

**PROPOSED RESIDENTIAL (USE
CLASS C3) DEVELOPMENT**

**MANOR NURSERY SITE, HIGH
STREET, ANGMERING**

**Transport Statement prepared on
behalf of Hanbury Properties Ltd**

April 2014



MILESTONE
TRANSPORT PLANNING

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MTP Ref: 14/033

Produced by

Milestone Transport Planning

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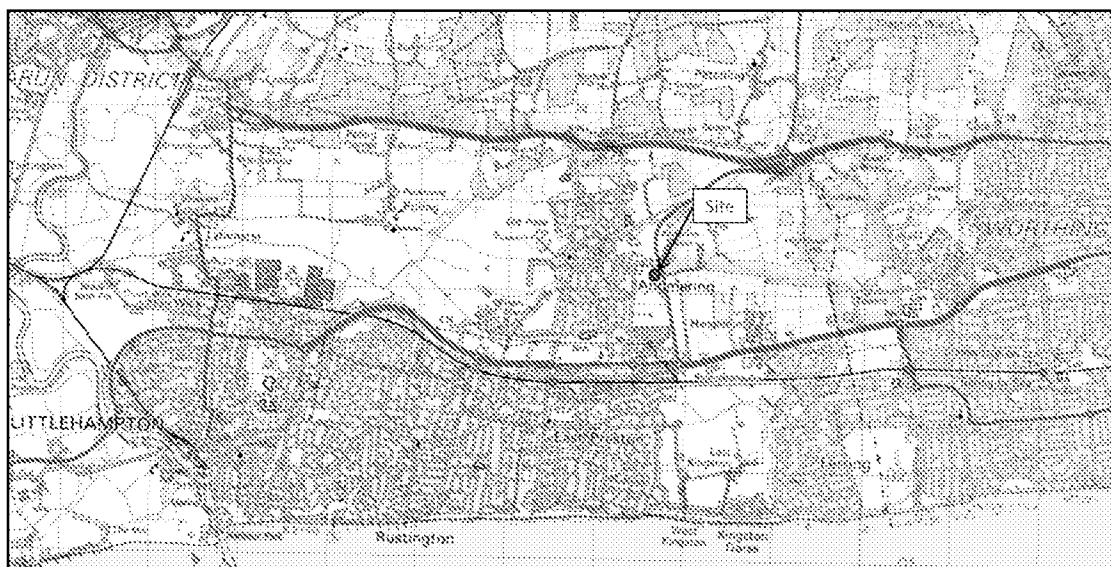
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1. THE SITE

- 1.1 This Transport Statement (TS) has been prepared on behalf of Hanbury Properties Ltd to accompany an outline planning application submitted to West Sussex County Council (WSCC) for the proposed redevelopment of the Manor Nursery and Garden Centre, Angmering to residential (Use Class C3) comprising of 32 dwellings.
- 1.2 The site is located at the eastern end of High Street, approximately 1km east of Angmering village centre. The site is bounded by a residential dwelling to the west, a public car park and a bridleway that extends from the eastern end of the High Street to the north, a BOAT (byway open to all traffic) to the east and fields to the south. The fields to the south are in multiple ownership and form part of a comprehensive masterplan proposal that, combined, could deliver circa. 600 residential dwellings.
- 1.3 The location of the site is detailed below in Figure 1.

Figure 1 Site Location



- 1.4 Manor Nursery and Garden Centre consists of a single glass house unit totalling 3,145m² with associated parking and external plant display areas. Manor Nursery is connected to High Street, Angmering by way of a gated priority junction access. The site access is situated some 170m east of the High Street / Roundstone Lane priority junction.
- 1.5 Manor Nursery is a supplier of plants, fertilizers, garden ornaments and gifts for both expert and amateur horticulturalists. In addition, Manor Nursery has a coffee shop serving drinks and light refreshments.

- 1.6 This TS will consider the implications of development related travel on the operation of the surrounding highway and transport networks. Furthermore this TS will consider the appropriateness of the proposed development in transport policy terms, giving due regard to the need to ensure that it is accessible by all modes of travel.

The Proposal

- 1.7 The proposed residential development under Use Class C3 will consist of 32 units comprising of 10 affordable and 22 private dwellings. The Architect's Site Plan (13114/SK07) included as Appendix 1 shows the development proposals with Table 1.1 providing a breakdown of the proposed development by type and size of dwelling.

Table 1.1 Development Mix

Type	Size of Dwelling	No. of Units	%
Affordable	2-bed house	8	25.00%
	3-bed house	2	6.25%
Private	2-bed house	3	9.38%
	3-bed house	10	31.25%
	4-bed house	6	18.75%
	5-bed house	3	9.38%
	TOTAL	32	100%

- 1.8 The TS will demonstrate that in terms of Planning Policy at both National and Local level with respect to issues such as sustainability and traffic impact, the application site is more than capable of accommodating the proposed level of development.

Scope of Assessment

- 1.9 Section 2 of the assessment provides a review of the proposals in the context of national, regional and local planning policy, a review of the sites access to key services is provided within Section 3. Details of the development scheme proposal access by sustainable modes for all road users is provided within Section 4.

- 1.10 A critical analysis of development-related total travel demand, trip generation and an estimate of the likely modal share characteristics are presented within Section 5. The operational and environmental impact of development-related trips on the surrounding highway and transport networks are considered within Section 6. Finally, the assessment is summarised and concluded within Section 7.

2. POLICY CONTEXT

- 2.1 An important consideration in the promotion of the proposed development is to highlight the guidance given with respect to transport policies at both National and Local Government level. In overall terms, planning policy seeks to achieve a balance by integrating land use and transport policy to create more sustainable development by appropriate location and design.

