number of different built examples of approaches which have developed and changed over time. Particular examples are considered below, however the following general points are considered relevant to consideration of how new street development and design can be guided:
 - Inset bays on the street require good accompanying design (such as planting or differentiated surfacing) to avoid a “sterile” effect, but largely avoid issues with blocking of the main carriageway or sightlines for other vehicles.
 - Excessive signage, lining and “street clutter” is detrimental to the street environment, but it should always be clear if there are any restrictions on who can park on the street.

- It should be assumed that on-street bays or uncontrolled on-street space in the immediate vicinity of residential or business frontages will be used by residents and business as additional permanent parking unless clear restrictions are applied (and enforced).
- Street hierarchy principles should be used to balance the arrangements for parking with the needs of other modes (including cycle access and cycle parking).

6.4 Accessible and Disabled Car Parking Provision

- 6.4.1 The physical requirements for “accessible” car parking spaces are set out in Manual for Streets and directly referenced within the current WSCC guidance. Other official documentation within the planning system (such as Building Regulations Part M) which requires the provision of dedicated parking spaces (including drop-off bays) refers back to MfS and there are very few (if any) situations where deviation from these standards is permitted.
- 6.4.2 In terms of the integration of accessible parking into the street scene or developments themselves, the requirements of Part M also place stringent limits on how far users of accessible spaces should be required to travel from the space to the entrance point of the building in question. In practice, street designers will often need to understand these requirements and place spaces with the correct dimensions into acceptable locations, with other parking then being arranged into the remaining available space.
- 6.4.3 The development of masterplans for residential development will additionally need to consider the number and location of “adaptable” dwellings within a scheme, to ensure that it is possible to convert one or more parking spaces to fully accessible specifications where this is required in future. Within parking courts this is often achieved by retaining additional space at the ends of planned parking rows; on-street, wider shared space approaches can offer flexibility over time so that “safe zones” around accessible bays can be incorporated into the street layout without leading to additional widening of carriageways or the sterilization of space which would otherwise be available to pedestrians.
- 6.4.4 Particular care needs to be taken with on-street linear bays laid out to accessibility standards, and potential conflict with on-street cycle routes; where on-street bays are being provided, cyclists must be safely able to pass around any hatched protected area without coming into conflict with oncoming vehicles, and to have clear visibility of open car doors or other equipment present in the protected area.

6.5 Local Examples within Horsham

- 6.5.1 Further commentary in relation to specific locations within Horsham (and their relevance to the topics discussed above) is provided within the remainder of this section of the report. The locations which have been examined have been identified as a result of issues and queries raised by HDC officers, and SYSTRA’s own observations from the site visit activities.
- 6.5.2 The analysis within this section of the report is intended to identify examples of good (or poor) practice specifically within the context of Horsham District and its different communities. This is considered important in the context of guiding new development as

local guidance should reflect the preferences and experiences of local residents and visitors, insofar as this can also be made

- 6.5.3 It is noted that the commentary on these examples is not intended as a formal appraisal of the street design elements; rather, it seeks to identify and explain what alternatives to the present layout could include, with reference to design guidance adopted elsewhere in the UK where this is relevant. It is recognised that there is often an initial tension between the amount of vehicle (and to a lesser extent, cycle) parking which is provided and the space required to do so in a manner which also provides a high quality environment for pedestrians and cyclists. There is additionally the potential for tension in how the street “reads” for different users, which can include those who are seeking to park for longer periods (i.e. on-street or parking court use by residents) versus shorter-term activity for businesses and servicing. These latter issues are usually best addressed through concise but visible signage and street markings, which have historically been viewed as “clutter” due to poor placement or integration with the rest of the street scene.

Thelton Avenue (described at Section 4.3)

- 6.5.4 Thelton Avenue is a residential street in Broadbridge Heath, located directly west of Horsham town.
- 6.5.5 No signed parking restrictions were observed on this street, with on-street parking noted on both sides of the carriageway. A deep parking lay-by was observed, allowing vehicles to be parked perpendicular to the carriageway, as shown in **Figure 6 22**.

