



HOOK LANE, WESTERGATE, WEST SUSSEX

**Proposed Outline Residential
Development**

**Transport Statement
Prepared on behalf of Whitgift Estates**

WGES/15/2717

July 2016



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1 INTRODUCTION

1.1 Scope of Transport Statement

- 1.1.1 This Transport Planning Statement (TPS) has been prepared by Russell Giles Partnership (RGP) on behalf of Whitgift Estates in association with an outline planning application for 8 residential dwellings on land occupied by outbuildings and a large open field associated with an adjacent dwelling to the north of the site.
- 1.1.2 The site has been subject to relatively recent planning application for access to the site which was approved in 2013 under Arun District Council (ADC) planning application reference AL/32/13/. The proposed access arrangements associated with this application are proposed in line with that of the existing planning consent. The site's location within the context of the local road network is demonstrated in **Figure 1.1**.

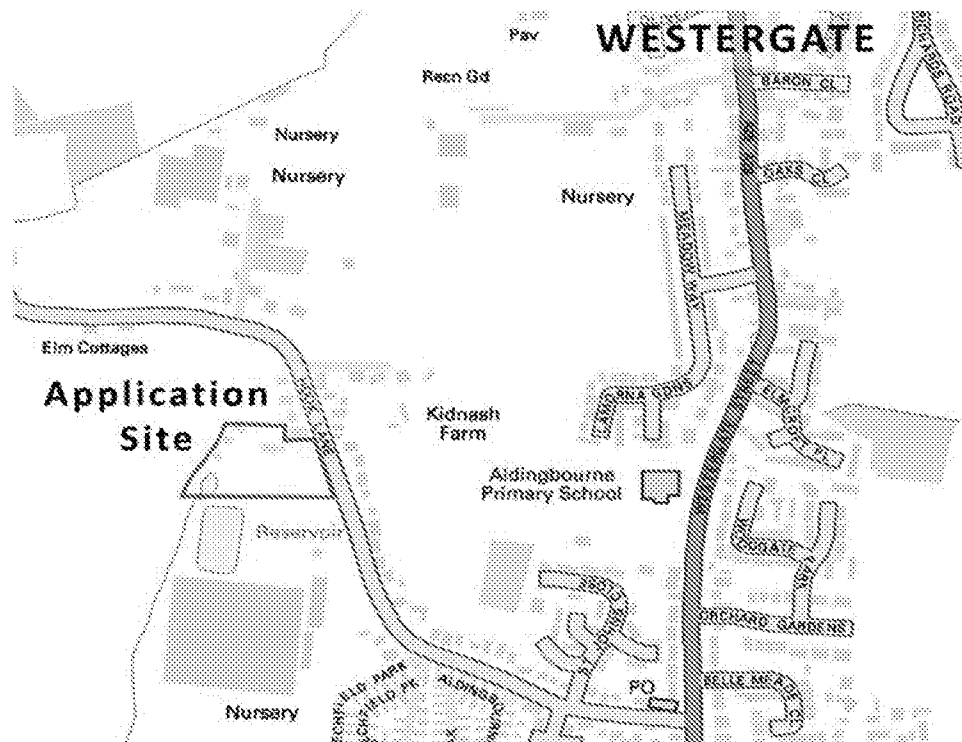


Figure 1.1 Site Location

- 1.1.3 This Transport Statement outlines the key transport planning matters in accordance with statutory highways consultants West Sussex County Council's (WSCC) 'Transport Assessment Methodology' (June 2007), reviewing site accessibility, relevant planning history, accident records, access arrangements, servicing arrangements, and the proposed trip impact on the local road network.



1.2 Planning History and Context

- 1.2.1 The proposed development site has previously been subject to a planning application for the conversion of the existing outbuildings on the site to B1 business use and a new access which was approved in January 2003, but has since expired. The past planning application can be found under ADC planning application reference number AL/24/02. The access element of the 2003 application has since been renewed under the aforementioned consented 2013 planning application ref. AL/32/13/.
- 1.2.2 The adjacent land on the eastern side of Hook Lane has also been subject to an outline planning application for the provision of 79 homes and associated access by Hallam Land. The application was given planning consent in 2014 and can be found under ADC planning application reference number AL/39/13. The transport planning and highways implications resulting from close proximity of proposed site and adjacent Hallam Land site is discussed subsequently in this report.

1.3 Report of Structure

- 1.3.1 The remainder of this report is comprised of the following sections:
- (i) **Section 2** presents an overview of the baseline conditions including a description of the site's location within the context of the local area and highway network; a review of the baseline traffic conditions on the local road network; consideration of the site's accessibility by a variety of travel modes; a study examining highway safety based on recorded Personal Injury Accidents.
 - (ii) **Section 3** considers the principal design aspects of the prospective development's access, the adjacent Hallam Land access, parking provision and servicing arrangements.
 - (iii) **Section 4** assesses the vehicular traffic generating potential of the development proposals and its associated impact on the local highway network.
 - (iv) **Section 5** summarises the main conclusions of the report.



2 BASELINE CONDITIONS

2.1 Introduction

- 2.1.1 This section of the report provides an overview of the baseline conditions including a description of the site within the context of the local area and highway network; an assessment of existing transport infrastructure and services by mode; and an appraisal of highway safety.

2.2 Site Location and Context

- 2.2.1 The application site encompasses an area of 0.97ha located to the west of Hook Lane in a semi-rural area 1km to the south of Westergate village. The nearest major employment centres are Bognor Regis and Chichester, which are located 5km and 7km from the proposed development site respectively.
- 2.2.2 The site boundaries are formed by the residential dwellings to the north and south; Hook Lane to the east and agricultural land west. **Figure 2.1** shows the site's immediate surroundings, whilst **Plan 01** shows the location of the site within the context with the wider local area.



Figure 2.1 Proposed Development Site Context



2.3 Existing Site

- 2.3.1 The site is currently occupied by 6 outbuildings and a large open field associated with an adjacent dwelling to the north of the site. The site's existing vehicle and pedestrian access takes the form of an informal gated field access, which leads to a narrow driveway running along the northern boundary of the site. The driveway is presently used by the adjacent dwelling to the north of the site.

2.4 Local Road Network

- 2.4.1 Hook Lane provides a link between Westergate villages and Aldingbourne, and a connection to the A29 c.450m to the south and Oving Road c. 1.5km to the north. The carriageway becomes increasingly rural in character heading north toward Oving Road. The Local road network is demonstrated in **Figure 2.2**.

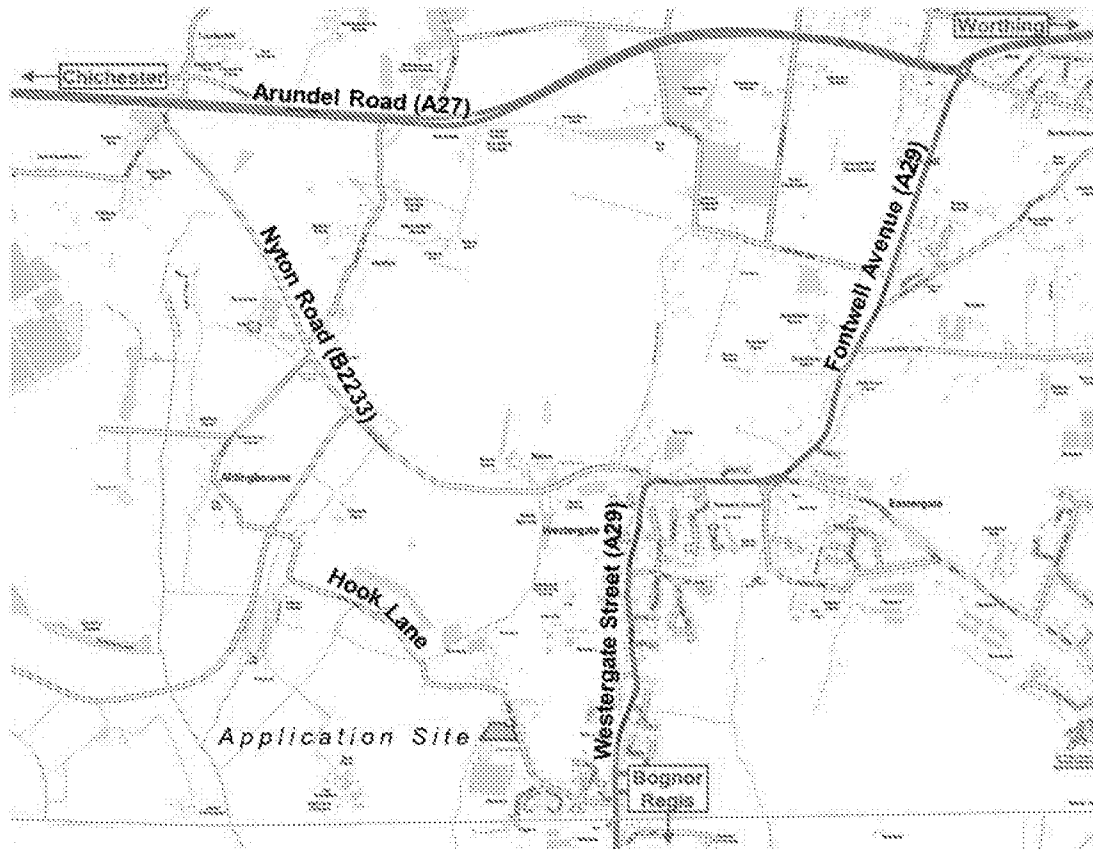


Figure 2.2 Local Road Network

- 2.4.2 Hook Lane is a two-way single lane carriageway approximately 4.7m wide in the vicinity of the access. Hook Lane is flanked by a c.1.5 footway on the western side of the carriageway, which extends from its junction with the A29 to a point 70m south of the site. The adjacent consented Hallam Land application proposes an extension of the footway from the proposed site to the existing footways 70m to the south.



- 2.4.3 Hook lane is subject to 30mph speed limit. Speed surveys undertaken as part of Hallam Lands Transport Assessment revealed 85th percentile design speeds of 32.0mph heading north bound and 33.0mph heading south bound. The proximity of the Hallam Land applications speeds surveys are considered as suitable for this application and are attached at **Appendix A**. Hook Lanes carriageway characteristics are demonstrated in **Figure 2.3** and **2.4**.



Figure 2.3 Hook Lane Looking South from the Site Frontage



Figure 2.4 Hook Lane Looking North from the Site Frontage



- 2.4.4 Hook Lane is not subject to parking restrictions making on-street parking possible. However, existing dwellings along Hook Lane provided off-street car parking facilities within the curtilage of properties meaning that on-street parking is uncommon. The carriageway width also means that parking on-street is undesirable.
- 2.4.5 The adjacent consented Hallam Land site will provide vehicle and pedestrian access from the east side of Hook Lane via a priority junction opposite the proposed site frontage. Formal assessment of the proposed site access and consented access's interaction is provided subsequently in **Section 3.3** of this report. The consented Hallam Land access arrangements are demonstrated in **Appendix B**.

2.5 Site Accessibility Credentials

- 2.5.1 To demonstrate how the proposals comply with the core principles contained in the National Planning Policy Framework (NPPF), most notably the requirement for new developments, to be located in areas where the need to travel would be minimised and opportunities for encouraging alternatives to the private car can be maximised, this section of the report describes the existing provision of transport infrastructure and services by modes available to potential future residents.

Accessibility to Local Services / Facilities

- 2.5.2 The proposed development site is located 1km from Westergate village, 5km from Bognor Regis, and 7km from Chichester City centre, all of which provide a range of services and amenities for that cater for the needs of potential future residents. The CIHT guidance identifies that facilities situated within 2km and 8km are accessible to pedestrians and cyclists respectively.
- 2.5.3 In line with the core principles of the NPPF, the services and facilities accessible by the 'active' modes of walking and cycling have been considered. **Figure 2.5** details the range of local facilities and services, which are likely to cater for the needs of future residents within acceptable walking and cycling distances (as advocated within the various CIHT publications).



JOURNEY PURPOSE	DESTINATION	DISTANCE (km)	WALK JOURNEY TIME (minutes)	CYCLE JOURNEY TIME (minutes)
Education	Sir Philip Howard Roman Catholic High School	3.8	46	12
	Barnham Primary School	3.9	47	12
	Orminston Six Villages Academy	2	24	7
	Eastergate C.E. Primary School	2.3	28	8
	Aldingbourne Primary School	0.8	9	3
	Hop Scotch Pre School	1.4	16	4
Employment	Fordingbridge Industrial Park	3.2	37	10
Health Care	Chantry House Dental Practice	3.3	42	11
	The Croft Surgery	3.2	39	10
Leisure	Aldingbourne Community Sports Centre	1.4	17	4
	Basmati Indian Restaurant	1.7	21	5
	Prince of Wales PH	0.6	7	3
Retail	Aldingbourne Post Office	0.5	6	1
	Costcutter	1.5	18	5
	Co-operative	4.1	50	12
	Esso Petrol Station	1.9	23	6
	Londis	2.1	25	6

Figure 2.5 Accessibility of Facilities and Services in Westergate

Pedestrian / Cycle Infrastructure

- 2.5.4 As previously identified Hook Lane provides an existing footway which will be extended to the site frontage as part of the Hallam Land Planning application. The Hallam Land site also provides a connection through to PROW 299 which runs from Hook Lane to Westergate Village. As part of the Hallam Land application the PROW will be upgraded to a shared cycle / footway. All PROWs in the vicinity of the proposed development site are identified in **Plan 01**.
- 2.5.5 There is limited existing cycle infrastructure in the vicinity of the site. The topography of the local area is relatively flat and free of steep gradients, conditions which are conducive to undertaking short journeys by cycle. The CIHT's publication entitled 'Cycle Friendly Infrastructure' (1996), suggests that reasonably fit individuals can comfortably cycle a distance of 8km for commuting purposes, meaning that Chichester (7km) and Bognor Regis (5km) are within a reasonable cycling distance.

Accessibility by Bus

- 2.5.6 The nearest bus stops to the proposed site is the 'Westergate, Opposite Belle Mead Close' stop located along the A29 Westergate Street c.500 metres to the south-east of the site. The local bus stops are served by the number 66 service. The 66 service provides a connection to Bognor Regis, Shripney, Barnham, Yapton and Walberton. The local bus service is demonstrated in **Figure 2.6**.



Service	Route Summary	Typical Frequency	Hours of Operation
66	Bognor Regis - Yapton - Bognor Regis	Mon-Sat: every 90 minutes	Mon-Fri: 07:18- 17:53 Sat: 07:27- 17:53

Figure 2.6: Bus services available from Belle Meade Close Bus Stops

- 2.5.7 Services from Westergate Village 1km to the north of the site provide connections to wider bus and train services to local employment centres such as Chichester, Portsmouth, Worthing and Brighton. Route maps and journey times from Westergate's bus stops are available to view online at www.travelinesoutheast.org.uk.

