

NORTH END ROAD, YAPTON

TRANSPORT STATEMENT (SOUTHERN SITE)

December 2019

Crayfern Homes

RESIDENTIAL DEVELOPMENT
NORTH END ROAD
YAPTON

TRANSPORT STATEMENT (SOUTHERN SITE)

CONTROLLED DOCUMENT

<i>PB-Associates Document No:</i>		125.0001/TSS/3	
<i>Status:</i>	Final	<i>Copy No:</i>	
	<i>Name</i>	<i>Signature</i>	<i>Date</i>
<i>Prepared by:</i>	Jessica Lloyd		May 2018
<i>Checked:</i>	Jon Huggett		May 2018
<i>PBA Approved:</i>	Mark Smith		June 2018

Revision Record

Rev.	Date	By	Summary of Changes	Chkd	Aprvd
2	05.06.18	JL	Client Comments	JH	JH
3	10.12.19	JL	Updated Site Layout	MS	MS



Crayfern Homes
Victoria House
14 St Johns Road
Hedge End
Southampton
SO30 4AB



Paul Basham Associates Ltd
Lancaster Court
8 Barnes Wallis Road
Fareham
Hampshire
PO15 5TU

**RESIDENTIAL DEVELOPMENT
NORTH END ROAD
YAPTON**

TRANSPORT STATEMENT (SOUTHERN SITE)

Contents

1. INTRODUCTION	2
2. SITE ACCESSIBILITY	4
3. PLANNING POLICY	12
4. PROPOSED DEVELOPMENT	16
5. SUMMARY AND CONCLUSIONS.....	19

Figures

- Figure 1 – Site Location
- Figure 2 – Site Context
- Figure 3 – PROW Routes
- Figure 4 – Local Cycle Network
- Figure 5 – PIA Incidents

Tables

- Table 1 – Distances to Local Facilities
- Table 2 – North End Road Traffic Survey Summary
- Table 3 – Local Bus Services
- Table 4 – Accommodation Schedule
- Table 5 – Proposed Trip Generation

Appendices

- Appendix A – Site Layout
- Appendix B – Accessibility Map
- Appendix C – Traffic Survey Data
- Appendix D – Accident Report
- Appendix E – TRICS Output
- Appendix F – Site Access Visibility Splays
- Appendix G – Stage 1 Road Safety Audit and Designers Response
- Appendix H – Refuse Vehicle and Fire Tender Tracking

1. INTRODUCTION

- 1.1 This Transport Statement (TS) has been prepared by Paul Basham Associates on behalf of Crayfern Homes to support a planning application for a residential development of 6 dwellings at land to the east of North End Road, Yapton. The site layout is attached as **Appendix A** whilst the site location is shown below in **Figure 1**.