Figure 22. Thelton Avenue, Broadbridge Heath



- 6.5.6 The nature of the residential properties on this street was deemed to be varied, with both those providing off-street parking and those requiring parking on-street observed.
- 6.5.7 The on-street parking provision as observed to be relatively well-used, with an estimated 70% of these spaces occupied. Almost all of the private driveways were noted to be occupied by vehicles.
- 6.5.8 Two parking laybys are present on Thelton Avenue, outside house numbers 2-8 and 20-26. Both laybys were deemed appropriately sized, with parking on the carriageway opposite not providing an obstruction to visibility.
- 6.5.9 A third parking layby is present on Thelton Avenue, outside house numbers 25-35. This layby is located on a bend in the carriageway and was observed to be deeper than the

other two mentioned above, with vehicles observed parking perpendicular to the carriageway.

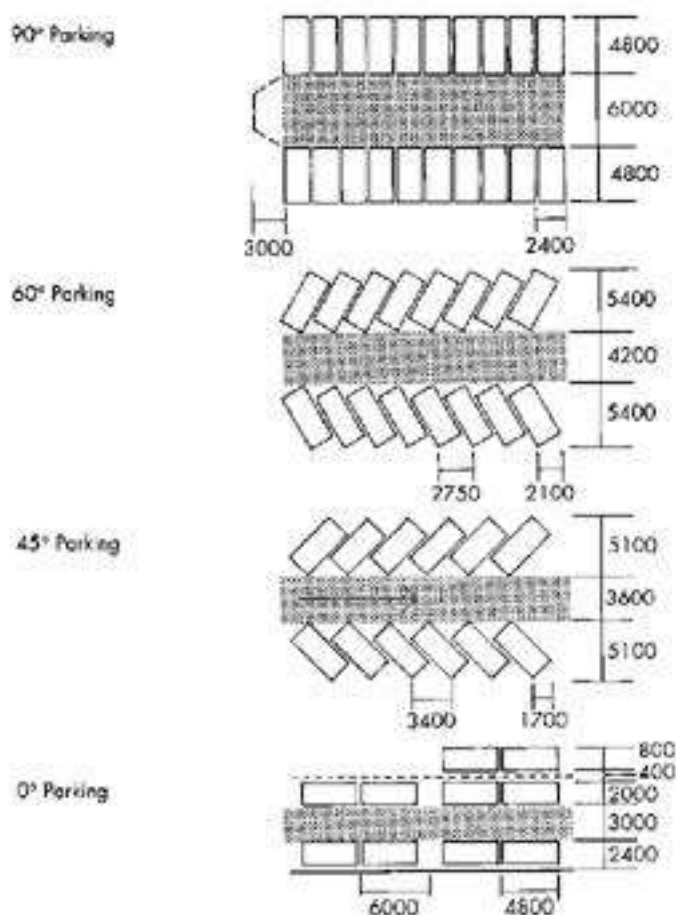
- 6.5.10 This layout was deemed to potentially present some safety issues. Vehicles parking in this layby were observed protruding into the carriageway, reducing the available space for vehicles to safely manoeuvre around the bend in the carriageway. In addition, parking on the inside bend opposite the layby was noted to be unrestricted, although no vehicles were observed parked in this location.

- 6.5.11 It is noted that the Essex Design Guide addresses these types of parking area and makes some recommendations around communal parking areas, which should be located so as not to be unduly conspicuous in the layout. A continuous row of parked cars in front of a terrace of houses is not recommended. Instead, communal parking areas should be divided and distributed around the layout, with some spaces convenient for visitors on or near the frontage.