Accessibility by Train

- 2.5.8 Barnham rail station is located c.3.6 kilometres to the east of the proposed site. It is situated on the West Coast Way Line and provides frequent and direct rail services to a host of local and regional destinations including Portsmouth, Southampton, Bognor Regis and London Victoria. A summary of rail services available from Barnham station is presented in **Figure 2.7**.

Destination	Frequency	Duration	Major Calling Points
Brighton	2 per hour	40-46 minutes	Worthing, Hove
London Victoria	4 per hour	82-97 minutes	Arundel, Horsham, Crawley, Three Bridges, Gatwick Airport, Redhill, East Croydon, Clapham Junction
Horsham	4 per hour	27-37 minutes	-
Bognor Regis	4 per hour	6-8 minutes	-
Littlehampton	2 per hour	9-11 minutes	Ford
Portsmouth Stations	3 per hour	36-44 minutes	Chichester, Emsworth, Havant, Fratton
Southampton Central	2 per hour	62-65 minutes	Chichester, Emsworth, Havant, Fareham

Figure 2.7: Rail services available from Barnham Rail Station.

- 2.5.9 Route maps and live journey updates from Barnham rail station are available to view online at www.nationalrail.co.uk.

2.6 Personal Injury Accident Data

- 2.6.1 The distribution of Personal Accident Injury (PIA) incidents has been assessed in order to determine highway safety in the vicinity of the proposed development. The data ranges five years from 1st November 2010 to 31st October 2015. The area considered extends from the junction of Park Lane c.1.1km to the north-west, to the junction Hook Lane and the A29 c.500m to the south east.



2.6.2 Patterns displayed in the data can be assessed with regards to their proximity, frequency and severity to establish any underlying highways design issues, which may require more detailed investigation. In this assessment particular attention has been paid to incidents occurring along Hook Lane in close proximity to the proposed site access, and any incidents involving pedestrians and cyclists. Collisions are classified as 'slight', 'serious' or 'fatal', depending on the severity of the injuries sustained. The PIA analysis is attached at **Appendix C**, whilst the distribution of PIA incidents is shown **Figure 2.8**.



Figure 2.8: PIA Incident Distribution



- 2.6.3 The PIA data shows that 2 'slight' incidents and '1' serious, have occurred on Hook Lane in the last five years. The PIA analysis revealed no incidents involving pedestrians or cyclists, and no incidents in the immediate vicinity of the site. The two incidents located approximately 170m north of the site on Hook Lane and the incident at the junction of Hook Lane and the A29 are attributed to human error within the Sussex Police report rather than highway design.
- 2.6.4 The PIA data does not identify any pattern in terms of incident distribution, frequency or severity that can be related to outstanding highway safety issues on the local road network.



3 PROPOSED DEVELOPMENT

3.1 Accommodation Schedule

- 3.1.1 The outline planning application proposes the development of 8 residential dwellings of mixed size and tenure, which would be served from a new access point adjoining Hook Lane. The Indicative site layout is attached at **Appendix D**.

3.2 Proposed Access Arrangements

- 3.2.1 The proposed site would be served via the consented access adjoining Hook Lane, located in the same position as outlined in the 2013 planning application. The access would take the form of 5.0m wide bellmouth supported by 6m corner radii. The access would be flanked by 1.8m wide footway on the southern side of the carriageway. The proposed access design is demonstrated in **Drawing 2015.2895.001**.
- 3.2.2 The geometries of the access would allow two standard car sized vehicles to concurrently turn in and out of the site, and refuse vehicles (the largest service vehicle requiring access) to negotiate the access. A vehicle swept path analysis demonstrating refuse vehicle manoeuvres through the proposed access is shown in **Drawing 2015.2895.002**.
- 3.2.3 The visibility requirements from the proposed access have been based on the aforementioned speed surveys which were undertaken as part of the adjacent Hallam Land planning application which are appended at **Appendix A** of this report. The speed surveys revealed an 85th percentile design speed of 32mph heading northbound and 33mph heading southbound.
- 3.2.4 The recorded design speed equates to a vehicle stopping site distance of 47.0m primary direction (looking south) and 49.2m in the secondary direction (looking north) based on Manual for Streets (MfS) calculation coefficients. Visibility splays from the access achieve the necessary site lines of 2.4m x 47.0m in the primary direction and 2.4m x 49.2m in the secondary directions in accordance with the recorded design speeds.

3.3 Adjacent Access Impact and Interaction

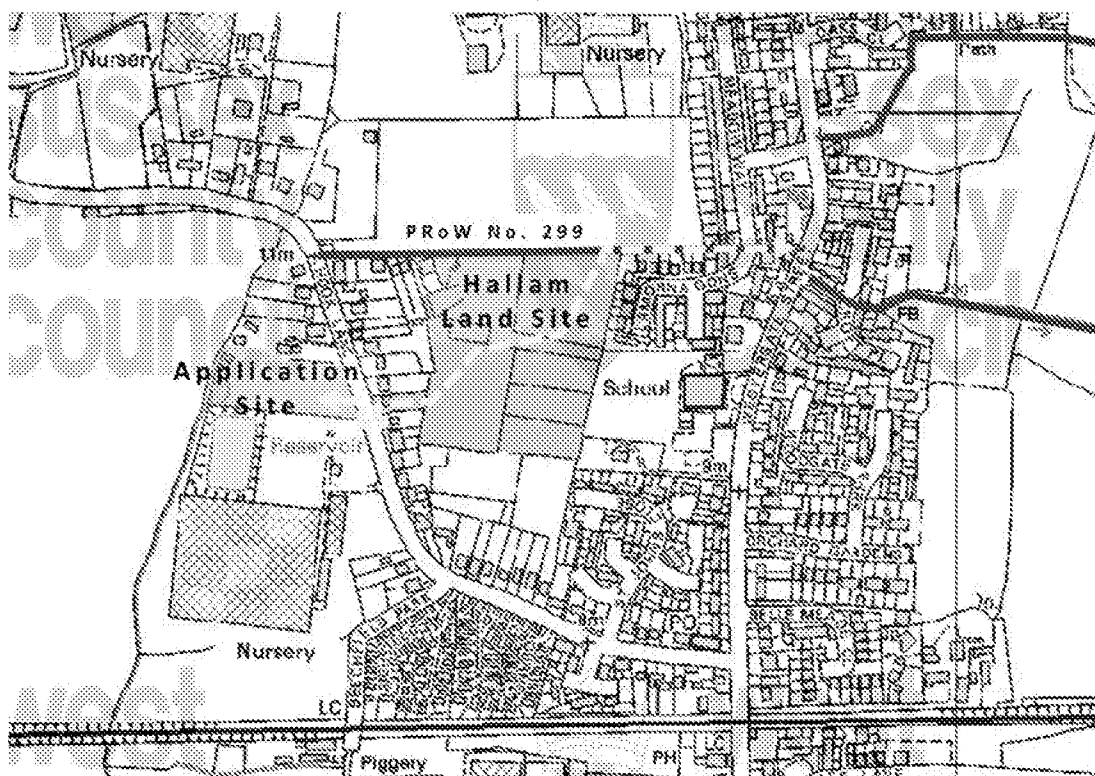
- 3.3.1 The proposed access's relationship with the adjacent approved Hallam Land application access has been assessed in terms of safety and its effect on Hook Lane's operation. The Hallam Land access takes the form of a priority T-junction served from the east side of Hook Lane approximately 20m to the south of the proposed access. The Hallam Land access is shown in **Drawing 2015.2717.002**.



- 3.3.2 The provision of the two accesses would result in a slight realignment of the Hook Lane carriageway by c.1m to the west. The realignment has been proposed as part of the Hallam Land application to accommodate the building out of their access bellmouth. The realignment would not have a material impact on the carriageways operation, which would be widened to 5.0m and would be supported by a new 1.8m footway on the west side of the carriageway. The realigned carriageway and footway would be provided within the bounds of the public highway. The carriageway geometries in the vicinity of the proposed development would comfortably accommodate two-way vehicle movements allowing an HGV and car sized vehicle to pass.
- 3.3.3 A suitable level of inter-visibility is provided between the two access points such that vehicles simultaneously egressing from the two accesses will be visible to each other, thereby reducing the potential for vehicle conflict. The inter-visibility site line between the proposed access and the Hallam Land access is shown in **Drawing 2015.2717.002**.
- 3.3.4 The use of the respective accesses by service vehicles has been subject to a vehicle swept path analysis to demonstrate that a large refuse vehicles can travel from the Hallam Land site access to the proposed access and vice versa. The vehicle swept path analysis demonstrating this manoeuvre is shown in **Drawing 2015.2717.003**.

3.4 Pedestrian Access

- 3.4.1 The site's pedestrian access would be provided via a footway flanking the southern side of the proposed vehicle access. The footway would extend across the site frontage to the north and south of the access on Hook Lane. The new southern section of the footway would tie in with the new footways proposed on west side of the carriageway, which will come forward as part of the Hallam Land application.
- 3.4.2 Pedestrian crossing points will be provided to facilitate pedestrian movements across Hook Lane on to the new footway fronting the Hallam Land site and across the proposed access. The crossing points would take the form of a simple dropped kerb crossing supported by tactile paving. The crossings provide a link to the Hallam Land site and leads to PROW 299, which is the most direct route into Westergate Village.
- 3.4.3 As previously identified PROW 299 is due to be upgraded for shared pedestrian and cycle use as part of the Hallam Land application. The proposed pedestrian infrastructure is demonstrated in **Drawing 2015.2717.002**. The pedestrian routes to the centre of Westergate village via the new footway infrastructure is demonstrated in **Figure 3.2**.



Figures 3.2 New Pedestrian Route to Westergate

3.5 Stage 1 Road Safety Audit

- 3.5.1 The proposed pedestrian and vehicle access arrangements and off-site works have been subject to a Stage 1 Road Safety Audit (RSA). The was undertaken by 'The Safety Forum' on the 15th of March 2016. The RSA and Designers Response is presented within **Appendix E** of this report.

3.6 Internal Layout

- 3.6.1 All matters pertaining to the site's internal layout design from a transport planning and highways perspective will be addressed as part of a reserved matters planning application should the outline application be met with approval.

3.7 Servicing Arrangements

- 3.7.1 It is proposed that refuse servicing would be carried out from the site's internal carriageway. A turning head will be provided to the north of the site which can accommodate large refuse vehicles turning manoeuvres allowing such vehicles to enter and exit the site in a forward gear. A vehicle swept path analysis demonstrating these manoeuvres will be undertaken as part of a reserved matters planning application.



- 3.7.2 Bin carry distances would be in line with the thresholds set out in MfS from all properties (25m for collectors 30m for residents). In keeping with access requirements for emergency service vehicles, the proposed development would provide access within 45m of all buildings, in line with Building Regulation requirements.

3.8 Parking Provision

- 3.8.1 The proposed site's parking provision would be provided in a mixture parking courtyards and on driveways. The parking layout design assessment and vehicle swept path analysis will be provided as part of a reserved matters planning application. The number of parking spaces would be provided in line with the WSCC's 'Residential Parking Demand Calculator'.
- 3.8.2 Cycle parking would be provided in line with WSCC residential cycle parking standards at a ratio of 2 cycle parking spaces per dwelling. The cycle parking space would be provided in the curtilage of properties, or in storage facilities in the rear gardens of properties.



4 TRIP GENERATION AND IMPACT

4.1 Trip Assessment Overview

- 4.1.1 A trip rate assessment has been carried out establish the trip generation associated with the proposal and the impact on local road network.
- 4.1.2 To quantify the anticipated level of traffic associated with the proposed residential dwellings, the TRICS database has been interrogated. The TRICS database contains traffic survey data from similar developments and has been filtered to include only representative data.

Proposed Site Trip Generation

- 4.1.3 The following filtering parameters have been applied to the TRICS data to establish the proposed residential developments trip rates:-
- i.* Land Use – Privately Owned Dwellings
 - ii.* Regions – England (excluding Greater London, Ireland and Scotland).
 - iii.* Scale / Number of Units on Site – up to 50.
 - iv.* Date Range – 2007 Onwards.
 - v.* Count Type – Manual.
 - vi.* Selected Days – Weekdays.
 - vii.* Selected Locations – Edge of Town, Suburban Area, and Residential Zone.
- 4.1.4 A summary of trip generation associated with the proposed development is shown in **Figure 4.1** whilst the TRICS data output is attached at **Appendix F**.

	TRICS Trip Rates (per Dwelling & Dwellings)		
AM Peak Hour (08:00-09:00)	0.146	0.396	0.542
PM Peak Hour (17:00-18:00)	0.382	0.161	0.543
Total Daily Traffic	2.279	2.282	4.561
	TRICS Vehicle Trip Generation		
AM Peak Hour (08:00-09:00)	1	3	4
PM Peak Hour (17:00-18:00)	3	1	4
Daily Traffic	18	18	36

Figure 4.1: Anticipated Trip Generation – Residential Development



- 4.1.1 The proposed development is anticipated to generate in the region of 36 daily vehicle trips on the local road network, with 4 trips during the AM peak period (0800hrs – 0900hrs) and 4 trips during the PM peak period (1700hrs – 1800hrs). This equates to a vehicle movement arriving / departing from the site every 15 minutes during the AM / PM peak hour periods.
- 4.1.2 The level of vehicle trip increase would have a negligible impact on the local road networks operation, particularly when considered within the context of the adjacent consented Hallam Land application site, which has a considerably higher trip generating potential owing to its larger development scale.



5 SUMMARY AND CONCLUSIONS

5.1.1 This TPS has been prepared by RGP on behalf of Whitgift Estates in association with a proposed outline planning application for 8 residential dwellings on land presently occupied by outbuildings and a large open field associated with a single dwelling to the north of the site.

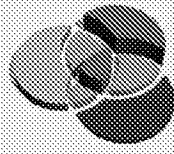
5.1.2 The main conclusions of this report are as follows:

- (i) The application site is well located to public transport services and amenity, which would cater for the everyday needs of prospective residents. The majority of these amenities are available and accessible on-foot within the maximum recommended distances, as prescribed by the CIHT.
- (ii) The PIA data does not show any pattern in terms of incident distribution, frequency or severity that can be related to outstanding highway safety issues on the local road network.
- (iii) The site would be served from a new access point adjoining Hook Lane and would take the form of a priority T-junction. The access would be flanked by 1.8m wide footway on the southern and northern side of the carriageway. The geometries of the access would allow two vehicles to concurrently turn in and out of the site, and large refuse vehicles to negotiate the access.
- (iv) The visibility requirements from the proposed access have been based on speed surveys which were undertaken as part of the adjacent Hallam Land planning application. Visibility splays from the access achieve the necessary site lines of 2.4m x 47.0m in the primary and 2.4m x 49.2m in the secondary directions in accordance with MfS calculation coefficients.
- (v) The proposed access's relationship with the adjacent approved Hallam Land application has been assessed in terms of safety and the effects on Hook Lanes operation. It has been demonstrated that the accesses provision would not affect the existing operation of Hook Lane and would provide suitable inter-visibility, and allow refuse vehicles to travel from the site access to the Hallam Land access.
- (vi) The site's pedestrian access would be provide via a footway flanking the southern side of the site access. The site's footway would extend across the site frontage heading south along Hook Lane. The new section of footway would tie in with the footways on west side of Hook Lane which will come forward as part of the Hallam Land application.