National Planning Policy Framework

- 2.2 The National Planning Policy Framework (NPPF) published in March 2012. Within the core planning principles as highlighted in para. 17 of the NPPF it states that planning should *"...actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling..."*
- 2.3 Section 4 of the NPPF continues on the theme of promoting sustainable transport. In para. 29 it highlights the role that transport policies have in contributing to wider sustainability and health objectives, citing smarter use of technologies and giving people real choice about how they travel as playing a key role in this regard. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport will vary from urban to rural areas.
- 2.4 Para. 32 states that *"...development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."*
- 2.5 Paragraph 35 of the NPPF goes on to state that *"Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people..."* It goes on to state that where practical developments should be located and designed to:
- *"accommodate the efficient delivery of goods and supplies;*
 - *give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;*
 - *create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;*
 - *incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*
 - *consider the needs of people with disabilities by all modes of transport."*

West Sussex Transport Plan 2011-2026

- 2.6 The main objective of this Plan is to improve quality of life for the people of West Sussex by: *"promoting economic growth, tackling climate change, providing access to services, employment & housing and improving safety, security & health."*

- 2.7 Within their long term strategy, West Sussex County Council strive to improve quality of life for the people of West Sussex by helping to provide:
- *"a high quality transport network that promotes a competitive and prosperous economy in all parts of the County;*
 - *a resilient transport network that complements the built and natural environment whilst reducing carbon emissions over time;*
 - *access to services, employment and housing;*
 - *and a transport network that feels, and is, safer and healthier to use."*
- 2.8 Within the plan, there are specific aims for each district within West Sussex. For Arun district, the document states the following in relation to new developments:
- *"All new development should be designed to promote 'local living', for example shops, jobs and homes all being within easy reach of each other;*
 - *All new development should provide enough secure cycle parking to meet the needs of the development and be within close proximity to public transport;*
 - *Parking provision at new residential development should provide enough spaces to accommodate the expected number of vehicles at the site or provide measures such as car clubs which reduce the number of vehicles to match the space available."*

West Sussex County Council Guidance for Parking in New Residential Developments

- 2.9 Parking standards for all new residential developments are set out within the Supplementary Planning Guidance provided by WSCC, updated in 2010. Within this, WSCC Car Parking Demand Calculator has been designed to calculate the number of parking spaces required at new residential development on a site specific basis. The calculator predicts levels of car ownership using information about the location (ward), unit type, unit tenure, unit size and the number of allocated spaces. The output from the Calculator is included as Appendix 2.
- 2.10 Table 2.1 shows a summary of the number of car parking spaces required generated by the WSCC Car Parking Demand Calculator, based on the characteristics of the development:

Table 2.1 Summary of WSCC Car Parking Demand Calculator Output

	Allocated No.	Unallocated for Residents	Unallocated for Visitors	Total
No. of Spaces	65	3	6	74

2.11 The number of car parking spaces proposed appropriately meet the standards provided by the WSCC Calculator, as shown on Architect's Site Plan (13114/SK07), included as Appendix 1 to the TS. There is capacity for on-street parking within the development, to allow for efficient and flexible use for visitor parking and deliveries.

2.12 Cycle parking provision would provided within the curtilage of the dwellings.

Arun District Council Local Plan (June 2013)

2.13 The Local Plan sets out the vision for the future of Arun and guides development to achieve this vision. The purpose of the Local Plan is to encourage new development and manage future growth whilst ensuring that change across the District is sustainable and appropriate to meet local need.

2.14 Policy SP21 Transport and Development outlines the Council's aim to ensure that development provides safe access on to the highway network, contributes to highway improvements and promotes sustainable transport, including the use of low emission fuels, public transport and the cycle, pedestrian and bridleway network. This is to ensure that growth in the District strengthens Arun's economic base whilst reducing congestion.

2.15 Where required by current guidance, planning applications should be supported by an effective and deliverable Transport Assessment / Statement which demonstrates that the transport effects of development on the local and strategic road network can be satisfactorily mitigated and must explain how the development has been designed to:

- *"accommodate the efficient delivery of goods and supplies;*
- *give priority to pedestrian and cycle movements and have access to high quality public transport facilities;*
- *create safe and secure layouts for traffic, cyclists and pedestrians whilst avoiding street clutter."*

2.16 The development should incorporate appropriate levels of parking in line with West Sussex County Council guidance on parking provision.

2.17 Policy DM23 Sustainable Travel and Public Rights of Way deals with accessibility and mobility. It states that any new development must ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport.

2.18 This TS takes into consideration the West Sussex County Council (WSCC) June 2007 Transport Assessment Methodology in terms of its guidance on both structure and content.