- 6.5.12 It should also be noted that the wider approaches set out in Manual for Streets should also be carefully considered when on-street parking options; in particular, more informal parking (potentially delineated in a less severe fashion with planters or other appropriate street furniture, rather than solid lining) may be a better design choice overall than a formal bay system. As a counterpoint to this, particular care should be taken to consider how dedicated parking space(s) for disabled residents will be, or would be, provided in the event that a request for a dedicated space were to be submitted to the body in control of the street, as these would need to meet the relevant national standards at the time of the request.

- 6.5.13 As a worked example using bays, the Suffolk Design Guide outlines the measurements expected for on-street parking, for parallel, perpendicular and angled spaces. These figures are shown below in **Figure 23** and demonstrate the relative densities which can be achieved via the different approaches shown.

Figure 23. Suffolk Design Guide, On-Street Parking Spaces Dimensions



6.5.14 It is therefore SYSTRA’s recommendation that, in a future situation of the type identified on Thelton Avenue, parking spaces could be marked within the deeper layby, ideally at an angle in order to maximise the capacity available, in line with the Manual for Streets guidance outlined above, as well as taking into account the Suffolk and Essex Design Guide suggestions. It is noted that the overall amount of parking to be provided should be balanced with space given over to planting and street scene improvements, and should not result in any degradation or “second best” provision for non-motorised modes. It is suggested that in a comparable situation within a new road design, double yellow lines should also be provided on the opposite side of the carriageway for the length of the bend, in order to ensure an adequate level of visibility for drivers manoeuvring around the bend and to reduce any potential for confusion by occasional visitors.

Clovers End, Horsham (described at Section 4.4)

6.5.15 Clovers End is a residential cul-de-sac street in the Littlehaven area of Horsham, located approximately 3.5km north east of the town centre. No signed parking restrictions were observed on this street.

6.5.16 The nature of the residential properties on this street was deemed to be varied, with both those providing off-street parking and those requiring parking on-street observed. A lay-by was observed on one side of the carriageway.

6.5.17 Occupancy levels for the on-street parking provision were deemed to be generally high, at approximately 70%. The occupancy levels for properties with off-street parking provision were deemed to be lower.

6.5.18 The section of road observed is shown in Figure 24 below.

Figure 24. Clovers End, Horsham



6.5.19 A bend is present, immediately before the end of the cul-de-sac with unrestricted parking on both sides of the carriageway. Despite this, parking was observed on the outside edge only, potentially indicating an “unofficial” arrangement in place amongst residents. It was noted that numerous cars are parked outside the properties at the end of the cul-de-sac, with reversing manoeuvres required to exit via Clovers End.

6.5.20 The lack of parking restrictions on the inside edge of the bend was deemed to present a potential safety issue due to restricted visibility, despite no vehicles observed being parked at this location during the site visit. It is noted that the use of tighter street geometries would physically reduce or remove the issue (as is observed at other development areas within the borough), however this is not necessarily appropriate in all circumstances, particularly where house plots are larger or the terrain does not lend itself to this type of street design, or where access for larger Local Authority vehicles (such as newer types of refuse collection truck) is not compatible with a tighter geometry layout.

6.5.21 As an example of how this type of issue is identified and foreseen by design guidance elsewhere, Kent’s Design Guide for Movement document requires proposed layouts to demonstrate that drivers will be able to both see and be seen around curves, including in this type of generally low-speed road layout. To enable this, it is necessary to provide clear unobstructed visibility in line with the anticipated vehicle speeds. It is noted that cars should not be expected to reverse a distance greater than 25 metres. The Kent Design Guide’s required forward visibility, bend centreline radius and distances from T-junction/cul-de-sac are shown below in **Table 11** for reference.