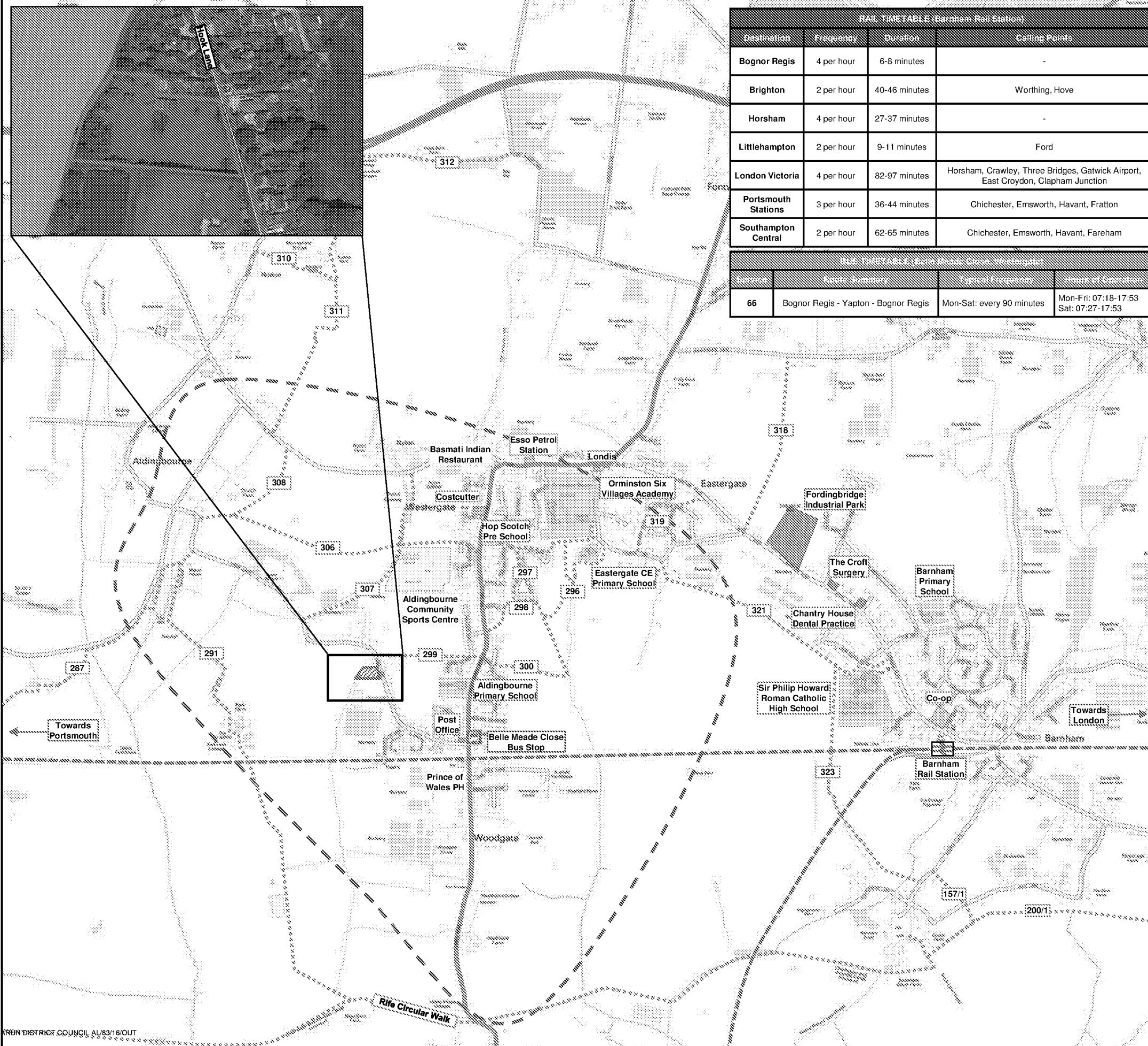


- (vii) A pedestrian crossing point will be provided to facilitate pedestrian movements across Hook Lane on to the new footway fronting the Hallam Land site and its internal footways. This provides a link to PROW 299 the most direct route into Westergate Village. PROW 299 is due to be upgraded for shared pedestrian and cycle use as part of the Hallam Land application.
- (viii) All matters pertaining to the site's internal layout design, servicing arrangements, car and cycle parking provision will be addressed as part of a reserved matters planning application should the outline application be met with approval.
- (ix) The proposed development is anticipated to result in a minor increase in vehicle trips. The level of increase is considered to have a negligible impact on the operation of local road network particularly when considered within the context of the adjacent consented Hallam Land application site, which is larger in scale and therefore has a greater trip generating potential.

5.1.3 On the basis of the evidence presented in this report, WSCC are respectfully requested to confirm that the prospective development would be acceptable from a transport planning and highways perspective.



PLANS



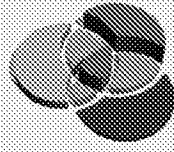
RAIL TIMETABLE (Barnham Rail Station)			
Destination	Frequency	Duration	Calling Points
Bognor Regis	4 per hour	6-8 minutes	-
Brighton	2 per hour	40-46 minutes	Worthing, Hove
Horsham	4 per hour	27-37 minutes	-
Littlehampton	2 per hour	9-11 minutes	Ford
London Victoria	4 per hour	82-97 minutes	Horsham, Crawley, Three Bridges, Gatwick Airport, East Croydon, Clapham Junction
Portsmouth Stations	3 per hour	36-44 minutes	Chichester, Emsworth, Havant, Fratton
Southampton Central	2 per hour	62-65 minutes	Chichester, Emsworth, Havant, Fareham

RAIL TIMETABLE (Barnham Rail Station)			
Service	Route Summary	Typical Frequency	Hours of Operation
66	Bognor Regis - Yapton - Bognor Regis	Mon-Sat: every 90 minutes	Mon-Fri: 07:18-17:53 Sat: 07:27-17:53

- ### LEGEND

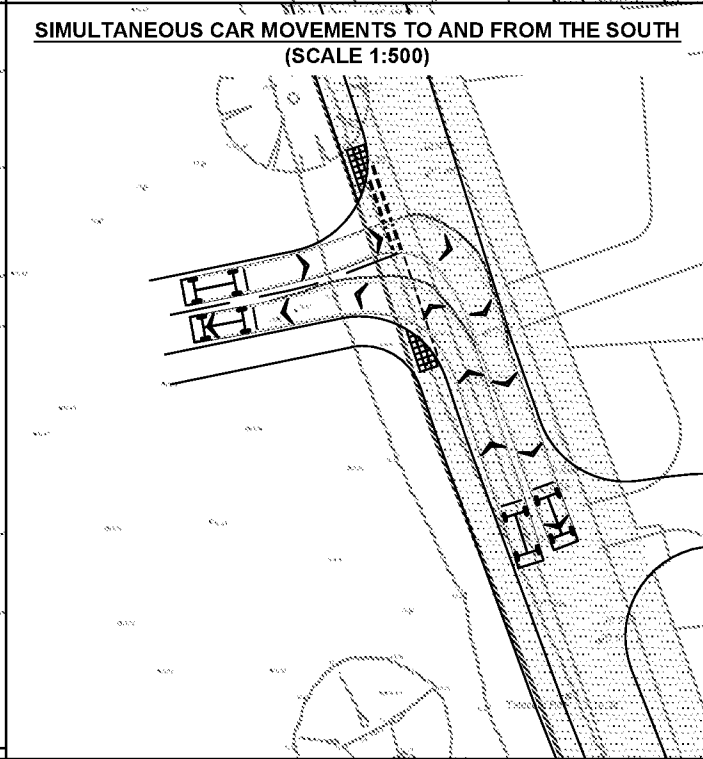
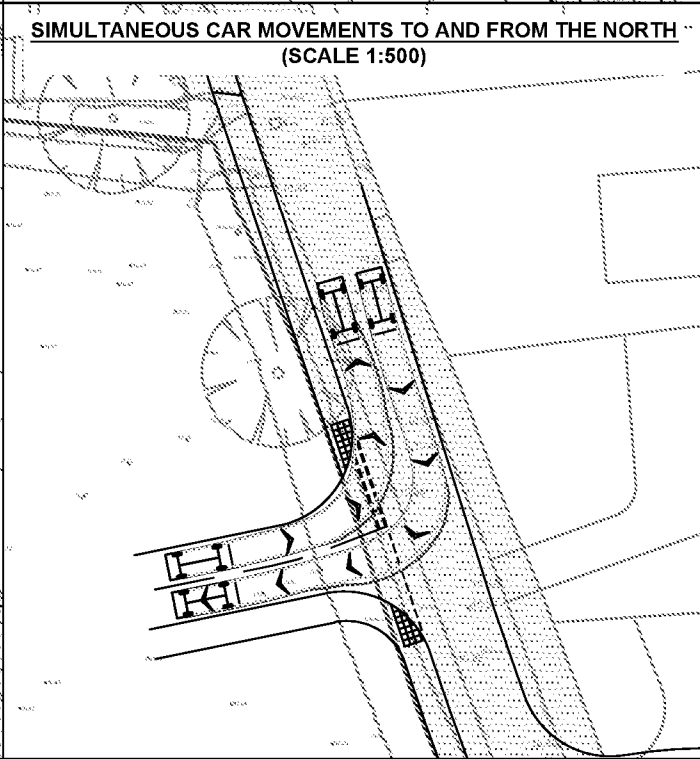
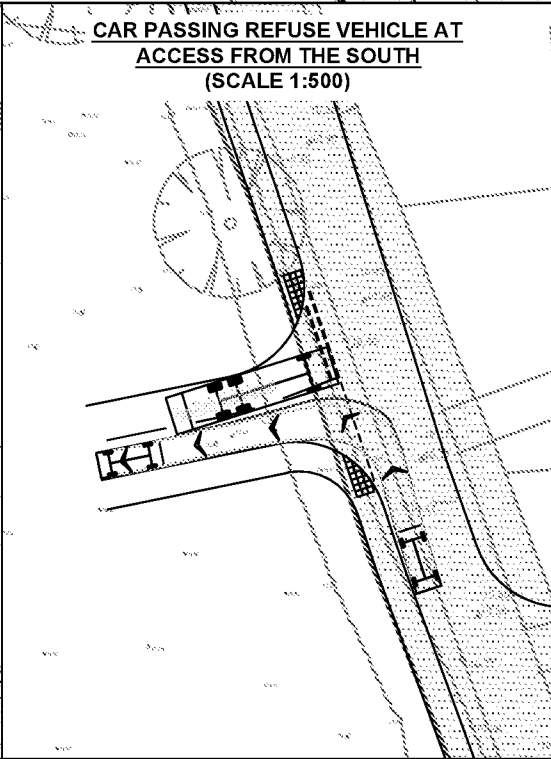
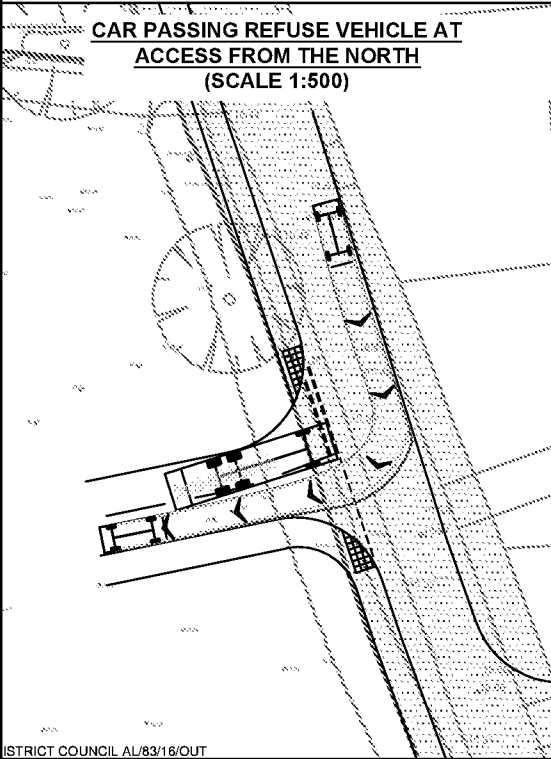
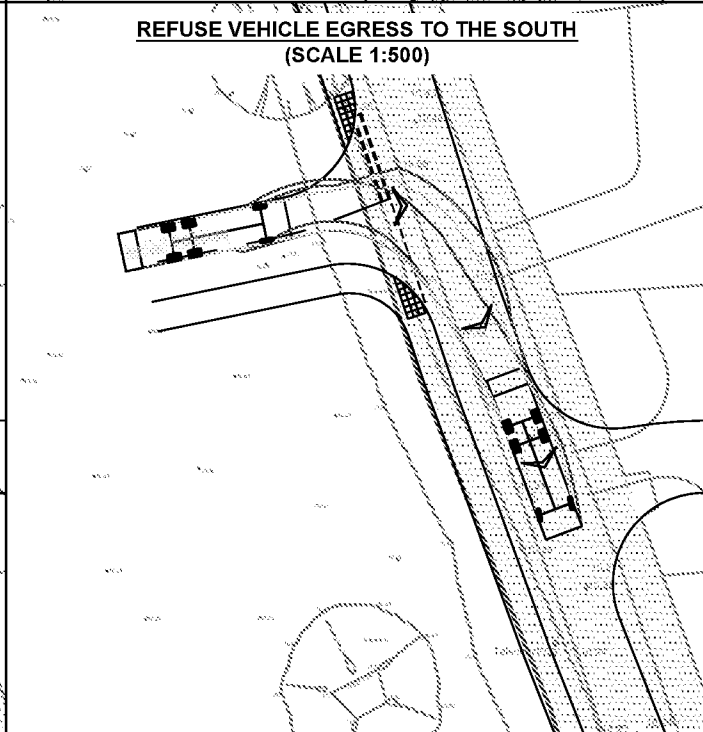
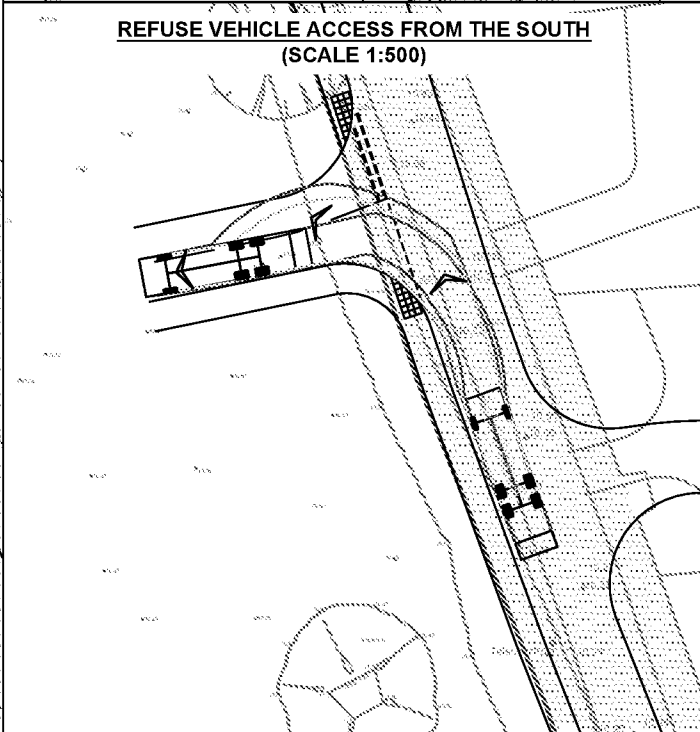
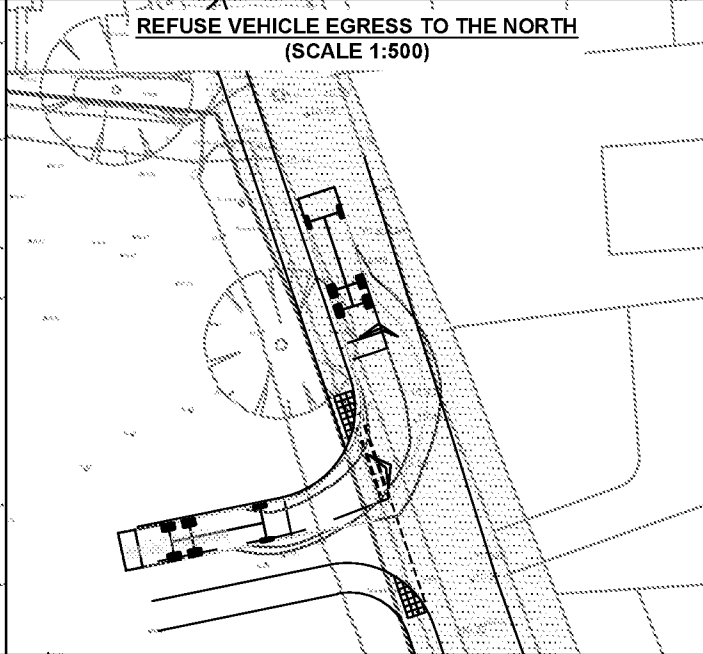
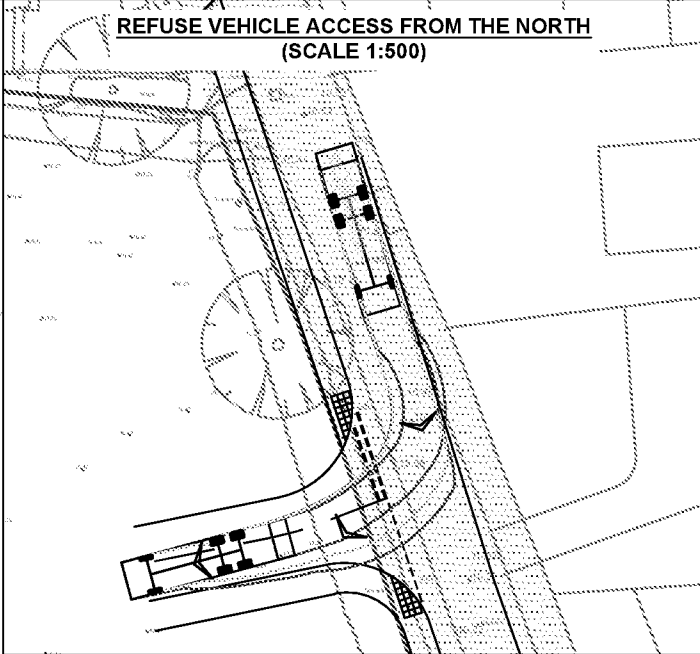
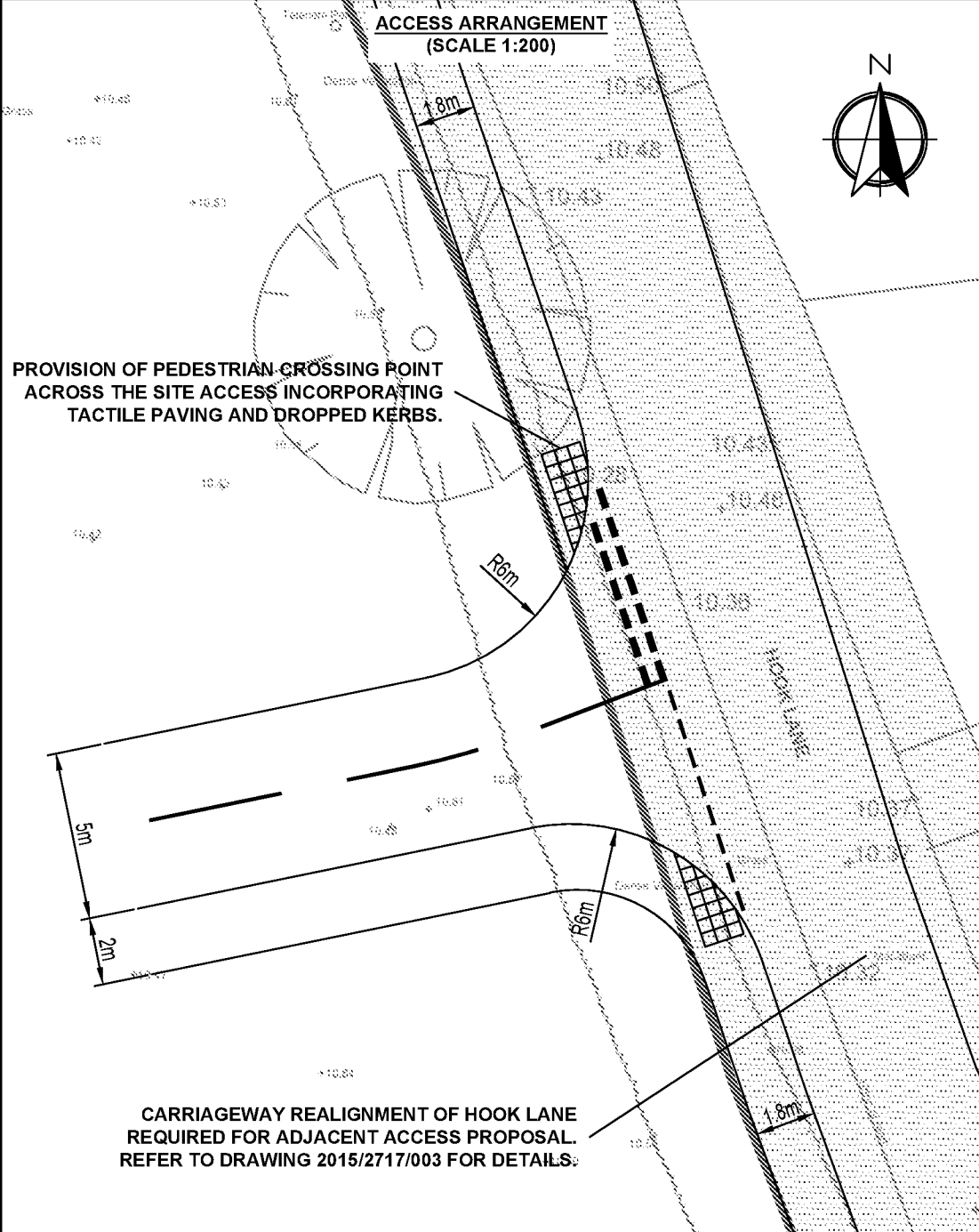
	SITE LOCATION
	RAIL STATION
	RAILWAY
	LOCAL BUS STOPS
	2KM ISOCHRONE
	RETAIL
	MEDICAL
	EDUCATION
	BUSINESS / EMPLOYMENT
	LEISURE AND RECREATION
	PUBLIC RIGHT OF WAY