3. ACCESSIBILITY TO KEY SERVICES

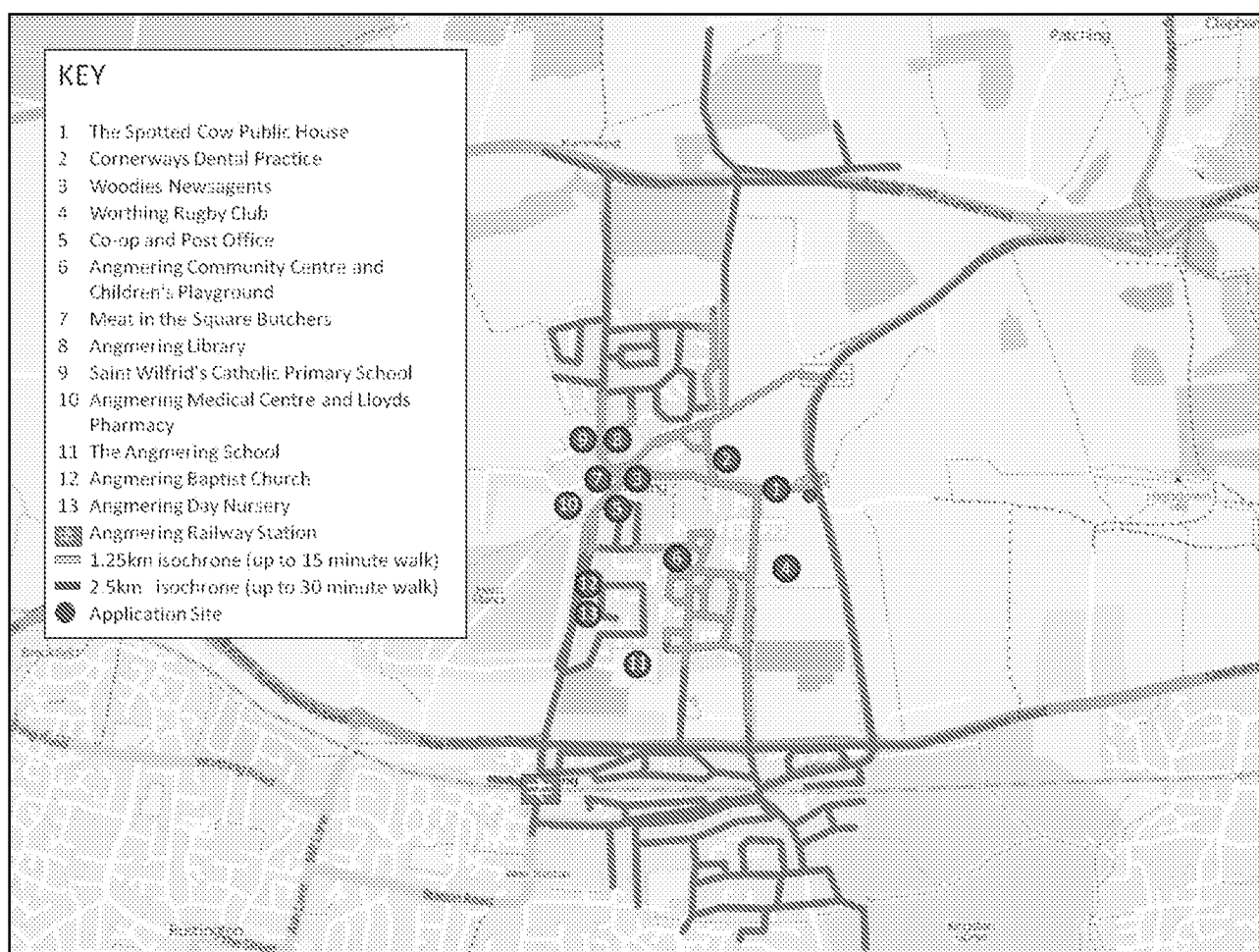
- 3.1 The application site is well located in terms of access / distances to key local amenities, the village centre and bus stops, making both pedestrian and cycle access a realistic choice in terms of mode of travel.
- 3.2 A key element of planning at national and local level is to ensure that residential development is accessible by public transport, walking and cycling to a range of amenities including food retail, health, employment and education facilities. These services include primary schools, health centres, convenience shops, branch libraries and recreational facilities in locations that are accessible without necessarily requiring the use of a car.
- 3.3 Table 3.1 details the distance to local services, all located within a 15 minute (1,250m) walking distance. Figure 2 shows the locations of these amenities in relation to the site, with walk isochrones indicating which amenities are located within a 15 minute or a 30 minute walking distance.

Table 3.1 Local Amenities within 15 minute (1,250m) walking distance

Destination	Distance	Destination	Distance
The Spotted Cow Public House	130 metres	Community Centre and Children's Playground	860 metres
Cornerways Dental Practice	465 metres	Meat in the Square Butchers	940 metres
Woodies Newsagents	770 metres	Angmering Library	985 metres
Worthing Rugby Club	775 metres	Saint Wilfrid's Catholic Primary School	990 metres
Co-op and Post Office	835 metres	Angmering Medical Centre and Lloyds Pharmacy	1,100 metres

- 3.4 In addition to these local amenities, the Angmering School is approximately 1400m (17 minutes walking distance) from the site and Day Nursery and Baptist Church are also beyond the 15 minute (1,250m) threshold, but well within a 30 minute walking distance.
- 3.5 With the addition of the proposed pedestrian and cycle link from the application site through the proposed development to the south, this will shorten the distance to some local amenities. As such, the distance to the Community Centre and Children's Playground will reduce to 730m and the Angmering School would be within 1270m of the site.

Figure 2 Local Amenities within walking distance



3.6 The food retail provision within walking distance provides a range of foods, including a small supermarket and a butchers. The health centre facilities including the medical centre, pharmacy and dental surgery, are all within a 15 minute walking distance. Education accessibility is good, with Saint Wilfrid's Catholic Primary School providing the primary school provision and the Angmering School providing secondary and sixth form education. In addition, Angmering Day Nursery provides pre-school education.

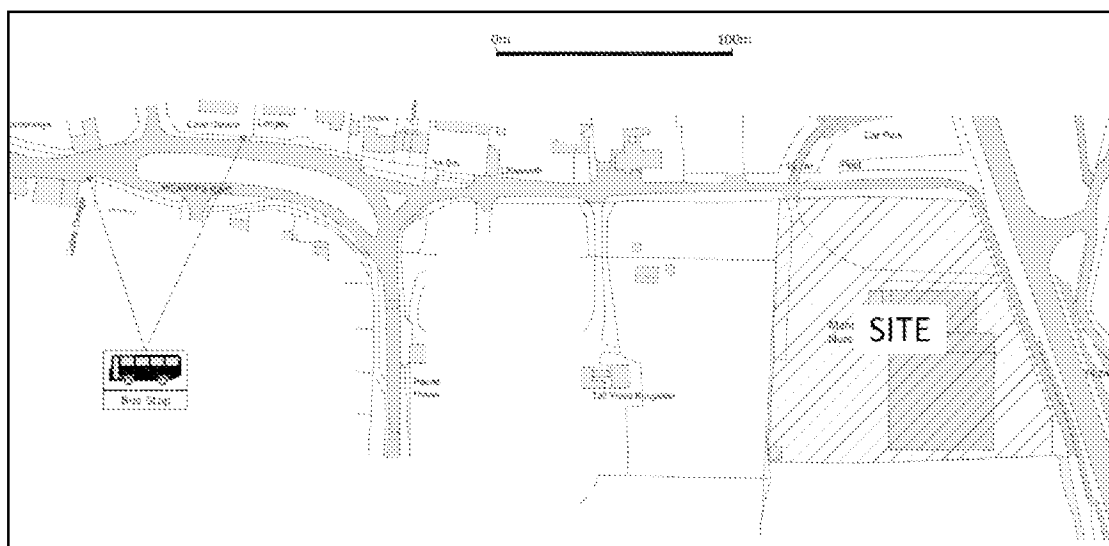
3.7 In terms of employment accessibility, Angmering, in keeping with its rural character, has a number of small businesses scattered around the village and so largely within walking distance of the site. The nearest larger employment area is south of the site, where a number of businesses line the A259 corridor, including businesses in Rustington Retail Park and Brookside Business Park, which are within a 3km and 4km cycling distance respectively.