Table 11. Kent Design Guide – Carriageway Bend Parameters

vehicle speed (mph)	forward visibility / Y distance (m)-	distance from T junction or cul-de-sac- (m)	design speed (mph)
10-	14-	10	5
15-	23	20	10
20	33	30	15
22	37	40	20
25	45		
30	60		

Feature	design speed (mph)
bend - centreline radius (m)-	
10	10-
15	15
20	20
25	22
30-	25-
40-	30
vertical shift	15
lateral shift	20
narrowing to single lane	20
roundabout	20
narrowing to reduced width	30
2m wide central island-	30
4m wide central island-	20

6.5.22 It is therefore SYSTRA’s recommendation that future layout proposals which are similar in nature to this example could incorporate tests of this type at the design stage, so that where there is no desire to formalise on-street parking through provision of bays, the

resulting parking activity does not result in potential safety issues or impact upon the movement of others (including cyclists). These tests should not be undertaken in isolation from wider design decision making, and should be integrated with placemaking principles in terms of footway provision, surfacing and materials, and the use of verges and planning. Additionally, where meeting these types of guidelines is challenging, double yellow lines could also be provided on the inside edge of such bends for their entire length, in order to ensure an adequate level of visibility for drivers manoeuvring around the bend, in line with the table above.

Highwood Mill (described in Section 4.9)

- 6.5.23 Highwood Mill is a relatively new development located approximately two kilometres west of Horsham town centre. Correspondence with HDC raised the challenge at this location of balancing sufficient off-street parking against avoiding sterile streets, where parking on-street is physically limited by the design of specific bays and the provision of a narrower road corridor. It is also noted that bollards and small build-outs have been included in the street design, presumably to reduce vehicle speeds.
- 6.5.24 No signed parking restrictions were observed at this location, with the road surfacing varying from the typical Local Highway Authority black asphalt. At the time of visit, relatively little parking on-street was observed, with each property providing off-street spaces, as shown in **Figure 25**.

Figure 25. Highwood Mill



- 6.5.25 Correspondence with HDC raised the challenge at this location of balancing sufficient off-street parking against avoiding sterile streets, where parking on-street is physically limited by the design of specific bays and the provision of a narrower road corridor. It is also noted that bollards and small build-outs have been included in the street design, presumably to reduce vehicle speeds.
- 6.5.26 It was noted that plenty of off-street parking capacity is provided in the form of driveways and garages, with light on-street parking observed in the laybys present.
- 6.5.27 In design terms, the approach to the layout in this location clearly seeks to reduce the prominence of vehicles and to provide greater visual “parity” through the approach to surfacing and the breaking up of the carriageway with physical horizontal displacement elements. However, it is noted that the relative widths of the footpath area and the

presence of a raised kerb still act to separate pedestrians from cycles and vehicles. Whilst this clearly has been done with safety in mind (particularly for those with visual impairments, and to delineate a defended space for the most vulnerable users), it has led to a perceived narrowing of the vehicle carriageway in addition to the physical measures.

6.5.28 It is noted that, from a purely technical perspective, the design in this location complies with general “good practice”. It is however questioned as to whether the use of “hard” features such as bollards is entirely necessary in this type of location, where the use of suitable planting or more small street trees would achieve a similar effect (potentially with smaller or no physical build-outs). A district-specific design guide could seek to encourage this alternative “softer” approach, taking into account the previous comments made in relation to visibilities; it is suggested that this could allow some simplification of the street layout and subtle use of road markings and planting to indicate where visiting vehicles can safely park. In this type of environment, it is also recognised that the use of small parking courts to address the balance of required parking provision can also be helpful; this is considered to be preferable to the introduction of staggered parking bays as in some circumstances it allows for the overall widths of the streets themselves to be lower, which creates a more friendly environment for pedestrians and cyclists. (This should be considered alongside the access requirements for servicing vehicles as this may call for a wider street or gentler geometry into which street parking can be integrated, reducing the need for separate parking court provision).

Kilnwood Vale (described in Section 4.9)

6.5.29 Kilnwood Vale is a relatively new development located on the outskirts of Crawley, located approximately eight kilometres north east of Horsham. Observations were made in Phase 1 of the development, which has been built out and occupied. It is noted that some of the remaining phases are still under construction at time of writing.