 Transport Planning and Infrastructure Design Consultants Shackelford Suite, Mill Pool House, Mill Lane, Godalming, Surrey, GU7 1EY Tel: 01483 861681 Fax: 01483 861682 www.tpidc.co.uk			
Client: Whitgift Estates			
Project: Hook Lane, Aldingbourne			
Title: Site Location and Accessibility Plan			
Plan No: Plan 01	Job No: 15/2717	Date: Dec 2015	Scale: NTS
Drawn By: JLM	Checked By: ALB	Approved By: PMR	Rev: -



DRAWINGS

2015-2800\2717 HOOK LANE, ALDINGBOURNE\DRAWINGS - CURRENT\2015-2717-001 REV A.DWG (001) (Mar 22, 2016 - 3:09pm) (r.attwood)



LEGEND

HIGHWAY BOUNDARY

SITE BOUNDARY

CAR SPECIFICATION

DB32 Private Car

Overall Length	4.223m
Overall Width	1.715m
Overall Body Height	1.392m
Min Body Ground Clearance	0.233m
Max Track Width	1.629m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.780m

REFUSE VEHICLE SPECIFICATION

Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	9.500m

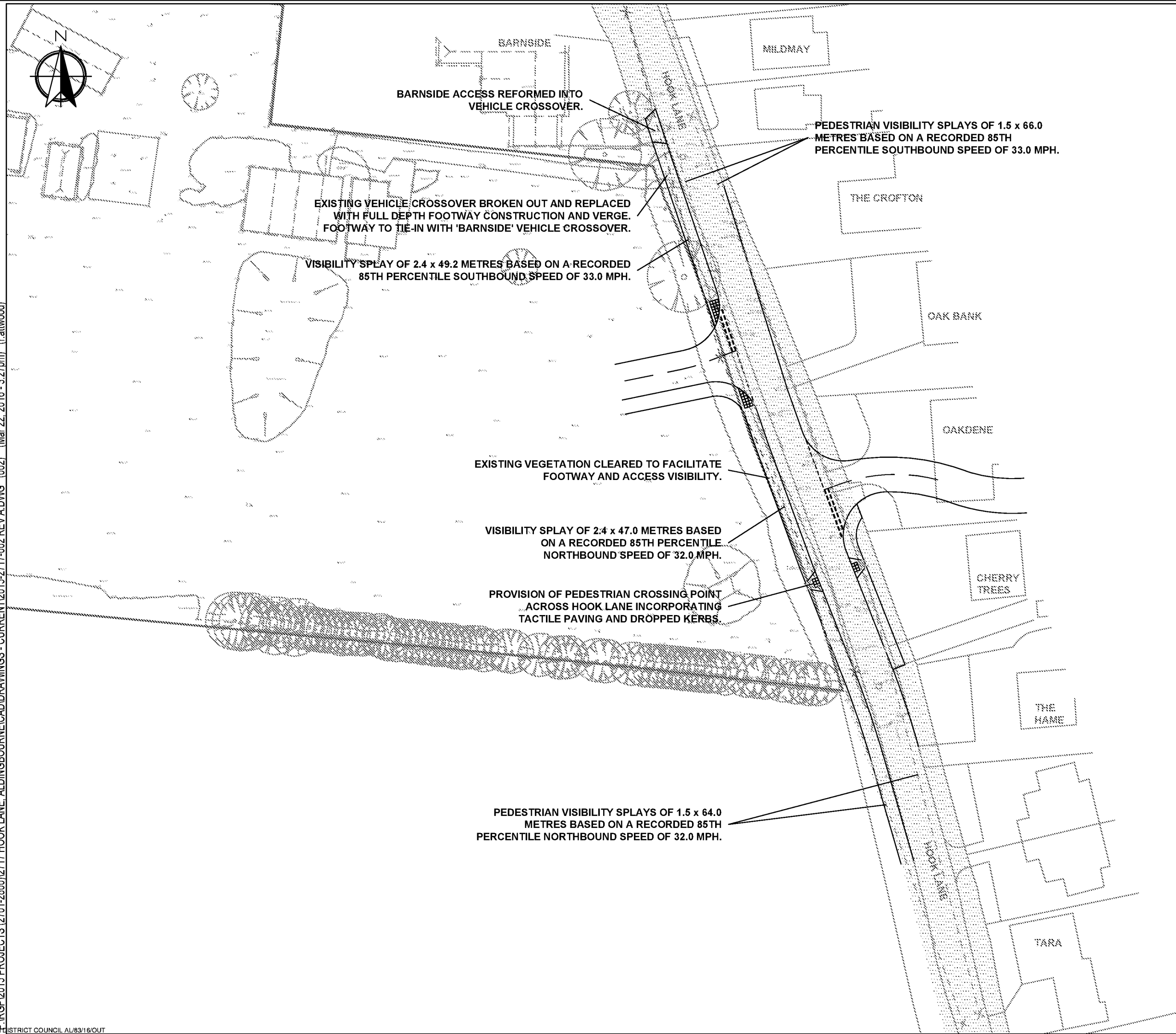
A	03/16	Changes based on Stage 1 RSA comments	RAA	PMR
Rev	Date	Amendments	Drawn	Appr.