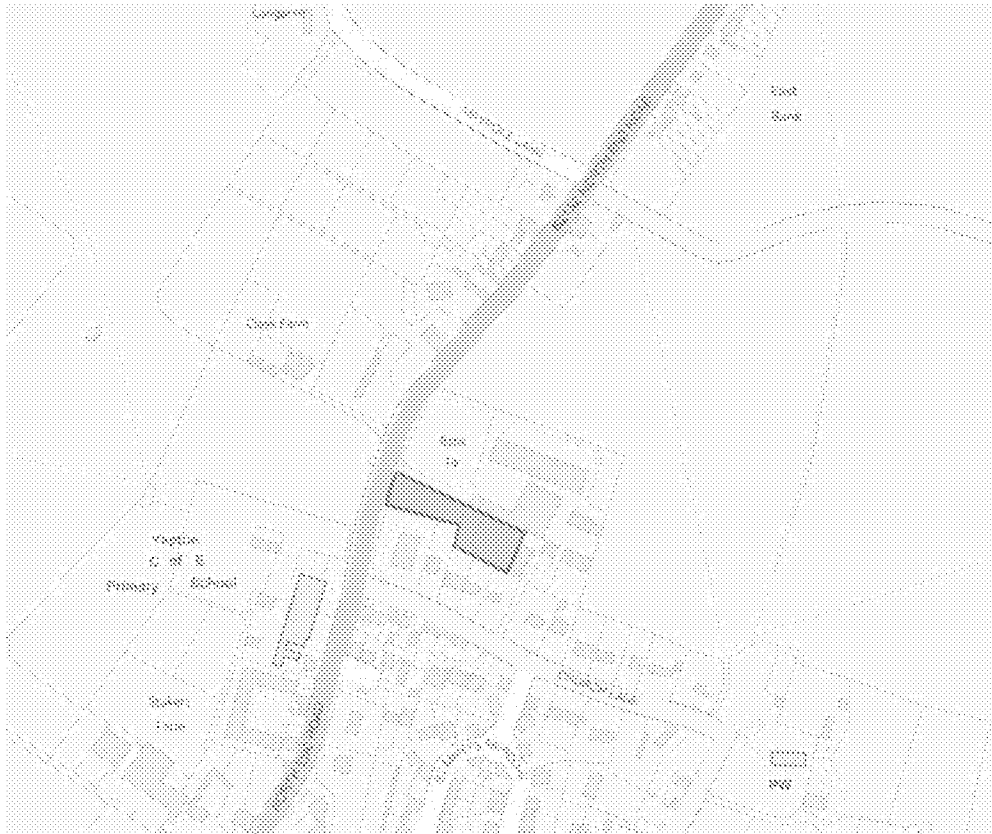


Figure 1: Site Locations

- 1.2 The scope of the highways input required for this application has been discussed with West Sussex County Council (WSCC) highways officers through pre-application consultation. More specifically, this TS will cover the following elements:

- Site History
- Site Accessibility (local road, pedestrian, cyclists and public transport network and local facilities nearby)
- Review of Personal Injury Accident (PIA) Data
- Review of local policies
- Summary of Development Proposals
- Trip Generation (supported with TRICS data)
- Access Arrangements (Including Stage 1 RSA)

- Parking Provision
- Servicing Arrangements
- Summary and Conclusions

2. SITE ACCESSIBILITY

Site History

- 2.1 The site currently consists of an existing residential dwelling which is due to be demolished as part of the development proposals. The site is bordered by residential development to the south, North End Road to the west and the Orchard Business Park to the north and east. The site has good access to local facilities being c.800m to the north of Yapton Village Centre, approximately a 10-minute walk. The site and its surroundings are demonstrated in **Figure 2**.



Figure 2: Site Context

Location

- 2.2 The site is located to the north of Yapton Village Centre, on the eastern side of North End Road. There is a footway flanking the eastern side of the North End Road carriageway which varies in width between 1m and 2m and is demonstrated in **Photograph 1**.



Photograph 1: Existing Pedestrian Conditions on North End Road

- 2.3 The local facilities, services and amenities available within Yapton are illustrated in an Accessibility Map attached as **Appendix B**.
- 2.4 The local primary school to the proposed development is Yapton CoE Primary School located circa 160m to the south of the site. A continuous pedestrian footway is provided from the site to the primary school. The secondary school within catchment of the proposed development is Ormiston Six Villages Academy in Westergate located approximately 5.3km to the northwest of the proposed development site.
- 2.5 In terms of health provision, the nearest Doctor's surgery is located c.500m to the south of the development site located on North End Road whilst the closest pharmacy is located in Middleton-on-Sea c.4.3km to the south of the site. The nearest hospital with Accident and Emergency facilities is St Richard's Hospital located approximately 11km to the west of the site.
- 2.6 The site's proximity to existing local amenities, pedestrian and cycle networks presents an opportunity to encourage the use of sustainable transport and create a sustainable development. A summary of walking, cycling and bus times from the site is shown in **Table 1**.

Amenity	Approximate Walking Distance (m)	Approximate Walking Time (Minutes)	Approximate Cycle Time (Minutes)	Approximate time by bus (Minutes)
Local Primary School	160m	2	1	-
Local Secondary School	5.3km	-	17	19
Post Office	970m	11	3	-
Closest Bus Stop	650m	8	2	-
Closest Convenience Store	970m	11	3	-
Community Facility	950m	10	3	-
GP Surgery	500m	5	1	-
Barnham Railway Station	2.8km	34	10	12

Table 1: Distances to Local Facilities

Local Road Network

- 2.7 North End Road is a single carriageway road c. 6m wide which forms an extension of Yapton Lane in the north from the level crossing and connects to the B2233 via a roundabout to the south. North End Road is subject to a 30mph speed limit across the site frontage with an advisory decrease to 20mph to the south past the local primary school (demonstrated in **Photograph 2**).