4. ACCESS BY SUSTAINABLE MODES

Bus Access

- 4.1 The nearest bus stops to the site are located on the High Street, near the junction with Roundstone Lane, approximately 290m (eastbound) and 370m (westbound) of the centre of the site. The no.9 bus route serves the stops, providing an hourly service throughout the daytime, Monday to Saturday, connecting Angmering to nearby towns including Littlehampton, Worthing and Shoreham by Sea. The service is operated by Stagecoach. Both stops are request only and are provided with poles, flags and timetable information.
- 4.2 Figure 3 identifies the locations of the bus stops in relation to the site.

Figure 3 Location of nearest Bus Stops



- 4.3 Following discussions with WSCC, part of a potential Section 106 contribution will be to enhance local bus services in Angmering. Specifically providing evening and Sunday bus services where no provision currently exists. Any arrangements with the bus service providers are to be conducted by the Local Authority subject their requirements and local demand.

Rail Access

- 4.4 Angmering Railway Station is the nearest station, approximately 2.5km from the site.
- 4.5 The station is within an acceptable cycling distance, with partially off-road routes provided through Angmering and wide straight residential streets conducive to cycling. Cycle storage facilities are provided at the station. The station is a 30 minute walk from the site, or alternatively the no.9 bus route serves the station.

- 4.6 The station provides regular services to key local and regional destinations. Table 4.1 shows key destinations, with journey duration and frequencies.

Table 4.1 Summary of Train Services

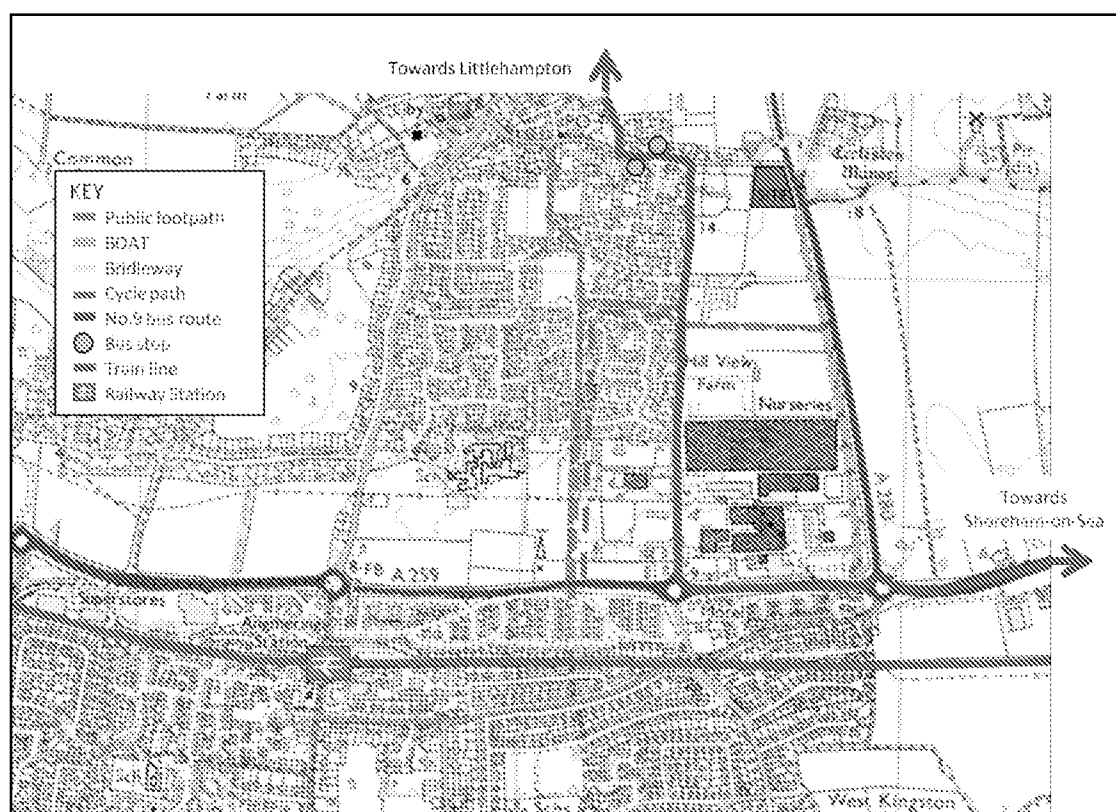
Destination Station	Service Frequency (off-peak trains per hour)			Duration
	Monday - Friday	Saturday	Sunday	
Littlehampton	2	2	2	10 minutes
Worthing	4	4	3	11 minutes
Chichester	2	2	2	19 minutes
Brighton	2	2	2	35 minutes
Portsmouth	1	1	1	50 minutes
Gatwick Airport	2	2	1	62 minutes
Southampton	1	1	-	73 minutes
London Victoria	2	2	1	94 minutes

Walking and Cycling

- 4.7 The application site is located within walking and cycling distance of key local amenities within Angmering.
- 4.8 Within the village, there is a good walk and cycle provision, with a segregated footway / cycle path running south through residential areas from Nursery Road, passing Angmering Community Centre, the Angmering School and continuing towards Angmering railway station. Where the route crosses the A259 Roundstone Bypass Road, a pelican crossing is provided, including crossing studs, tactile paving and guard railings.
- 4.9 There is a continuous footway link from the Roundstone Lane / High Street junction to the village centre, provided to a width of at least 1.2m along the majority of its length. Street lighting is present along the High Street, west of the Roundstone Lane / High Street junction.
- 4.10 A bridleway (path no. 3692) extends from the eastern end of the High Street, opposite the existing site access, crossing the A280 via an equestrian bridge. The bridleway continues eastwards towards Durrington.