Transport Planners and Infrastructure Design Consultants
Metro House, Northgate, Chichester, West Sussex, PO19 1BE
Tel: 01243 210418 Fax: 01483 861682 www.rgp.co.uk

Client	Whitgift Estates			
Project	Hook Lane, Aldingbourne			
Drawing Title	Access Arrangements and Vehicle Swept Path Analysis			
Scale	Varies @ A3	Drawn By	RAA	Checked By
Drawing No.	2015/2717/001	Date	December 2015	Approved By
				PMR
				Rev.
				A

ALDINGBOURNE CAD DRAWINGS - CURRENT 2015-2717-002 REV A.DWG (002) (Mar 22, 2016 - 3:27pm) (r.attwood)
RGP/2015 PROJECTS (2701-2800) 2717 HOOK LANE, ALDINGBOURNE AL/83/16/OUT



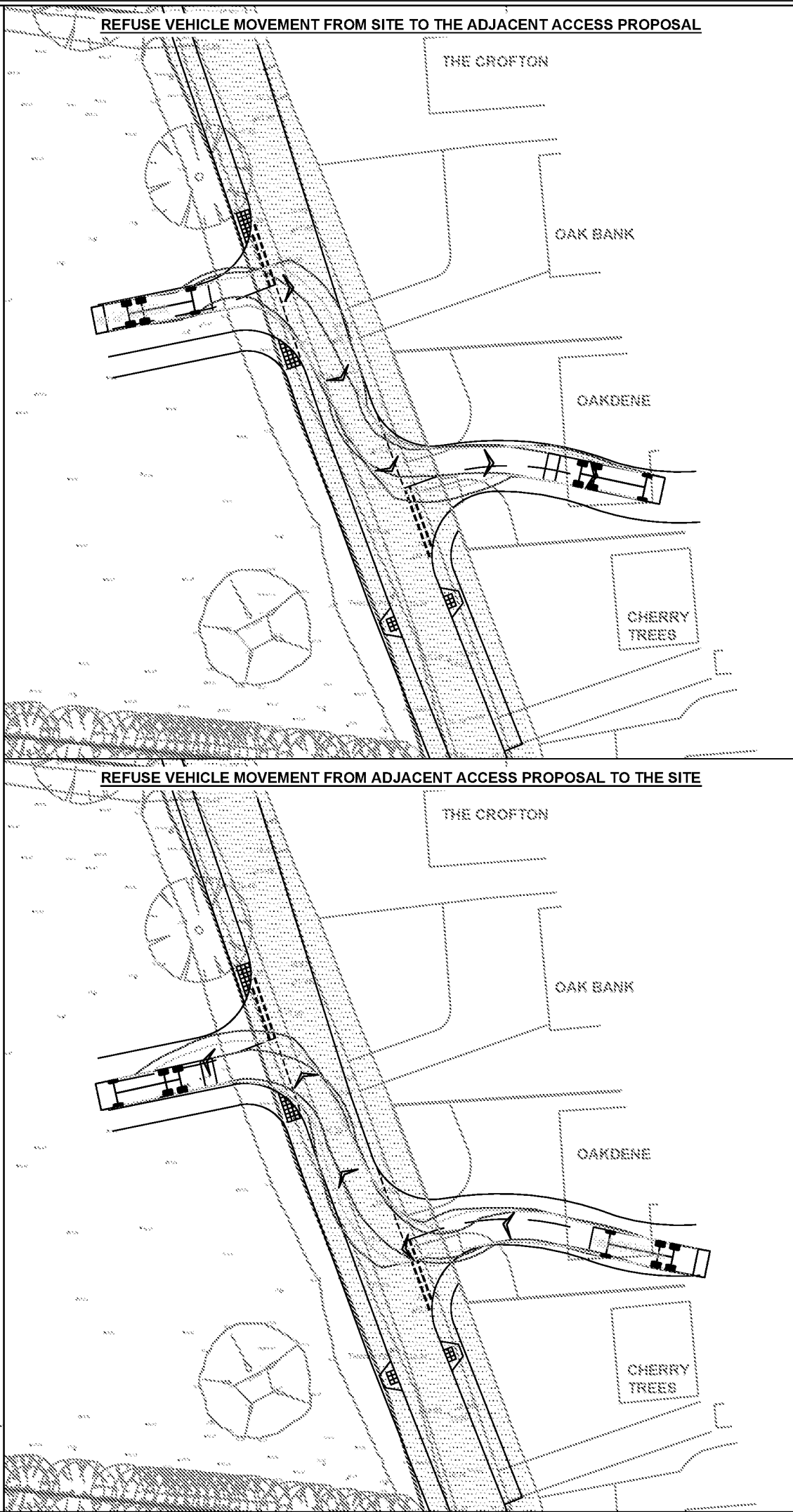
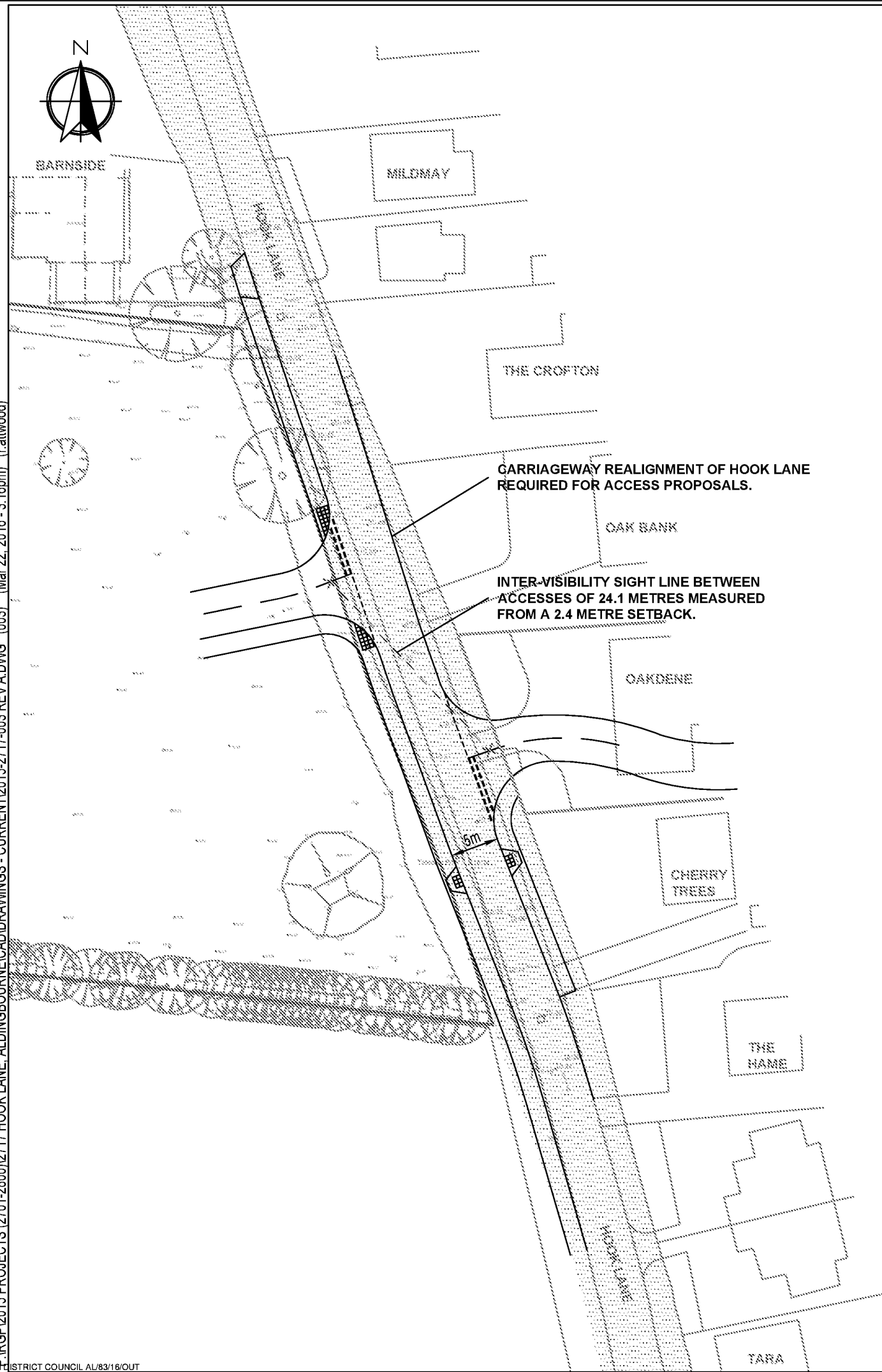
A	03/16	Changes based on Stage 1 RSA comments	RAA	PMR
Rev	Date	Amendments	Drawn	Appr.



Transport Planners and Infrastructure Design Consultants
Metro House, Northgate, Chichester, West Sussex, PO19 1BE
Tel: 01243 210418 Fax: 01483 861682 www.rgp.co.uk

Client	Whitgift Estates			
Project	Hook Lane, Aldingbourne			
Drawing Title	Access Visibility Splays			
Scale	1:500 @ A3	Drawn By	RAA	Checked By
Drawing No.	2015/2717/002	Date	December 2015	Approved By
				PMR
				Rev.
				A

2015-2016 PROJECTS (2701-2800) 2717 HOOK LANE, ALDINGBOURNE CAD DRAWINGS - CURRENT 2015-2717-003 REV A.DWG (003) (Mar 22, 2016 - 3:16pm) (r.attwood)



LEGEND

- HIGHWAY BOUNDARY
- SITE BOUNDARY
- CONSENTED PROPOSAL BOUNDARY

REFUSE VEHICLE SPECIFICATION

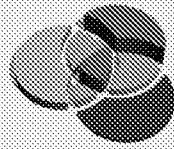
Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	9.500m

A	03/16	Changes based on Stage 1 RSA comments	RAA	PMR
Rev	Date	Amendments	Drawn	Appr.

Transport Planners and Infrastructure Design Consultants
Metro House, Northgate, Chichester, West Sussex, PO19 1BE
Tel: 01243 210418 Fax: 01483 861682 www.rgp.co.uk

Client	Whitgift Estates						
Project	Hook Lane, Aldingbourne						
Drawing Title	Adjacent Access Interaction						
Scale	1:500 @ A3	Drawn By	RAA	Checked By	ALB	Approved By	PMR
Drawing No.	2015/2717/003	Date	December 2015		Rev.	A	



APPENDIX A

Hook Lane, Westergate - Speed Survey



Weather

Thursday 4 July 2013

All speeds are recorded from free flowing vehicles

Dry/Bright

1000-1530

Northbound				Southbound			
Speeds(mph)		Speeds(mph)		Speeds(mph)		Speeds(mph)	
1	34	51	27	1	32	51	28
2	37	52	27	2	38	52	28
3	39	53	27	3	38	53	28
4	20	54	28	4	39	54	29
5	20	55	28	5	21	55	29
6	20	56	28	6	22	56	29
7	20	57	28	7	22	57	30
8	20	58	28	8	22	58	30
9	21	59	28	9	22	59	30
10	21	60	28	10	22	60	30
11	21	61	28	11	22	61	30
12	21	62	28	12	22	62	30
13	21	63	28	13	23	63	30
14	21	64	29	14	23	64	30
15	21	65	29	15	23	65	30
16	21	66	29	16	23	66	30
17	22	67	29	17	23	67	30
18	22	68	30	18	23	68	30
19	22	69	30	19	23	69	30
20	23	70	30	20	23	70	31
21	24	71	30	21	23	71	31
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24	24	74	30	24	24	74	31
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28	24	78	31	28	25	78	31
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38	26	88	33	38	26	88	33
39	26	89	33	39	26	89	33
40	26	90	33	40	26	90	33
41	26	91	34	41	26	91	34
42	27	92	34	42	26	92	34
43	27	93	34	43	27	93	34
44	27	94	34	44	27	94	34
45	27	95	34	45	27	95	34
46	27	96	35	46	27	96	35
47	27	97	35	47	27	97	37
48	27	98	37	48	27	98	40
49	27	99	39	49	28	99	40
50	27	100	42	50	28	100	41
ROAD SURFACE - DRY							

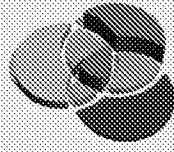
Average Northbound	27.2	Average Southbound	27.9
85th%ile Northbound	32.0	85th%ile Southbound	33.0
% > Speed Limit Northbound	0.0	% > Speed Limit Southbound	0.0
% > 15mph over Speed Limit Northbound	0.0	% > 15mph over Speed Limit Southbound	0.0

SPEED
LIMIT

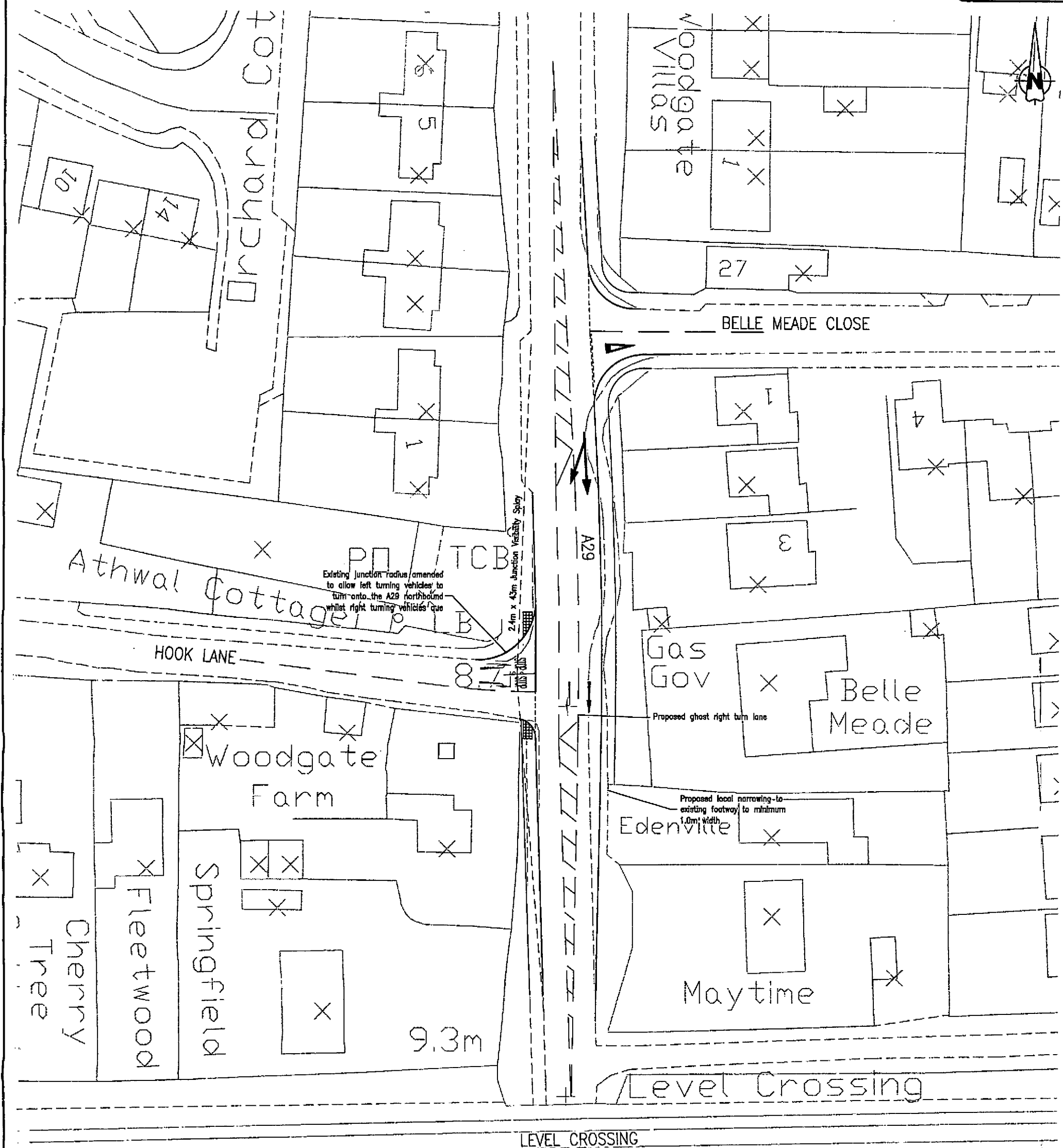


SPEED
LIMIT





APPENDIX B



NOTES

- 1.) Do not scale from this drawing.
- 2.) This survey has been created using mapping data secured by a third party contractor. Brookbanks Consulting Ltd cannot be held responsible for the accuracy of this data.



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Rev.	Revision Details	Drawn	Checked	Approved	Date
PRELIMINARY					25-09-13
Issue Status		Approved		Date	
Drawn	RM	Checked	AE	Date	23-09-13

Hallam Land Management

Land at Westergate

Hook Lane Junction Improvements

Option 2

Brookbanks

Consulting

6150 Knights Court Solihull Parkway Birmingham B37 7WY
Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com

Scale
1:500

Drawing No.
1313/SK/20

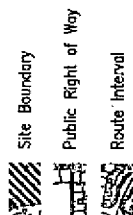
Rev.
-



NOTES

- 1.) Do not scale from this drawing.
- 2.) This drawing has been created using mapping data secured by a third party contractor. Brookbanks Consulting Ltd cannot be held responsible for the accuracy of this data.