Photograph 2: Decreasing Speed Limit Location

- 2.8 A traffic survey was commissioned in the vicinity of the site access along North End Road to establish the existing traffic situation on the local road network in order to fully understand the likely impact of the development and the 85th percentile vehicle speeds. The survey was undertaken between 26th January 2018 to 2nd February 2018 with the results presented in **Table 2** and attached as **Appendix C**.

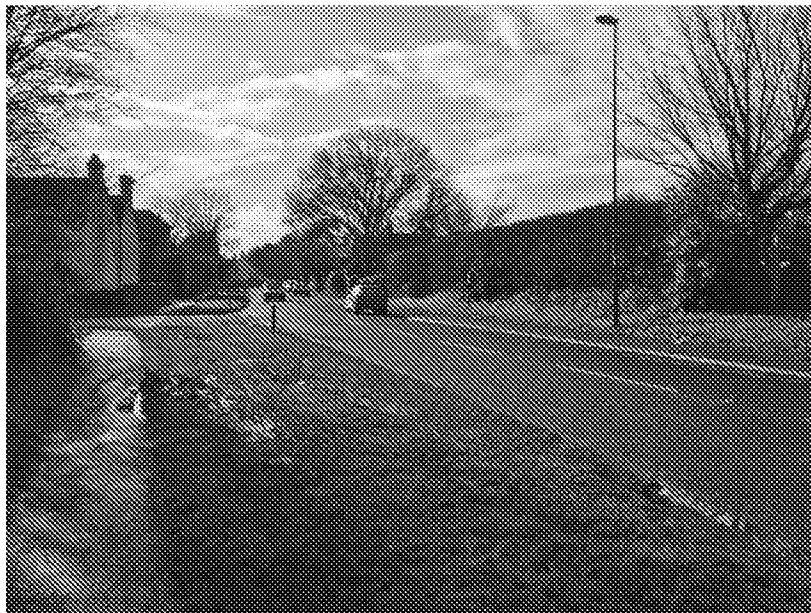
North End Road	AM Peak (0800-0900)	PM Peak (1700-1800)	Daily Flow (7-Day Average)	Daily 85 th ile Speeds
Northbound	156	77	1996	35.6mph
Southbound	118	188	1937	34.7mph

Table 2: North End Road Traffic Survey Summary

- 2.9 **Table 2** demonstrates that North End Road carries a modest level of traffic with a slightly greater flow of traffic northbound in the AM peak and southbound in the PM peak suggesting the majority of trips would travel to/from the A27 in the north.

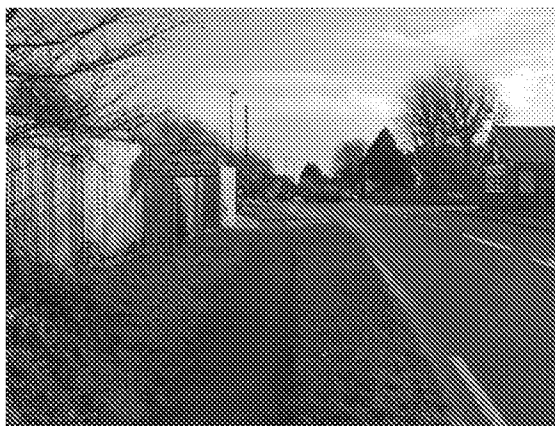
Pedestrian Infrastructure

- 2.10 The local footway network around the site benefits from a gentle topography and footways of sufficient width.
- 2.11 Within the vicinity of the site a footway flanks the eastern side of North End Road providing a continuous connection from the level crossing to the north of the roundabout with the B2233 in the south, however, approximately 215m to the north of the roundabout with the B2233 the footway crosses over to the western side of the carriageway. The pedestrian environment along North End Road is demonstrated in **Photograph 3**.



Photograph 3: Existing Pedestrian Conditions on North End Road

- 2.12 Travelling east towards the local facilities in Yapton Village Centre on the B2233, a continuous footway is provided along the northern side of the carriageway with a signalised pedestrian crossing provided for pedestrians onto the southern side of the carriageway to access the local convenience store and eateries. The pedestrian conditions along the B2233 and the signalised crossing is demonstrated in **Photographs 4** and **5** respectively.



Photograph 4: Existing Pedestrian Conditions on B2233



Photograph 5: Signalised Crossing on B2233

- 2.13 Yapton also benefits from a number of local Public Rights of Way (PROW), as demonstrated in **Figure 3**, which further aids pedestrian connectivity towards local facilities.