6.5.30 This location was identified in correspondence with HDC as having dealt with parking in a positive manner, maintaining an effective balance between off-street parking, on-street parking and soft-landscaping. There are also generally well considered parking courtyards to limit the requirement for parking on-street. It is noted that the road carriageways are relatively wide and do not generally include any measures to restrict vehicle speeds.

6.5.31 No signed parking restrictions were observed at this location, with the road and pavement surfacing varying from the typical Local Highway Authority black asphalt. At the time of the visit, relatively little parking on-street was observed, with each property providing off-street spaces, as shown in **Figure 20**.

Figure 26. Kilnwood Vale



- 6.5.32 This location was identified in correspondence with HDC as having dealt with parking in a positive manner, maintaining an effective balance between off-street parking, on-street parking and soft-landscaping.
- 6.5.33 It was noted that generally well considered and appropriately scaled parking courtyards were present, limiting the requirement for parking on-street. The road carriageways were deemed relatively wide and did not generally include any measures to restrict vehicle speeds; from the site visit it was observed that this had not seemingly led to issues with inappropriate vehicle speeding behaviour.
- 6.5.34 Despite this, during the site visit, some vehicles were observed partially parking on the pavement; current national guidance seeks to minimise this type of activity wherever possible, as not only can it result in difficulties for some pedestrians (including buggies

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and mobility aids) but it gives a strong impression that vehicles take priority over active users, which runs counter to national and local policies.

6.5.35 It is recommended that future street designs which are intended to capture a similar feel to this example should ensure that footpaths are not encroached upon; the approaches discussed above offer examples of how on-street parking can be managed to better achieve this aim. In this specific instance, some enhanced distinction between carriageway and pavement is suggested (via either surfacing or more visually obvious kerb lines), along with measures communicating the prohibition of pavement parking, in order to keep the footway clear for pedestrians. The measures proposed in this regard should be sensitive to the street context and avoid unnecessary clutter (whilst also complying with the legal requirements associated with the Traffic Regulation Order(s) used to implement any restrictions.

6.6 Summary of Comments

6.6.1 The preparation of local design guidance for streets and public areas has the potential to guide new development (and redevelopment) so that resulting activity by pedestrians, cyclists and vehicles has a positive impact. It is recognised that streets are places where movement and interaction should be encouraged, but that this ideally should be in a context where all users feel safe and unnecessary or anti-social behaviour is minimised.

6.6.2 It is expected that the majority of street designs for new developments will be intended for adoption into the public highway. As such, all local guidance prepared by Local Planning Authorities will need to be fully compatible with the requirements for Section 38 design as adopted by their corresponding Local Highway Authority (in this case, WSCC). Section 38 sets out the legal requirements and process by which infrastructure designed and built by private companies or individuals can legally be integrated into the public highway.

6.6.3 Notwithstanding this, we have identified several examples of approaches from other LHAs in their published guidance which point to a wider range of approaches to the provision of on-street and court-based parking which could feasibly be adapted or referenced in a Horsham-specific guidance document. These include:

- Less use of “hard” measures to control carriageway width and associated speeds, with road curvature, appropriately placed on-street parking, and associated roadside planting applied as an alternative;
- Clear delineation of footpaths and space for non-motorised users with an avoidance of footway parking
- Concise but clearly visible instruction for on-street parking where restrictions are deemed necessary (complying with legal requirements in a manner which does not result in clutter on streets)
- Use of small parking courts with good visibility from the street (and also potential for use as informal play and gathering space when fewer vehicles are present)
- Careful checking of sightlines on streets where a more informal approach to parking and servicing is preferred, with double or single yellow lines used sparingly but appropriately to guide drivers and prevent conflict (including with public transport routes and cycle activity)