KEY



TERRAIN

- ① 0.4m wide, dirt track, overgrown.
- ② 2.5m wide, grass track, overgrown.
- ③ 1.35m wide, paved footway.
- ④ 0.5m wide, paved footway.
- ⑤ 2m wide, dirt track, tree roots.
- ⑥ Non-existent track, agricultural land.
- ⑦ 1.3m wide dirt track.
- ⑧ 1.45m wide, slab paving.

Rev.	Revision Details	Checked	Approved	Date
PRELIMINARY		PAS	SEP 13	
Issue Status		Approved	Date	
Drawn	CA	Checked	AE	Date 23.09.13

Brookbanks
Consulting

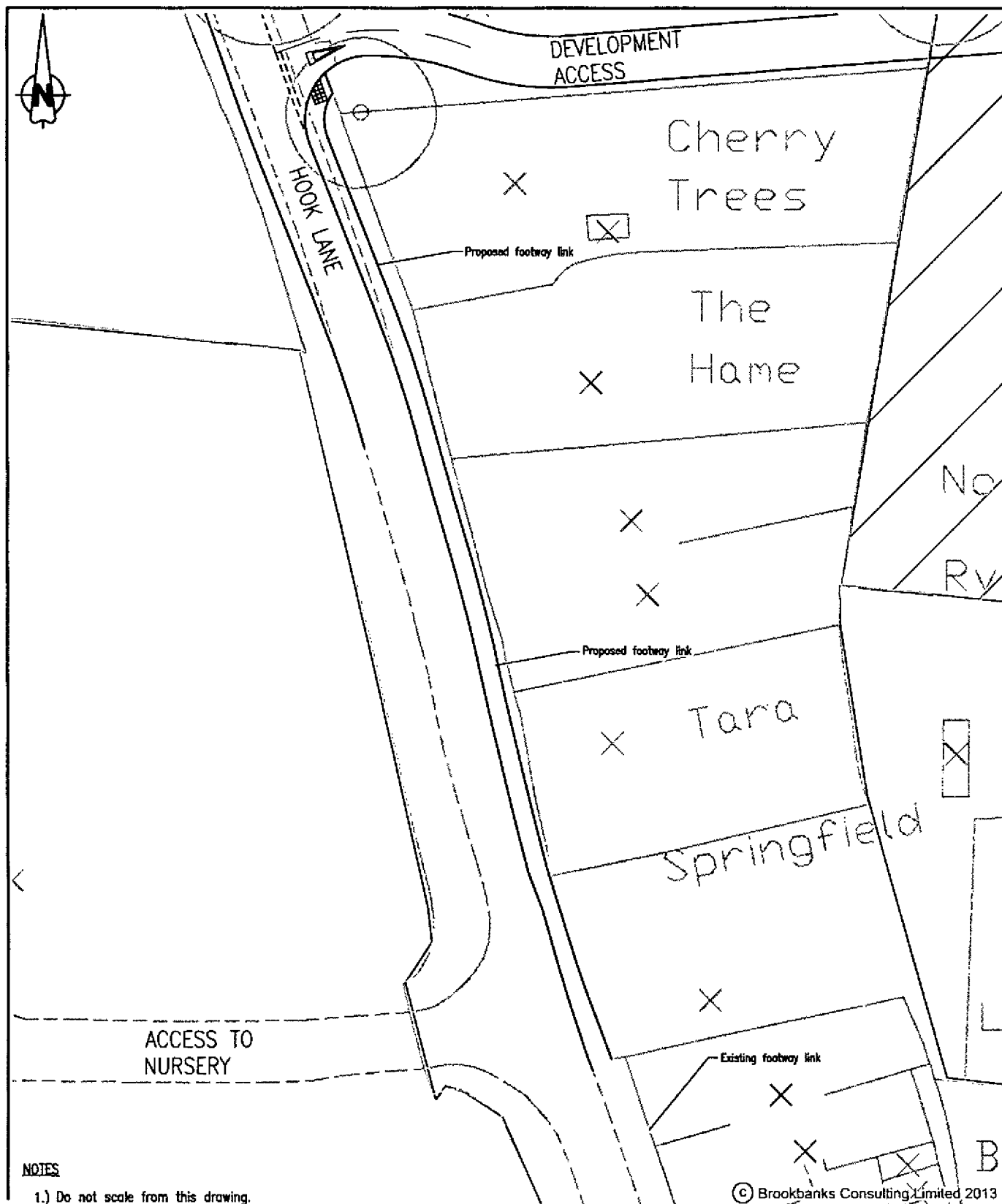
8150 Knights Court, Southall Parkway, Birmingham B37 7WY
Tel: (0121) 329 4330 Fax: (0121) 329 4331
www.brookbanks.com



Proposed Development
Land at Westergate

Existing Public Right of Way
General Arrangement

Scale: A1	Drawing No.	Rev.
1:2,000	1313-GA-01	-



NOTES

- 1.) Do not scale from this drawing.

Drawn	Checked	Date	PRELIMINARY		15.5.13
RM	AE	14.5.13	Issue Status	Approved	Date

Hallam Land Management

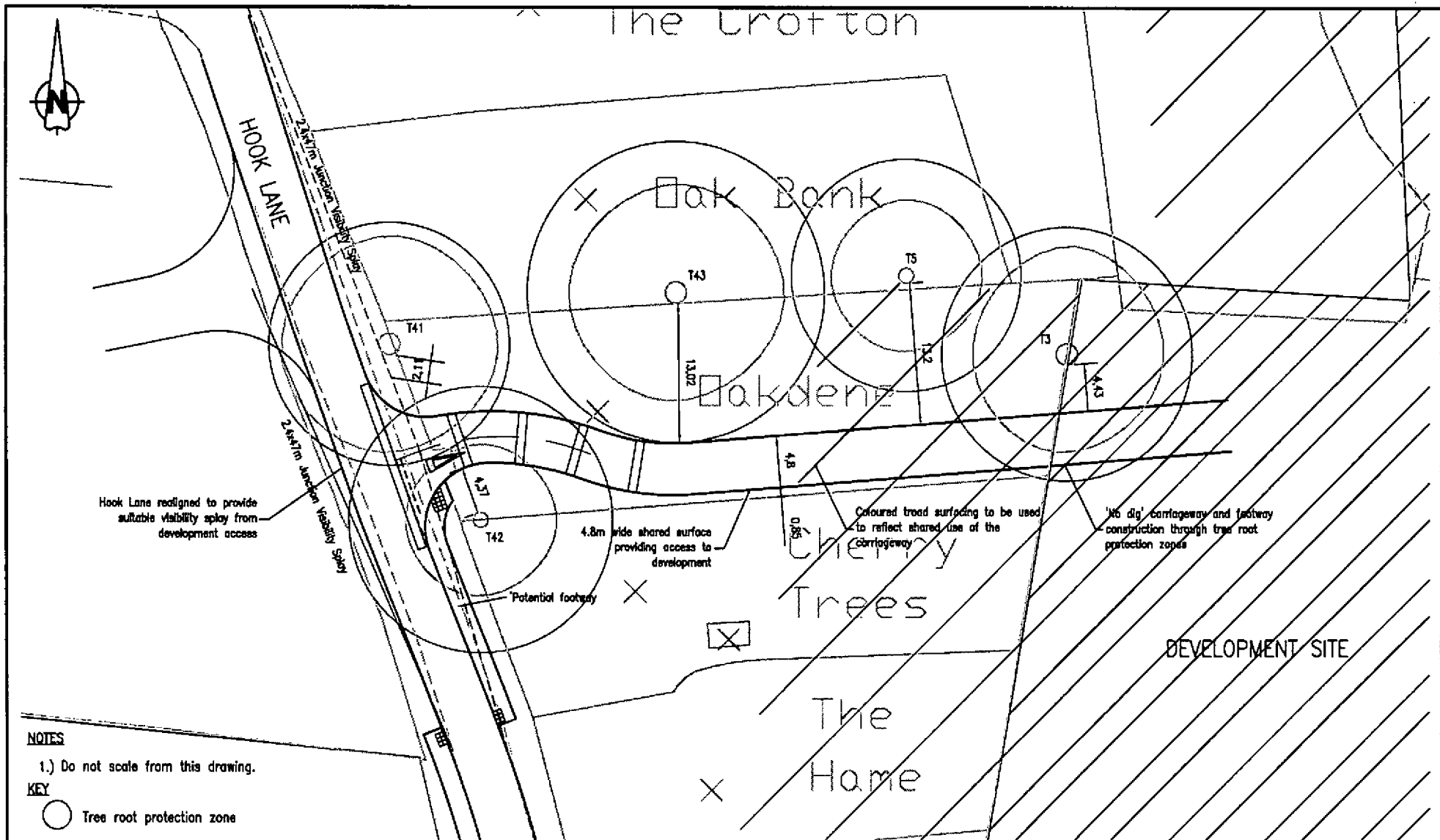
Land at Westergate

Proposed Footway Link Option 1

Brookbanks
Consulting

6150 Knights Court, Solihull Parkway, Birmingham B37 7WY
Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com

Scale	Drawing No.	Rev.
1:500(A4)	1313/SK15	-



NOTES

1.) Do not scale from this drawing.

KEY

○ Tree root protection zone

Hallam Land Management

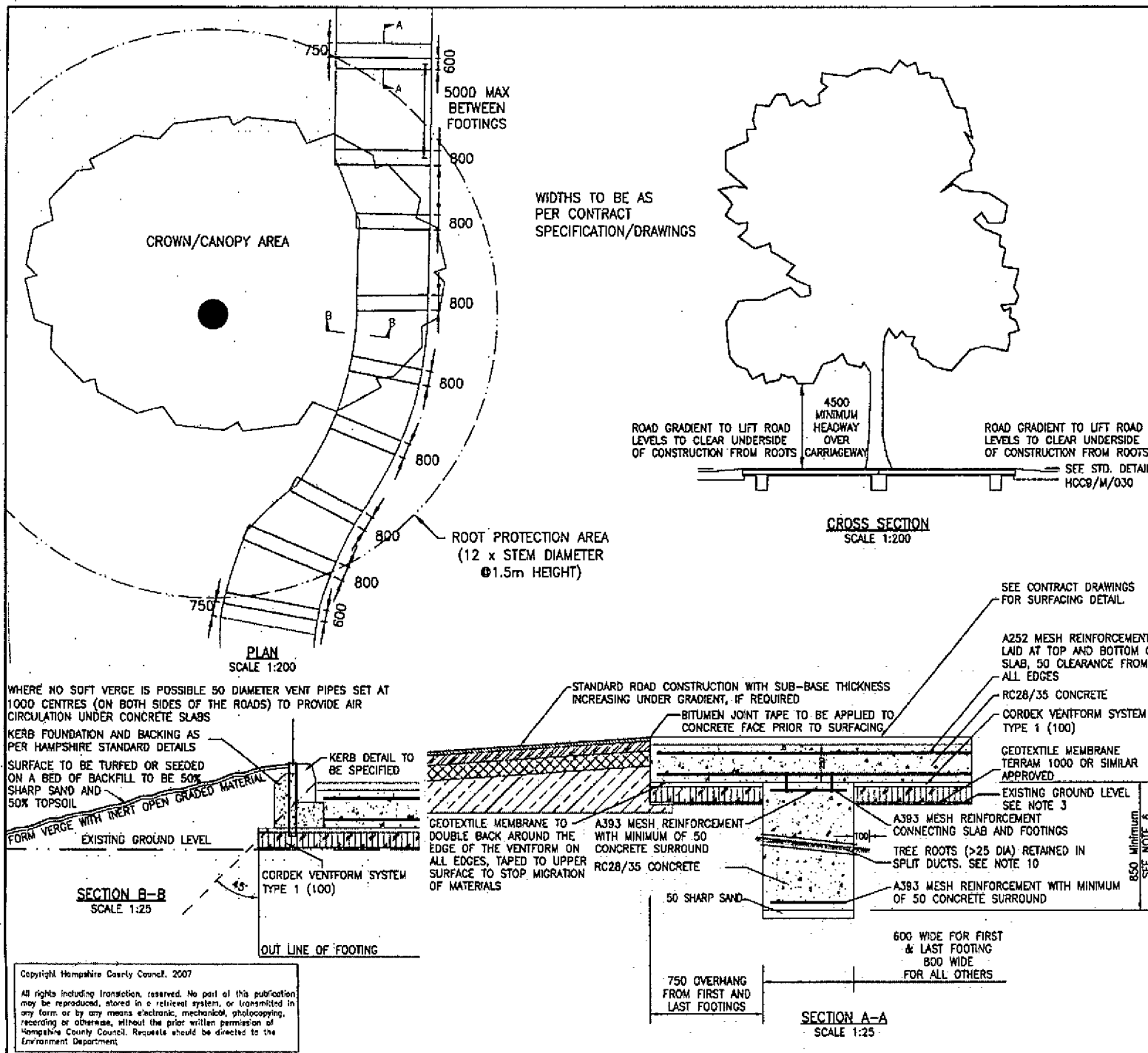
Land at Westergate

Highway Access Option - 4.8m Shared Surface

Drawn	RM	PRELIMINARY	03/05/13
Checked	AE	Issue Status	Approved Date
		© Brookbanks Consulting Limited 2013	
Date	03/05/13	Scale	Drawing No.
		1:500@A4	1313/SK14C

Brookbanks
Consulting

6150 Knights Court Sollihull Parkway Birmingham B37 7WY
Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com



NOTES:

- WHERE APPROPRIATE, GROUND VEGETATION ALONG LINE OF PROPOSED ROAD TO BE TREATED WITH A TRANSLOCATED HERBICIDE (GLYPHOSATE) AS ADVISED BY HIGHWAYS ARBORICULTURALIST.
- ALL EARTHWORKS WITHIN THE ROOT PROTECTION AREA OF RETAINED TREES TO BE HAND EXCAVATED IN ACCORDANCE WITH BS 5837:2005.
- UNLESS OTHERWISE STATED IN APPENDIX 30/10 GROUND PREPARATION WITHIN THE ROOT PROTECTION AREA OF RETAINED TREES TO BE RESTRICTED TO THE REMOVAL OF THE LOOSE TOPSOIL/HUMUS LAYER ONLY. ANY MAJOR HOLLOW TO BE FILLED WITH INERT NO-FINES AGGREGATE TO PROVIDE A LEVEL SURFACE.
- FOOTINGS TO BE LAID OUT IN AN ESSENTIALLY RADIAL PATTERN AT RIGHT ANGLES TO ROAD CENTRELINE BUT POSITIONS CAN BE MOVED SLIGHTLY TO AVOID MAJOR ROOTS
- EXACT LOCATION OF ALL EXCAVATION TO BE AGREED ON SITE.
- FOOTINGS REQUIRE DEEPENING TO 1150mm. WHERE CBR IS <5M.
- FOR SITES WITH A CROSSFALL, FOOTINGS SHALL BE PROFILED TO ACHIEVE THE DESIRED ROAD SURFACE PROFILE
- INDIVIDUAL FOOTINGS TO BE DUG BY HAND IN ONE OPERATION WITH LOOSE SOIL REMOVED TO ENSURE GOOD AND SMOOTH SIDES AND BASE. CONCRETE TO BE POURED INTO FOOTINGS AS SOON AFTER EXCAVATION AS POSSIBLE.
- ALL TREE ROOTS, GREATER THAN 25MM IN DIAMETER, TO BE RETAINED AND WORKED AROUND.
- RETAINED ROOTS WITHIN THE FOOTINGS TO BE ENCASED IN SPLIT DUCTING OF AN APPROPRIATE DIAMETER TO GIVE 5 TO 20mm CLEARANCE AROUND THE ROOT, DUCTING TO EXTEND A MINIMUM OF 100mm BEYOND THE FOOTING ON EITHER SIDE. DUCTING TO BE TAPED TOGETHER AFTER PLACEMENT.
- ALL CONCRETE TO BE DESIGNATED MIX RC 28/35 WITH CONSISTENCE CLASS S2.
- CONCRETE TO BE COMPACTED USING INTERNAL VIBRATION.
- WHERE SERVICES MUST BE PLACED WITHIN THE ROOT PROTECTION AREA, THEY SHOULD BE POSITIONED TO AVOID FOOTINGS WITH REFERENCE TO NAVG GUIDANCE AND DUCTED TO AVOID FUTURE DISTURBANCES.
- CORDEK VENTFORM SYSTEM TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
- ALL DIMENSIONS IN MILLIMETRES.