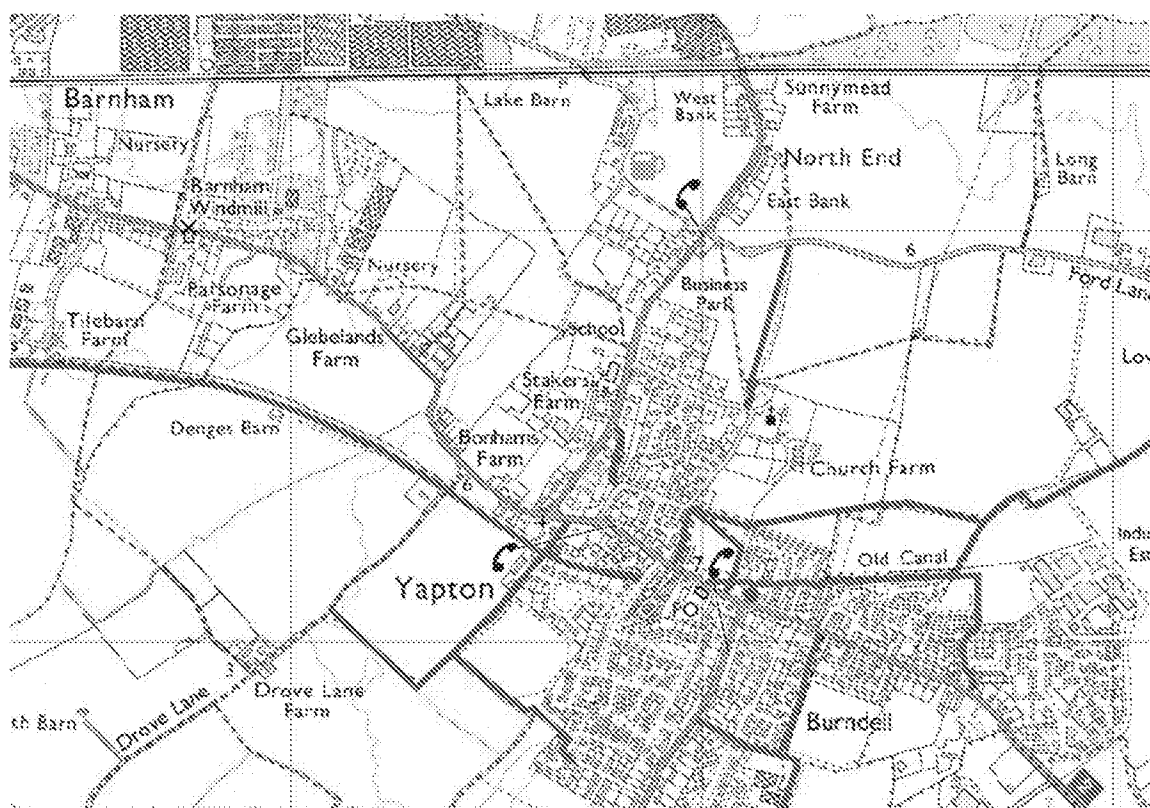


Figure 3: PROW Routes

Cycling Network

- 2.14 The local road network also benefits from gentle gradients which help to make cycling a more attractive mode of transport. The site is also within close proximity of National Cycle Network (NCN) Route 2 which locally connects Yapton to Littlehampton in the east and Bognor Regis in the west. The NCN Route 2 is demonstrated in **Figure 4** with the purple lines representing on road routes and green lines representing traffic free routes.