- 4.11 A BOAT (path no. 3605) runs along the eastern perimeter of the site, running south parallel to the A280 and ending near the A280 / A259 Roundstone By-pass Road / A259 Littlehampton Road / B2140 Old Worthing Road roundabout.
- 4.12 In conjunction with the proposed residential developments to the south of the site, a major green link is proposed, linking High Street and the application site to the developments and in turn to the accesses onto Roundstone Lane.
- 4.13 Figure 4 shows the local connectivity of the area, identifying the key footpaths and cycle paths, the bus routes and stops and the railway station and line in relation to the application site.

Figure 4 Local Connectivity



Proposed Pedestrian Improvements

- 4.14 Whilst there is good walking and cycle provision within the village, the section of High Street from Roundstone Lane to the site has no footway provision. In order to enhance access for pedestrian activity generated by the development it is proposed to construct a 1.5m footway that will link the application site to the existing footway along High Street, as shown on the plan included as Appendix 3. A 1.5m footway is wide enough to accommodate a pedestrian and a pushchair passing simultaneously, as shown in fig. 6.8 in DfT Manual for Streets.

- 4.15 The proposed footway will also benefit the local community, providing a safe connection to both the BOAT (path no. 3605) and the bridleway (path no. 3692). A dropped kerb pedestrian crossing with tactile paving will be located 45m west of the site access where the footway along the northern side of the carriageway ends and the footway continues on the southern side.
- 4.16 As part of the proposed works the High Street between the car park and the driveway of Carlton Cottage a distance of 157m will be resurfaced. The road will also be drained by gullies to a positive drainage system. All the works are within highways land as confirmed by West Sussex County Council.

5. TOTAL TRAVEL DEMAND

5.1 This section identifies the total demand for movement of people in and out of the site by all modes for the existing and proposed uses. Under the DfT's Guidance on Transport Assessment (2007) a TS should consider the weekday morning and evening peak periods when analysing the adjacent transport system with particular focus on the peak period traffic flows on the road network. It is during these weekday morning and evening peak periods when generally trip generation arising from the site is also at its peak.

5.2 Typically, the industry standard software programme TRICS is used when assessing the potential level of trip generation associated with development. TRICS enables vehicular and multi-modal trip rates to be identified based on analysis of analogous existing sites around the country. The TRICS database allows the end user to take account of a range of factors such as type of development, location and accessibility to public transport.

Existing Trip Generation

5.3 TRICS site selection parameters consisted of sites selected from the 'Retail - Garden Centre' sub-category. TRICS only has a very limited number of multi-modal sites under this sub-category. Therefore for the purposes of a comparative assessment only vehicular trip rates have been identified based on a reasonable sample size of 6 sites. Further filtering has been undertaken to include sites in the South West and South East of England. Sites deemed too large were removed from the selection. Based upon the above criteria, Appendix 4 provides a copy of the TRICS output.

5.4 Table 5.1 summarises the predicted level of weekday AM Peak and PM Peak vehicle trip generation associated with the existing 3,145sqm of Garden Centre use at the application site, assuming it is fully utilised, based on trip rates derived from the TRICS database. Trip rates for the standard peak hours of 0800-0900hrs and 1700-1800hrs have been derived.

Table 5.1 Vehicle Trip Rates - Existing Garden Centre (3,145sqm)

Peak Period	Arrivals		Departures		Total Movements	
	Trip Rate	No. Trips	Trip Rate	No. Trips	Trip Rate	No. Trips
AM Peak Hour	0.975	31	0.163	5	1.138	36
PM Peak Hour	0.413	13	0.873	27	1.286	40

5.5 From Table 5.1 it is noted that the existing Garden Centre uses at the application site have the potential to generate 36-40 vehicle trips during the AM and PM peaks.

Proposed Trip Generation

- 5.6 For the purpose of providing a robust assessment of potential trip generation associated with the proposed development, the TRICS sub-category 'Houses Privately Owned' has been adopted. Further filtering has also been undertaken to include sites in East Anglia, Southeast and Southwest England only, with unsuitable sites within this removed. Based upon the above criteria, Appendix 5 provides a copy of the TRICS output that includes the details of the 9 sites identified through the filtering process.
- 5.7 Table 5.2 provides a summary of the weekday AM and PM peak hourly trip rates based on the proposed development of 32 residential dwellings under Use Class C3. Trip rates for the standard peak hours of 0800-0900hrs and 1700-1800hrs have been derived. The total person trip rates have been broken down by mode of travel. The methodology adopted is based upon localised modal split data derived from the 2011 Census Method of Travel to Work data for the Arun 005A Super Output Area Lower Layer, a copy of which is included as Appendix 6 to the TS.

Table 5.2 Trip Rates by Mode of Travel - Proposed Residential Development (32 dwellings)

Mode	Modal Split	AM Peak			PM Peak		
		Arr	Dep	Total	Arr	Dep	Total
Public Transport	9.42%	0.025	0.095	0.120	0.059	0.036	0.095
Driving a car or van	74.31%	0.197	0.746	0.943	0.464	0.282	0.746
Passenger in a car or van	4.92%	0.013	0.049	0.062	0.031	0.019	0.050
Bicycle	2.59%	0.007	0.026	0.033	0.016	0.010	0.026
On foot	5.75%	0.015	0.058	0.073	0.036	0.022	0.058
Other method of travel to work	3.00%	0.008	0.030	0.038	0.019	0.011	0.030
Total	100%	0.265	1.004	1.269	0.625	0.380	1.005

- 5.8 Table 5.3 provides the resultant person trips by mode of travel for the weekday AM and PM peak hours.

Table 5.3 Total Person Trip Rates by Mode of Travel - Proposed Residential Development

Mode	AM Peak Hour			PM Peak Hour		
	Arr	Dep	Total	Arr	Dep	Total
Public Transport	1	3	4	2	1	3
Driving a car or van	6	24	30	15	9	24
Passenger in a car or van	0	1	1	1	1	2
Bicycle	0	1	1	0	0	0
On foot	1	2	3	1	1	2
Other method of travel to work	0	1	1	1	0	1
Total	8	32	40	20	12	32

- 5.9 From Table 5.3, it can be seen that during the weekday AM and PM peak periods, the proposed development would have the ability to generate 32-40 person trip movements during the weekday peak hours of which around 24-30 would be car or van driver trips. Of the remaining trips, some 5-8 movements would be by non-car modes of travel, i.e. walking, cycling or by public transport.