A	NOTES AMENDED	DEC. 11	MT	9	3
	AMENDMENT	DATE	DRAWN	CHECK	APPRO

CONSULTANT



STUART JAMES BBA (TYPE 1) WITH DIRECTOR OF ENVIRONMENT, THE OFFICE, WIMBORNE.

SCHEME

STANDARD DETAILS

DRAWING TITLE

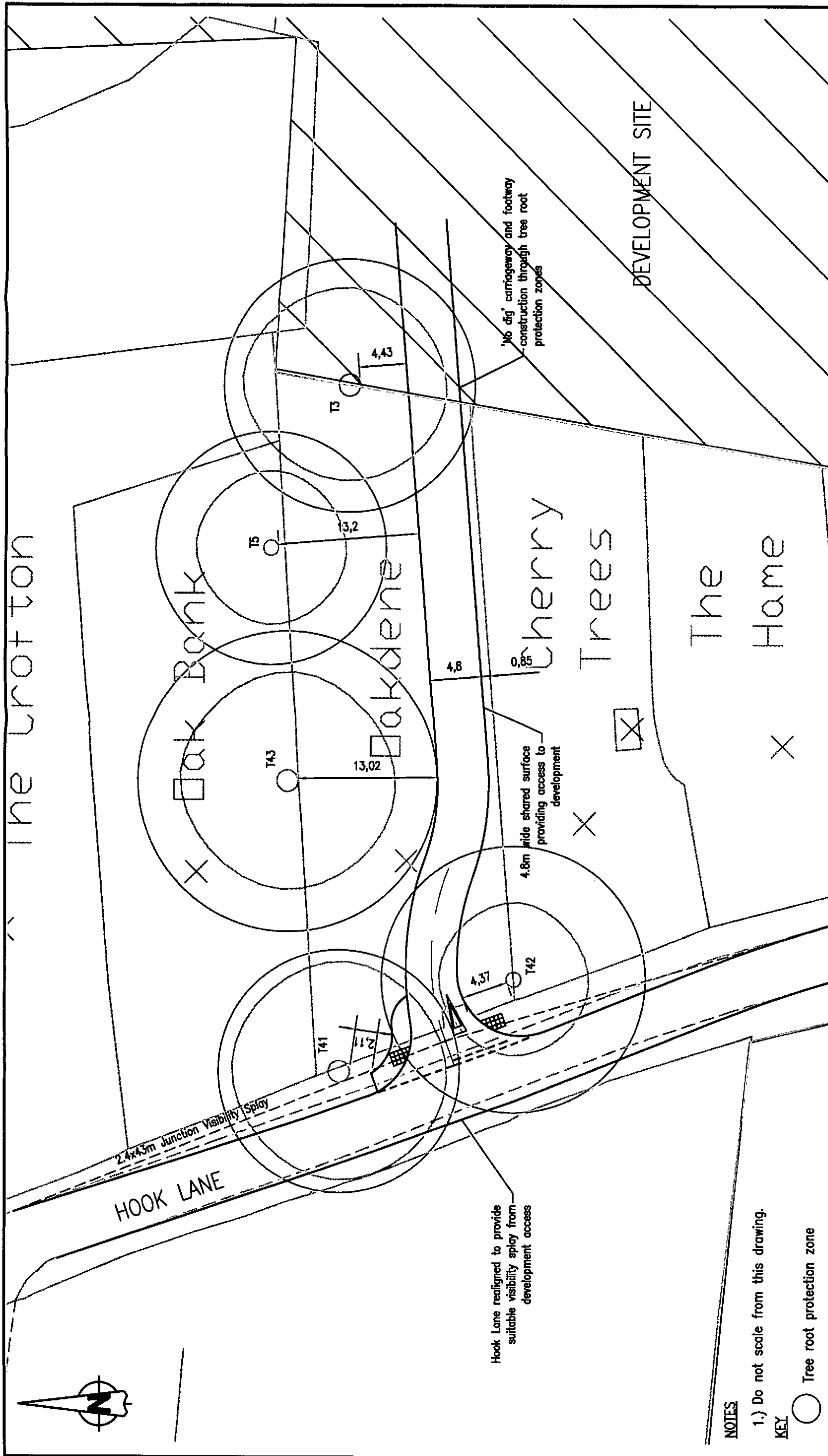
CARRIAGEWAY DETAIL FOR CONSTRUCTION WITHIN THE ROOT PROTECTION AREA OF RETAINED TREES

REV. 01/01/12 12:34:2912 11 12/01/12

DRAWN	TL	CHECKED	TL	TL	SCALE	VARIES
CAD	LMH	APPROVED	PS	PS	DATE	JULY 2010
ORD. NO.	HCC9/C/155	REVISION	A			

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NOTES

1.) Do not scale from this drawing.

KEY

○ Tree root protection zone

Drawn	RM	PRELIMINARY		03/05/13
Checked	AE	Issue Status	Approved	Date
Date	- 03/05/13	© Brookbanks Consulting Limited 2013		
		Scale	Drawing No.	
		- 1:500@A4	1313/SK14	

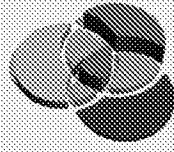
Hallam Land Management

Land at Westergate

Highway Access Option - 4.8m Shared Surface

Brookbanks
Consulting

6150 Knights Court Solihull Parkway Birmingham B37 7WY
Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com



APPENDIX C

Hook Lane – Oving – RGP

Collision report 01/11/2010 – 31/10/2015

Date produced
11 December 2015

The information included in this report is provided for analysis and is based on the data provided by Sussex Police. Some of the data included in this report is subjective and as such is not considered suitable for general release. In view of this it should not be transmitted to any other person in its original form, including in any report which may be available to the public. If you have any doubt regarding how this data may be used other than for analysis please contact SSRP for advice.

Sussex Safer Roads
P A R T N E R S H I P

Safer Roads
Safer Communities
Sharing the Responsibility

Produced by Sussex Safer Roads Partnership on behalf of Sussex Police

Data regarding personal injury collisions is recorded by Sussex Police in accordance with the DfT Stats 19 requirements. The data is subsequently used by Sussex Safer Roads Partnership for monitoring and planning. While every effort is made to ensure that this data is accurate, it is subject to change should further information become available.

This data may not be fully validated and while every effort is made to ensure its accuracy any statistics provided may not match those published elsewhere.

Sussex Safer Roads Partnership does not hold collision data either where there are no recorded casualties or the incident has not been reported to Sussex Police.

For further information:





Her Majesty's Office (c) Crown Copyright

Sussex Safer Roads
PARTNERSHIP

Collision data
Hook Lane - Oving - RGP
01/11/2010 - 31/10/2015

SCALE	1 : 6974
DATE	11/12/2015
DRAWING No.	
DRAWN BY	

Details of Personal Injury Accidents for Period - 01/11/2010 to 31/10/2015 (60) months

Selection:

Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles						Casualties			
			Veh No	Type	Age	Manv	Dir	Class	Sex	Age	Sev	
Road No.	Date											
2nd Road No.	Time											
Grid Ref.	D/L											
	R.S.C											
	Weather											
	Speed											
	Account of Accident											
Causation Factor:												

1106529 Tuesday U HOOK LANE of A29 WESTERGATE
18/10/2011 STREET (moved out of Poly from 493770 Veh 2 Car 79 Wait to turn left W to N
R1: U 0923 hrs 104388 VET LM 11/01/12) Veh 1 Car 86 Reversing W to E FSP F 81 Slight
R2: A 29
E 493,768 Wet/Damp
N 104,382 Fine without high winds
30 mph

Causation Factor:

1st: Failed to look properly
2nd: Loss of control

Participant:

Vehicle 001 Very Likely
Vehicle 001 Very Likely

Confidence:

V1 WAS PARKED ON THE OPPOSITE SIDE OF THE ROAD IN HOOK LANE, WITH THE REAR OF THE VEHICLE FACING THE A29. THE DRIVER THEN ENTERED THE VEHICLE AND FAILED TO CHECK IF THE VEHICLE WAS IN NEUTRAL, STARTED THE ENGINE AND THEN VEHICLE REVERESED AT SPEED, STRIKING V2 WHO WAS WAITING AT THE JUNCTION.

1400977 Wednesday C40 HOOK LANE ALDINGBOURNE
19/02/2014 347M NORTH OF U BEECHFIELD Veh 1 Car 48 Go/ahead LH bend S to NW Dri F 48 Serious
R1: C 40 1300 hrs PARK
Daylight:street lights present
E 493,351 Wet/Damp
N 104,798 Fine without high winds
40 mph

Causation Factor:

1st: Poor turn or manoeuvre

Participant:

Vehicle 1

Confidence:

Possible

V1 WAS TRAVELLING NORTH ALONG HOOK LANE. APPROACHED LEFT HAND BEND, MOUNTED N/SIDE VERGE, LOST CONTROL AND LEFT THE ROAD TO THE N/SIDE INTO A DITCH

1402326 Wednesday U HOOK LANE ALDINGBOURNE
30/04/2014 200M WEST OF U WESTERGATE Veh 1 Car 22 Go/head S to SW Dri M 22 Slight
R1: U 0025 hrs STREET
Darkness: no street lighting
E 493,376 Dry
N 104,798 Fine without high winds
30 mph

Causation Factor:

1st: Impaired by alcohol
2nd: Careless/Reckless/In a hurry
3rd: Loss of control

Participant:

Vehicle 1
Vehicle 1
Vehicle 1

Confidence:

Very Likely
Possible

V1 DRIVEN WESTERLY ALONG HOOK LANE HAS DRIVEN INTO 30MPH ROAD SIGN, TELEGRAPH POLE (REF GPO 28M 63)AND THEN COLLIDED WITH TREE, DRIVER AND PASSENGER AIR BAGS DEPLOYED, NO PERSONS LEFT WITH VEHICLE

PIA ANALYSIS

NOTE: BLUE = INCIDENT AT ACCESS/JUNCTION ON HOOK LANE

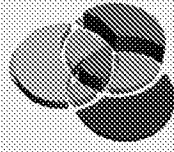
ACCIDENT REF	GRID REF	DATE	SEVERITY	LOCATION	DESCRIPTION	CAUSATION FACTOR	LOCATION	CIRCS	PEDESTRIAN/ CYCLE/CAR
1106529	493,768 104,382	18/10/2011	SLIGHT	U HOOK LANE OF A29 WESTERGATE STREET (MOVED OUT OF POLY FROM 493770 104388 VET LM 11/01/12)	V1 WAS PARKED ON THE OPPOSITE SIDE OF THE ROAD IN HOOK LANE, WITH THE REAR OF THE VEHICLE FACING THE A29. DRIVER FAILED TO CHECK IF THE VEHICLE WAS IN NEUTRAL, STARTED THE ENGINE, VEHICLE THEN REVERSED AT SPEED, STRIKING V2 WHO WAS WAITING AT THE JUNCTION.	V1) FAILED TO LOOK PROPERLY V1) LOSS OF CONTROL	HOOK LANE	LOSS OF CONTROL	CAR
1400977	493,351 104,798	19/02/2014	SERIOUS	C40 HOOK LANE ALDINGBOURNE 347M NORTH OF U BEECHFIELD PARK	V1 WAS TRAVELLING NORTH ALONG HOOK LANE. APPROACHED LEFT HAND BEND, MOUNTED N/SIDE VERGE, LOST CONTROL AND LEFT THE ROAD TO THE N/SIDE INTO A DITCH.	V1) POOR TURN OR MANOEUVRE	HOOK LANE	LOSS OF CONTROL	CAR
1402326	493,376 104,798	30/04/2014	SLIGHT	U HOOK LANE ALDINGBOURNE 200M WEST OF U WESTERGATE STREET	V1 DRIVEN WESTERLY ALONG HOOK LANE HAS DRIVEN INTO 30MPH ROAD SIGN, TELEGRAPH POLE (REF GPO 28M 63) AND THEN COLLIDED WITH TREE, DRIVER AND PASSENGER AIR BAGS DEPLOYED, NO PERSONS LEFT WITH VEHICLE	V1) IMPAIRED BY ALCOHOL V1) CARELESS/RECKLESS/IN A HURRY V1) LOSS OF CONTROL	HOOK LANE	LOSS OF CONTROL	CAR

SUMMARY

SEVERITY		
SLIGHT	SERIOUS	FATAL
2	1	0

PEDESTRIAN/CYCLE INCIDENTS		
CYCLE	PEDESTRIAN	VEHICLE
0	0	3

INCIDENT SITUATION		
ROAD JUNCTION	DIRECT ACCESSES	ON CARRIAGEWAY
1	0	2



APPENDIX D

RGP Fry's Yard Godalming

Licence No: 728001

Calculation Reference: AUDIT-728001-151216-1229

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

VEHICLESSelected regions and areas:

02 SOUTH EAST	
ES EAST SUSSEX	1 days
04 EAST ANGLIA	
CA CAMBRIDGESHIRE	1 days
NF NORFOLK	1 days
SF SUFFOLK	1 days
05 EAST MIDLANDS	
LN LINCOLNSHIRE	1 days
06 WEST MIDLANDS	
SH SHROPSHIRE	2 days
WK WARWICKSHIRE	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
NY NORTH YORKSHIRE	3 days
08 NORTH WEST	
CH CHESHIRE	2 days
09 NORTH	
CB CUMBRIA	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 7 to 40 (units:)
 Range Selected by User: 6 to 50 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 22/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	7 days
Wednesday	1 days
Thursday	3 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	8