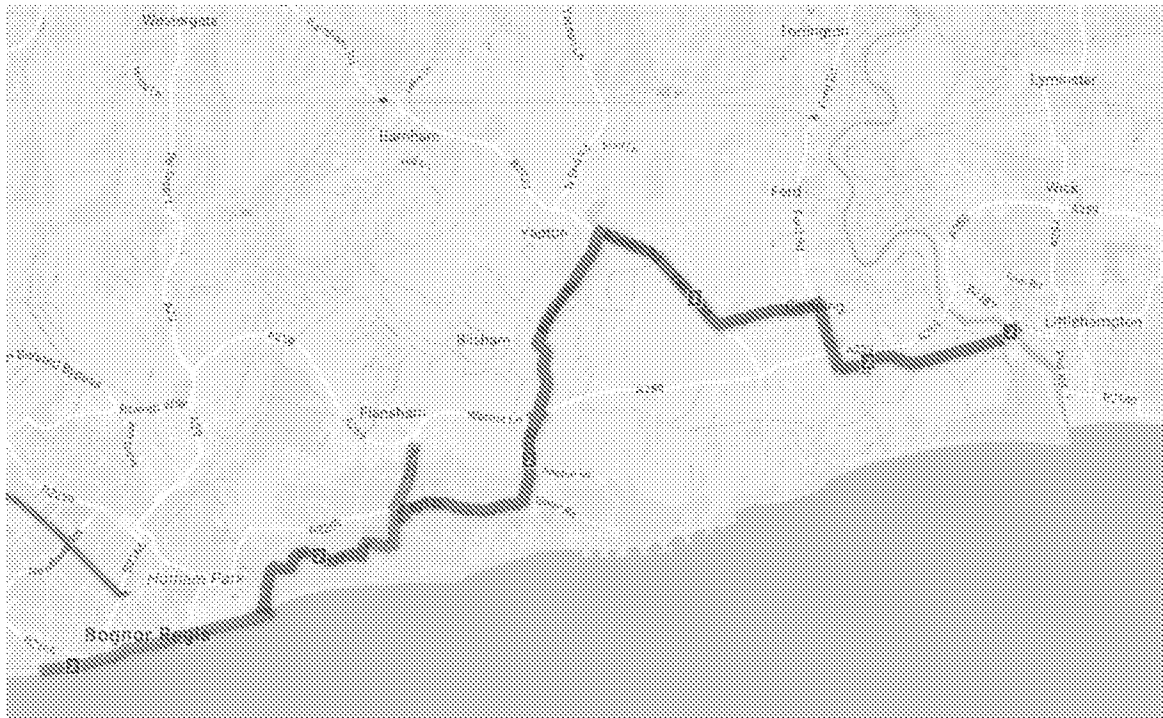


Figure 4: Local Cycle Network

Public Transport Network

- 2.15 The site is supported by two pairs of bus stops to the north and south of the site both within 150m of the site's access. As is typical of village locations, the stops only consist of a flagpole. Further services are available along the B2233 and at Bilsham Road which include the 700 Coastliner. A summary of the local bus services and their nearest bus stop is provided in **Table 3**.

Service	Route	Stop	Operator	Frequency		
				Monday - Friday	Saturday	Sunday and Public Holiday
66A	Bognor Regis – Banham – Yapton - Wallberton	Maypole Lane	Compass Travel	4 services a day		No Service
665*	Wickbourne - Chichester	Maypole Pole	Stagecoach	2 services a day	No Service	No Service
668*	Westergate – Yapton - Tangmere	Church Road	Compass Travel	16:02	No Service	No Service
700	Brighton - Wick	Sparks Corner	Stagecoach	Every 10 minutes		Every 20 minutes
141*	Elmer – Felpham - Yapton	Sparks Corner	Compass Travel	2 services a day	No Service	No Service

Table 3: Local Bus Services

* School Service Only

2.16 The Compass Travel 66A and Stagecoach 700 service provides the most frequent services to the general public. The 66A service connects to Barnham and Bognor Regis with approximately 4 services a day. This route is accessible from the bus stops close to the site on North End Road.

2.17 The Stagecoach 700 (Coastliner) service provides a high frequency route between Brighton and Wick. The service runs Monday – Sunday and is accessible from the bus stops on Bilsham Road. A typical journey on the 700 to Bognor Regis takes approximately 17 minutes, to Chichester approximately 45 minutes and to Littlehampton approximately 13 minutes.

2.18 The nearest train station to the site is Barnham located c. 2.8km to the west. Barnham Railway Station provides users with storage for 62 bicycles, a staffed ticket office Monday-Sunday, toilets, waiting rooms and step free access. Destinations from Barnham include Southampton Central, London Victoria, Bognor Regis, Littlehampton and Brighton.

Summary of Site Accessibility

2.19 The site is situated to the north of Yapton which hosts a selection of facilities and amenities including a convenience store, eateries, schools and a public house. The site benefits from being well connected to the local pedestrian network and is also within close proximity to a high frequency bus corridor providing connections towards Littlehampton, Bognor Regis and Chichester.