Summary

- 5.10 From Tables 5.1 and 5.3 it can be seen that the potential weekday vehicular trip generation of the existing and proposed uses at the site are very similar, with the potential for the proposed development to generate less trips at peak times than the site's existing use. Therefore the net increase in impact on the operation of the surrounding highway network, will, in reality, be minimal as these trips already exist on the network.
- 5.11 In general terms, it is also worthy of note that in terms of the mix of vehicle movements the proposed residential uses would generate a marked reduction in HGVs along local roads compared to the Garden Centre use, to the benefit of the local community.

6. TRAFFIC ACCESS

Existing Network Traffic

- 6.1 In order to establish traffic conditions on the immediate highway, Automatic Traffic Counts (ATC) and Manual Classified Counts (MCC) have been undertaken.
- 6.2 An ATC survey has been undertaken on Roundstone Lane, south of its junction with High Street. These surveys were undertaken for a 7-day period recording directional classified vehicle flows and speeds, commencing 07 February 2014. A copy of the ATC surveys' results are included as Appendix 7 to this TS.
- 6.3 From the results of the ATC survey installed on Roundstone Lane the following is noted:
- 5-day average 24-hr flows:
 - Northbound: 1441 vehicles
 - Southbound: 2033 vehicles
 - Two-way: 3474 vehicles
 - 5-day average peak hourly flows:
 - AM Peak: 236 vehicles northbound; 182 vehicles southbound
 - PM Peak: 134 vehicles northbound; 250 vehicles southbound
 - Classification of Daily Vehicle Movements (Average Weekday):
 - Motorcycle: 0.70 %
 - Car: 90.90%
 - LGV: 3.08%
 - HGV: 5.21%
 - Bus: 0.11%
 - 85th percentile Vehicle Speeds:
 - Northbound: 29.7 mph
 - Southbound: 30.7 mph

- 6.4 An MCC survey has been undertaken at the High Street / Roundstone Lane / Weavers Ring staggered crossroads, on 11th February 2014, between 0700-1000 hrs and 1600-1900 hrs. From the results of the MCC surveys it has been established that during the AM peak period the peak hour was recorded as being between 08:00 and 09:00 hrs and that during the PM peak period the peak hour was recorded as being between 17:00 and 18:00 hours. The MCC survey data is contained as Appendix 8.

Access and Servicing Strategy

- 6.5 The existing vehicular access will be retained in its present location albeit modified to provide kerbed footways of 1.5m on both sides of a 4.8m wide carriageway. The modified vehicular access will be provided with kerb corner radii of 4.0m and 7.5m to the east and west respectively.
- 6.6 Given the size of the proposed development, the number of service deliveries would be low and restricted to a weekly collection of refuse plus occasional home delivery services. Service and refuse collection vehicles can utilise the turning head located at the far end of the site allowing them to enter and exit in a forward gear. The access has also been designed to accommodate movement of occasional larger vehicles.
- 6.7 Appendix 9 includes Plan 033/02 that depicts the swept path analysis of a refuse vehicle manoeuvring the access and the turning head within the site.
- 6.8 As outlined within DfT Manual for Streets para. 6.8.9, the site layout will be designed such that residents will not be required to carry waste more than 30m to the storage point and refuse collection vehicles will be able to get within 25m of the storage points.
- 6.9 Furthermore all dwellings will be within 45m of the internal access road, which runs through the development, and therefore access for fire appliances to individual properties would not be required.

Sightline Requirements

- 6.10 In respect of the inter-visibility between vehicles emerging from the site and traffic on High Street the two key elements to be assessed are the set back distance, or 'x' distance, along the minor arm and the distance a driver can see along the major road when exiting, or 'y' distance.
- 6.11 At an 'x' distance of 2.4m, an approaching driver will have to slow to a virtual stop at the give-way line to observe traffic on the major road without encroaching onto it. Consequently only one vehicle at a time can safely exit from the minor road under these operating conditions. It is clearly evident that the volume of traffic emerging from the new access way will be low and therefore a 2.4m 'x' distance is considered appropriate.

- 6.12 The 'y' distance is based upon sight stopping distances (SSD's) of traffic approaching on the major arm of a junction. Based on a target design speed of 20mph, the appropriate visibility or 'y' distances to the left and right for the site access, in accordance with DfT Manual for Streets Table 7.1 a 'y' distance of 25m is appropriate. Visibility splays are shown on Plan 033/01 within Appendix 3. The visibility is shorter to the right as the carriageway ends and becomes a BOAT. The visibility splay passes through publicly maintained highway land and will be maintained to avoid obstruction to visibility.

Committed Development

- 6.13 There are currently no approved committed local developments which will affect the transport and highways matters associated with the site. However, the comprehensive masterplan proposals to the south of the site (up to 600 dwellings) are the subject of a much wider, detailed study being undertaken by WSCC. WSCC have advised that the traffic impact arising from the application site under consideration in this TS has been taken fully into account in the modelling of the wider network.

Network Traffic Growth

- 6.14 A TEMPRO growth factor has been applied to the surveyed flows, derived from the MCCs, to inform the 'base' traffic scenarios for five years from the date of lodging a planning application ie. 2019. The TEMPRO Outputs are included as Appendix 10.

Highway Capacity Impact

- 6.15 On the basis that the study area will include junctions where there is a predicted increase in total entry flows of 30 vehicles or more per hour, the impact of development traffic will not extend beyond the High Street / Roundstone Lane / Weavers Ring staggered crossroads given the dispersal of development-related traffic at this point.
- 6.16 The distribution of development traffic at High Street / Roundstone Lane / Weavers Ring staggered crossroads is attached as Appendix 11.