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and

Not Known

Selected Location Sub Categories:

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3

13 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	4 days
10,001 to 15,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	8 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	13 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

RGP Fry's Yard Godalming

Licence No: 728001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	14	20	0.068	14	20	0.318	14	20	0.386
08:00 - 09:00	14	20	0.146	14	20	0.396	14	20	0.542
09:00 - 10:00	14	20	0.150	14	20	0.168	14	20	0.318
10:00 - 11:00	14	20	0.129	14	20	0.114	14	20	0.243
11:00 - 12:00	14	20	0.129	14	20	0.146	14	20	0.275
12:00 - 13:00	14	20	0.132	14	20	0.104	14	20	0.236
13:00 - 14:00	14	20	0.118	14	20	0.093	14	20	0.211
14:00 - 15:00	14	20	0.175	14	20	0.221	14	20	0.396
15:00 - 16:00	14	20	0.289	14	20	0.229	14	20	0.518
16:00 - 17:00	14	20	0.332	14	20	0.182	14	20	0.514
17:00 - 18:00	14	20	0.382	14	20	0.161	14	20	0.543
18:00 - 19:00	14	20	0.229	14	20	0.150	14	20	0.379
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.279			2.282			4.561

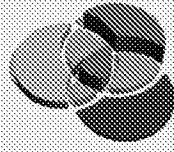
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP * FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 7 - 40 (units:)
 Survey date range: 01/01/07 - 22/05/14
 Number of weekdays (Monday-Friday): 14
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



APPENDIX E



Hook Lane, Westergate, West Sussex

Proposed Residential Development and Access Arrangements

Stage 1 Road Safety Audit

March 2016

RDW/KS/16/1164/RSA1

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Rob Westhead	Kevin Seymour		15 Mar. 16
Designer's Response				
Authority's Response				
Audit Response				

Client:	
Russell Giles Partnership	The Safety Forum Ltd
The Old Stables Fry's Yard Bridge St Godalming Surrey GU7 1HP	PO Box 744 Godalming Surrey GU7 9DU
Date: 15 Mar. 16	

APPENDIX A	Location Plan
APPENDIX B	Road Safety Audit Response

1.0 INTRODUCTION

- 1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposed access arrangements, and highway improvements associated with a proposed residential development at Hook Lane, Westergate, West Sussex.
- 1.2 The highway proposals include: the construction of a two new access junctions from Hook Lane leading to residential development sites; and construction of new lengths of footway on Hook Lane.
- 1.3 The Stage 1 RSA was carried out at the request of Russell Giles Partnership.
- 1.4 The Audit was carried out between 10th and 11th March 2016 by consultants working on behalf of The Safety Forum Limited.
- 1.5 The Audit Team, which is established from The Safety Forum Ltd and independent of the project design team, has had no involvement with the project The Auditors were:

The Auditors were:

Name – Rob Westhead (MSoRSA, RSA Cert Comp)

Name – Kevin Seymour (BSc, PG Dip TS, MCIHT, MSoRSA, HE RSA Cert)

- 1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.7 The Audit consisted of a desktop study and a site visit. The site visit was carried out on 11th March 2016, between 13:30 and 14:15 hours by all member of the Audit Team together. The weather was dry and sunny and the road surface was dry. Traffic conditions were light.
- 1.8 Issues relating to the health & safety of operatives constructing, operating or maintaining the highway are not covered by Road Safety Audit. Only issues relating to the design and construction of facilities for highway maintenance that may potentially contribute to a Road Safety Matter are considered by the Road Safety Audit process.

Road Safety Audit is not a technical check that the design conforms to Standards and/or best practice guidance. Design Organisations are responsible for ensuring that their designs have been subjected to the appropriate design reviews (including, where applicable, Non-Motorised User (NMU) Audits) prior to Road Safety Audit.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.

- 1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.11 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the LHA on final completion.
- 1.12 All problems identified in this Road Safety Audit Report are indicated on a location plan in Appendix A

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following Russell Giles Partnership documentation. It is assumed that only Russell Giles Partnership drawings (numbered 15/2717/01, 02 and 03) are subject to this Audit and other drawings are provided for information only.

Drawing No.	Rev	Title
WGES/15/2717	3	Transport Statement
Plan 01	-	Site Location and Accessibility Plan
15/2717/01	-	Access Arrangements and Vehicle Swept Path Analysis
15/2717/02	-	Access Visibility Splays
15/2717/03	-	Adjacent Access Interaction
-	-	Speed Survey
1313/SK/20	-	Hook lane Junction Improvements
1313/GA/01	-	Existing PROW General Arrangement
1313/SK/15	-	Proposed Footway Link Option 1
1313/SK14C	-	Highways Access Option – 4.8m Shared Surface
HCC9/C/155	A	Carriageway detail for construction within the root protection area of retained trees.
1313/SK14	-	Highways Access Option – 4.8m Shared Surface
-	-	Collision Report – 01/11/2010 – 31/10/2015
1265-P01-D	-	Illustrative Site Layout As Proposed
AUDIT-728001-151216-1229	-	TRICS DATA

- 2.2 No departure from standards or other information was submitted to the Audit Team.

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT.

3.1 PROBLEM

LOCATION: Access roads.

SUMMARY: Road widths of 5m have centre lines shown.

The Audit Team note that both new access roads are less than 5.5m wide and have centre lines proposed. Roads users may therefore be led to believe that they are always able to safely pass opposing vehicles, including long vehicles such as refuse vehicles. This could increase the risk of side to side conflicts.

RECOMMENDATION

Omit the centre line from the access roads where the road width is less than 5.5m.

3.2 PROBLEM

LOCATION: Footways on Hook Lane.

SUMMARY: Unclear how footways terminate.

The supplied design drawings show proposed footways on the western side of the road extending north and south from the development access.

To the north the footways appears to terminate, however no indication is given as to how pedestrians are to enter the carriageway.

To the south the footways are also shown to terminate. Other plans supplied appear to show proposed footways on Hook Lane that these sections will link to however the Audit Team are concerned that should there be a period within which the footways do not form a continuous link then pedestrians will be forced into the carriageway at an unsuitable point or via an unsuitable access, i.e. no dropped kerbs.

RECOMMENDATION

Ensure that all footways link to the wider footway network and that where footways terminate pedestrians are given safe and obvious access to and from footways, particularly for visually and mobility impaired pedestrians.

3.3 PROBLEM

LOCATION: Footway into access on eastern side of Hook Lane.

SUMMARY: Unclear whether footway continues into development.

The supplied design drawings show the footway leading into the development access on the eastern side of Hook Lane appearing to terminate approximately 4m into the access.

This will force pedestrians into the carriageway at a point that may not be safe due to vehicles movements.

RECOMMENDATION

Extend the footway into the site to a suitable point where pedestrians and road traffic can be safely mixed.

3.4 PROBLEM

LOCATION: Western side of proposed crossing over Hook Lane.

SUMMARY: Telegraph pole in area of footway.

The Audit Team noted an existing telegraph pole in the area of the proposed footway adjacent to the crossing on Hook Lane. This will obstruct footway users.

RECOMMENDATION

Relocate the existing telegraph pole to a position that will not obstruct footway users.

3.5 PROBLEM

LOCATION: Western side of proposed crossing over Hook Lane.

SUMMARY: Vegetation falls within pedestrian visibility splay.

Existing vegetation to the south of the pedestrians crossing on the western side of Hook Lane is likely to obstruct visibility to / from pedestrians using the crossing. This could result in vehicles to pedestrian conflicts.

RECOMMENDATION

Clear back all vegetation to maintain adequate pedestrian visibility splays.

4.0 AUDITOR STATEMENT

4.1 I certify that this audit has been carried out in accordance with HD 19/15.

AUDIT TEAM LEADER

Rob Westhead
The Safety Forum Ltd
PO Box 744
Godalming
Surrey
GU7 9DU

Signed: 

Date: 15 March 2016

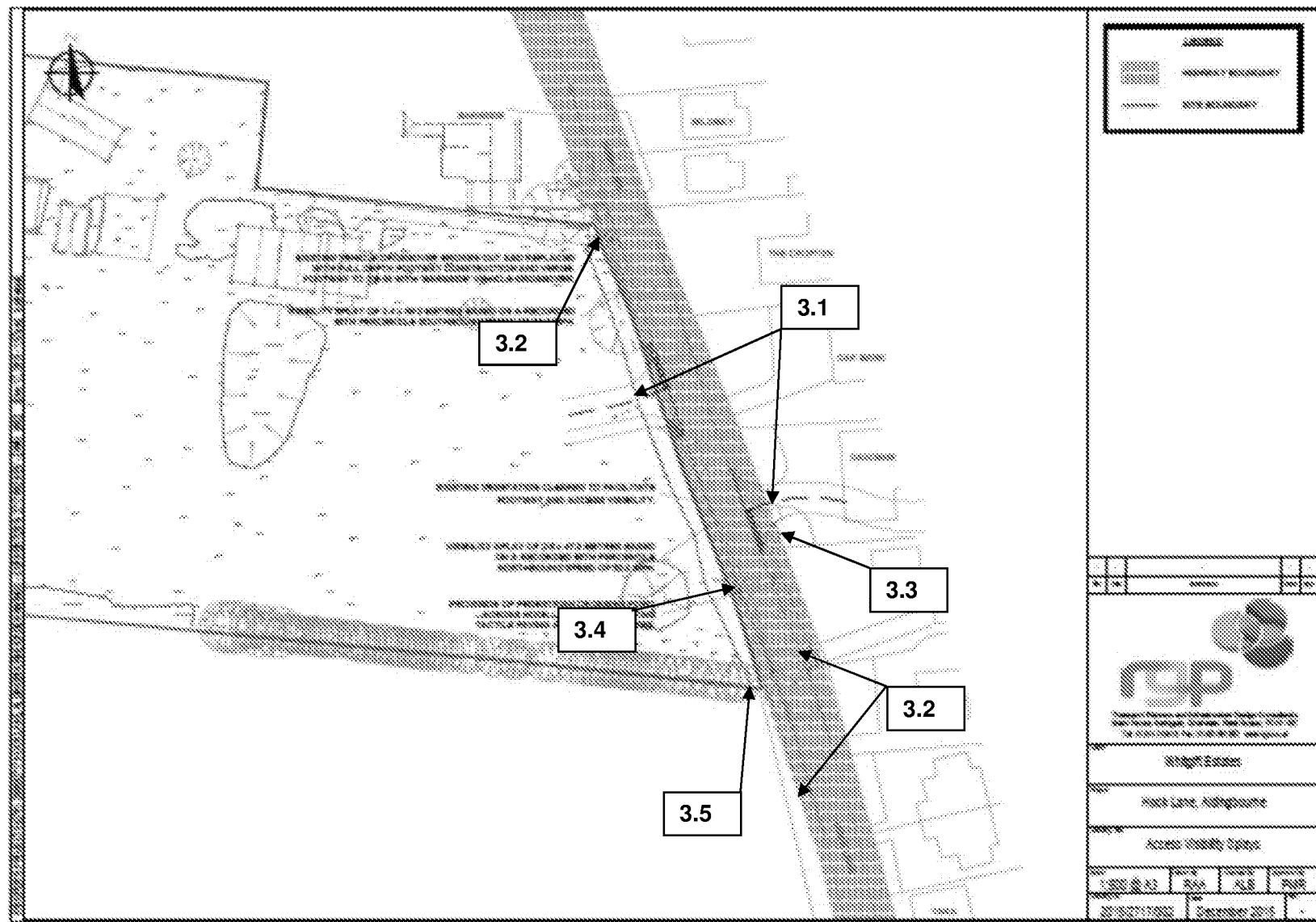
AUDIT TEAM MEMBER

Kevin Seymour

Signed: 

Date: 15 March 2016

APPENDIX A: LOCATION PLAN



APPENDIX B: Road Safety Audit Response

Auditors: Rob Westhead (Team Leader) and Kevin Seymour (Team Member).

Date Response Completed:

Scheme: Hook Lane, Westergate, West Sussex. Proposed Residential Development And Access Arrangements.

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1	No	No	The application of guidance regarding centrelines is not applicable at priority road junctions. The centre line assists vehicles with their positioning on egress in order to avoid the carriageway being obstructed. Drawing 2015.2717.001 demonstrates that standard car sized vehicles can concurrently turn in and out of the access and that a large service waiting at the access can be passed by a standard car sized vehicle.
3.2	No	No	A dropped kerb crossing is provided just south of the access linking with the footway infrastructure on the opposite side of the carriageway associated with the Hallam Land development. The short section of footway to the north is provided to collect pedestrians leaving the two properties along the site frontage. As there is no footway proposed opposite this section of footway no formal dropped kerb crossing is provided, thereby encouraging pedestrians to use the formal crossing provided.

			The new southern section of footway to the south would tie in with the new footways proposed on west side of the carriageway, which will come forward as part of the Hallam Land application. The northern section of the footway would tie in with the existing driveway at its far end which would be formalised into a vehicle crossover arrangement. The dropped vehicle crossover would serve pedestrians and vehicle movements into the carriageway.
3.3	No	No	It is proposed that the adjacent Hallam Land development uses a shared surface arrangement. A dropped kerb into the carriageway is proposed, along with appropriate road surfacing to indicate shared use.
3.4	Yes	Yes	-
3.5	No	No	Vegetation would be removed through the implementation of the footway. Demonstration of the required pedestrian visibility splay is provided in Drawing 2015.2717.002 attached to the Transport Statement.

Principal Engineer's / Audit Project Sponsor's Statement:

Road Safety Audit for Hook Lane, Westergate, West Sussex. Proposed Residential Development And Access Arrangements.

I certify that I have considered the items raised in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.



..... Date.....21.03.2016.....

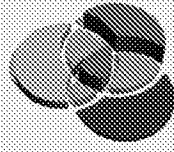
Principal Engineer

Chief Engineer's / Director's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer



APPENDIX F

RGP Fry's Yard Godalming

Licence No: 728001

Calculation Reference: AUDIT-728001-151216-1229

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

VEHICLESSelected regions and areas:

02 SOUTH EAST	
ES EAST SUSSEX	1 days
04 EAST ANGLIA	
CA CAMBRIDGESHIRE	1 days
NF NORFOLK	1 days
SF SUFFOLK	1 days
05 EAST MIDLANDS	
LN LINCOLNSHIRE	1 days
06 WEST MIDLANDS	
SH SHROPSHIRE	2 days
WK WARWICKSHIRE	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
NY NORTH YORKSHIRE	3 days
08 NORTH WEST	
CH CHESHIRE	2 days
09 NORTH	
CB CUMBRIA	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 7 to 40 (units:)
 Range Selected by User: 6 to 50 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 22/05/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	7 days
Wednesday	1 days
Thursday	3 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	8

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and

Not Known

Selected Location Sub Categories:

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3

13 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	4 days
10,001 to 15,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	8 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	13 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

RGP Fry's Yard Godalming

Licence No: 728001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
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19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.279			2.282			4.561

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 7 - 40 (units:)
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 Number of weekdays (Monday-Friday): 14
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