7. CONCLUSION

- 7.1.1 SYSTRA has been commissioned by Horsham District Council to conduct a review of the parking standards for cars and cycles to new development proposals within Horsham District. The Local Highway Authority is West Sussex County Council, who has produced the parking standards which currently apply for developments in Horsham district.
- 7.1.2 This report has incorporated an analysis of parking standards for comparable local authorities, conducted an analysis of the relationship between parking provision and trip generation, providing an indication of the impacts of increasing the recommended parking provision and noted observations from a site visit to various areas of Horsham district.
- 7.1.3 The WSCC vehicle parking standards for residential developments in rural areas have generally been found to fall in line when comparing to the average parking ratios across a number of local authorities covering towns similar in nature to Horsham. However, the WSCC standards were found to be less generous than average when considering developments in town centre locations, in particular for one and two bedroom dwellings. This correlates with the specific concerns raised by consultees in relation to certain previous planning applications.
- 7.1.4 The WSCC minimum residential cycle parking standards have been found to be generally less than the average figure across the assessed local authorities, with the potential to be made more stringent.
- 7.1.5 The WSCC standards regarding charging points for EVs have been found to be in line with the assessed local authorities which gave specific requirements.
- 7.1.6 The current WSCC parking standards for care homes have been deemed relatively ambiguous. The assessed local authorities provided a varying range of parking spaces per resident bed, from one space per three to six beds, with the staff requirements more consistent at a maximum of one space per staff member.
- 7.1.7 When comparing the average parking ratios and trip rates for sets of sites matching the WSCC PBZ criteria, a general increase in peak hour vehicle trips was observed when higher numbers of parking spaces were provided. However, significant variation was observed between different sites with similar proportions of parking to dwellings, with the differences considered to be associated with the availability of local services and public transport.
- 7.1.8 A site visit was conducted on Monday 16th May 2022, between 08:30 and 16:00 and covering at least one typical residential street from each of the WSCC PBZs, a selection of Horsham town centre car parks (alongside examination of the wider town centre streetscape) and specific new build residential sites which were identified through correspondence with HDC.
- 7.1.9 The majority of locations observed were not deemed to be under a high degree of parking stress at the time of the site visit. Where high levels of on-street parking were observed, this was primarily due to the surrounding residential properties not providing off-street

parking spaces, and having parking provision significantly below what would be required to meet current parking standards.

- 7.1.10 It is acknowledged that the site visit took place during a time where a significant number of residents would likely have been at work and therefore the parking stress levels could potentially be higher in the evenings than what was observed. It is considered that should HDC wish to progress this study further, an additional site visit taking place during the evening, and/or formal parking accumulation surveys, would help gather the full picture of parking conditions at these locations.
- 7.1.11 In comparing the appraisal of the current WSCC parking standards to existing examples of good and bad parking design and implantation specifically within Horsham district, SYSTRA has arrived at the view that the WSCC standards themselves (in terms of their requirement for the *amount* of car and cycle parking to be provided for different development types) are not significantly mis-matched from typical demands as have been observed from the site visits and other data sources. However, it is evident from our own analysis and the data and feedback provided by Council officers that there has been considerable variation in terms of how street layouts within the district have been designed. These designs have, in most cases, attempted to be consistent with the wider development and street environment “aspirations”, but a number of technical and practical issues have arisen. Some of these issues could reasonably be foreseen (in a present-day context), others have only become apparent as a result of “real world” use of these spaces.
- 7.1.12 To reflect the above, commentary has been provided within this report on a number of identified issues and concerns with existing parking and street layouts. It is considered that additional local guidance could help to steer future street and public space design towards aspects which deliver on the types of environment which Horsham residents, visitors and officers wish to see delivered, whilst remaining fully compatible with the requirements for adoption as set out by WSCC Highways. It is suggested that any such bespoke guidance should be founded on real-world examples of the types of design which are preferred, and that examples of design issues (including those identified in this report) to be avoided are also given, with a “toolkit” of preferred approaches to resolving these issues being included within the guidance, drawing on national standards and other examples of good practice. Some suggestions for this are provided within this SYSTRA report and others could no doubt be identified if a local guidance document were to be developed.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

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