Junction Operation- High Street / Roundstone Lane

- 6.17 Junction capacity assessments have been carried out using PICADY modelling software for the 2019 'Base + Development' model and Table 6.1 provides a summary of the junction operation of the proposed High Street / Roundstone Lane priority junction with the 2019 traffic flows and full results of the PICADY analysis contained as Appendix 12.

Table 6.1 PICADY Analysis – High Street / Roundstone Lane

Arm	2019 Base + Development AM Peak		2019 Base + Development PM Peak	
	Max. RFC	Max. Queue	Max. RFC	Max. Queue
High Street	0.069	0.07	0.040	0.04
Roundstone Lane	0.012	0.01	0.024	0.03

- 6.18 From Table 6.1 it can be seen that in 2019 with development traffic added to the highway network, the High Street / Roundstone Lane junction is predicted to operate comfortably within capacity.
- 6.19 The PICADY analysis has identified no material impact to the highway network performance, subsequently no mitigation measures will be necessary to minimise / alleviate the impact.
- 6.20 As detailed in section 4, measures have also been proposed to improve the eastern section of High Street for pedestrians with the addition of footway provision.
- 6.21 There are existing traffic issues on the A259 Roundstone Lane By-pass Road, however this development will have minimal impact on this due to the minimal traffic the site will produce as a change of use. As noted in para. 6.13 above, WSCC have also taken account of development traffic through this junction within their own modelling.

Environmental Impact of Development Traffic

- 6.22 It is not considered that the development will result in an increase in traffic flows of over 20% on any local highway. This development, in comparison to the existing use, will reduce the number of overall vehicles accessing the site and so overall will have a beneficial impact on the local environment. Notably, there will be a significant reduction in the number of HGVs accessing the site as the result of the change of use.

Road Traffic Accidents

- 6.23 To enable review of the road safety record of the highway network in the immediate vicinity of the application site, Personal Injury Accident (PIA) data has been secured from the Highway Authority, Sussex Safer Roads Partnership for the relevant sections of High Street and Roundstone Lane.
- 6.24 The response confirmed that no accidents had occurred within the search cordon over the time period from 01/02/2009 – 31/01/2014, as shown on the cordon within Appendix 13.

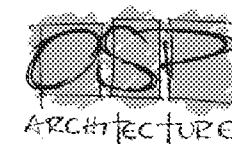
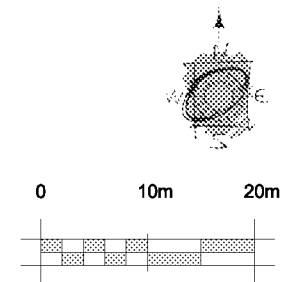
7. CONCLUSIONS

7.1 This Transport Statement has been prepared on behalf of Hanbury Properties Ltd in support of a planning application for a residential development of up to 32 no. dwellings under Use Class C3 on the site of Manor Nursery and Garden Centre, located to the east of High street, Angmering. From the outcome of the Transport Statement the following has been concluded:

- The application site is ideally located to access a wide range of local services and amenities, providing a genuine opportunity for prospective residents of the proposed residential development to access local services and amenities. There will be negligible effects of the development upon the highway, public transport, walking and cycling networks, due to its size and good location;
- The proposed footway improvements along the eastern section of High Street will enhance pedestrian safety when accessing / egressing the site via High Street and Roundstone Lane, resulting in safer access to the local amenities, bus stops and Angmering railway station, as well as for non-residents accessing the bridleway and BOAT for both residents of the proposed development as well as the local community;
- The application site is accessible to public transport with an hourly daytime bus services and direct connections to key destinations, with both bus stops on High Street within 400m of the centre of the site. Angmering Railway Station is 2.5km from the site, so within cycling distance and is also accessible by bus;
- Car parking provision is within the levels set by the Parking Standards for the size of the development, and will be sufficient to serve the needs of the development without creating displaced parking on the surrounding streets;
- Cycle parking will be provided within the curtilage of the dwellings;
- The access road within the site has been designed such that all vehicles, including delivery and refuse collection vehicles, can enter and exit the site in a forward gear.
- It has been demonstrated that during the AM and PM network peak hours the application site is likely to generate no more than 38 vehicle driver movements. At worst this equates to one vehicle movement every 90 seconds which, in the context of the surrounding highway network any associated impact, is deemed to be negligible;
- Analysis of the five year accident data for the area, obtained from the Highway Authority, Sussex Safer Roads Partnership, indicates there have been no accidents in the vicinity of the site.

7.2 On the basis of the findings within this Transport Statement, it is considered that there are no residual cumulative impacts in terms of highway safety or the operational capacity of the surrounding transport network and therefore planning permission should not be withheld on transport grounds.

APPENDIX 1



Coloured Site Layout
Manor Nursery, Angmering

13114 / SK07

Scale 1:500 @ A2 March 2014

APPENDIX 2

This parking demand tool has been compiled by West Sussex County Council. If you have queries relating to the information provided or require additional information please contact darryl.hemmings@westsussex.gov.uk.

Please input the ward name for your development location below by double clicking in the box or click box and use the drop down menu to the right of the box. The spreadsheet will automatically show the District and Ward of this location. If the ward is not known please input postcode into the Ward Finder. The tool will allow input up to 3 wards in the boxes below. Please refer to notes for more details.

Ward 1	Angmering
District	Arun
Ward 2	Arundel
District	Arun
Ward 3	Findon
District	Arun
Ward Tempro Factor 2009-2026	1.082615
District Tempro Factor 2009-2026	1.067644



west
sussex
county
council

Ward Finder

Postcode	BN16 4AW	Ward	Angmering
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Note:

No special provision need be made for visitors where at least half of the total parking provision associated with a development is unallocated. In other circumstances, it may be appropriate to allow for additional demand for visitor parking of up to 0.2 spaces per dwelling.

In areas of parking constraint, levels of provision below predicted demand may be applicable.

The tool is expressed as number of Rooms (Per Unit). If data is not available in this format and number of Bedrooms is used this will need to be converted. A general guide for conversion is as follows but may differ in some cases.

Houses	Flats
1 bed = 3 rooms	Studio = 1 room
2 bed = 4 rooms	1 bed = 2 rooms
3 bed = 5 rooms	2 bed = 3 rooms
4 bed = 6 rooms	3 bed = 4 rooms
5 bed = 7 rooms	4 bed = 5 rooms

Garages will count as 1 space when allocating spaces.

Ward data used can be checked by the user by referring to the District-Ward Data Tables. The Ward Data Tables highlight if the Census data does not include data for certain dwelling sizes. In such cases car ownership values have been obtained using the nearest sized dwelling with same tenure and ward. For example, if no data is available for a private house with 1 room then data for a private house with 2 rooms has been used. The Car Ownership Data is highlighted in purple where such an approach has been used. Where Census data contains small samples for certain sized dwellings this is highlighted in red if <20, and green if <50 in the Total Demand column. In such cases, other wards should be selected to achieve a higher sample size.

Report Summary Table

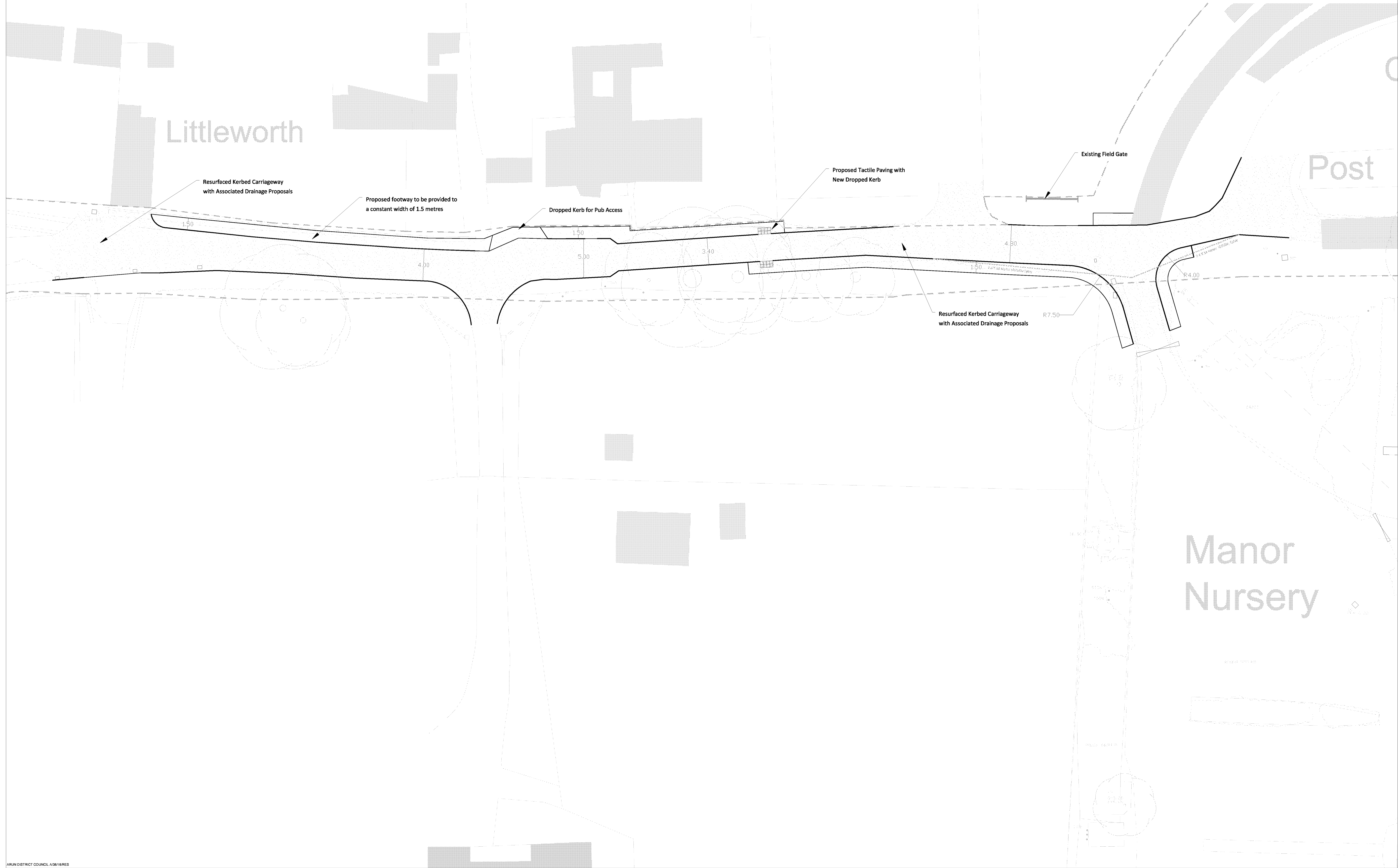
DEVELOPMENT MIX				
Ref.	Unit Type	Unit Tenure	Habitable Rooms (Per Unit)	No. of Units (Total)
A		Council/Housing Association (not including shared ownership)	4	8
B		Council/Housing Association (not including shared ownership)	5	2
C		Private	4	3
D		Private	5	10
E		Private	6	6
F		Private	7	3
G				
H				
I				
J				
K				
L				
M				
N				
O				
P				
Q				
R				
S				
Total				32

ALLOCATED PARKING
Spaces (Per Unit)
1
2
2
2
3+
3+

APPENDIX 3



- KEY**
-  New Carriageway Surface
 -  Proposed Footway
 -  Indicative Boundary of the Public Highway



Drawing Revisions

Rev	Date	Details
A	26.02.2014	Modifications in response to WSCC comments

Client
HANBURY PROPERTIES LIMITED

Project
**MANOR NURSERY SITE
HIGH STREET, ANGMERING**

Title
**PROPOSED HIGHWAY
IMPROVEMENT WORKS**

MILESTONE
TRANSPORT PLANNING
Heritage House, 7 Wey Court, Mary Road
Guildford, Surrey, GU1 4QU
Tel: 01483 397888
web: www.milestonetp.co.uk

Status	DRAFT		Scale	1:250 @ A1
Drawn	BC	Checked	MS	Date APRIL 2014
Drawing Number	033/01			Revision A