Personal Injury Accident Data

- 2.20 Personal Injury Accident (PIA) data has been acquired from Crashmap to assess and consider the existing safety situation on the local road network (in particular North End Road). The patterns in the data have been assessed with regards to proximity, frequency and severity of incidents that have occurred. The PIA data has been collected for the most recent 5-year period (2014-2018) and is outlined in **Figure 5**.

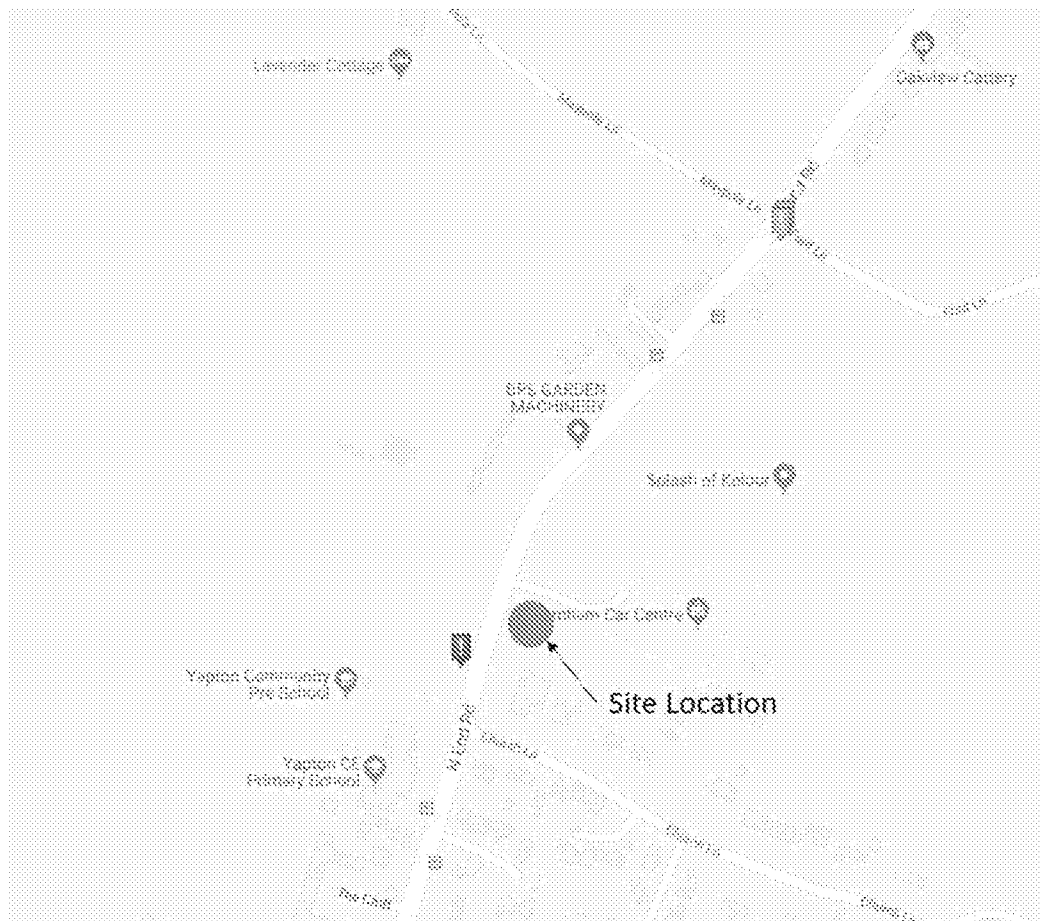


Figure 5: PIA Incidents

- 2.21 There has been a total of 3 incidents in proximity of the site of which two were slight in nature and one was serious in nature. The single serious incident was in close proximity to the existing (and proposed) access and has therefore been reviewed in more detail with the accident report attached as **Appendix D**. This accident involved a goods vehicle striking a cyclist when overtaking and is therefore not a result of highway design. The frequency and distribution of these PIAs over a 5-year period do not indicate any cause for concern relating to highway safety.

3. PLANNING POLICY

National Planning Policy Framework

- 3.1 The revised National Planning Policy Framework (NPPF) was adopted in February 2019 and acts as the central guidance for development planning, replacing all National Planning Policy guidance. The following paragraphs are relevant to this TS.

Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist.

(NPPF Para. 84)

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- a) The potential impacts of development on transport networks can be addressed;
- b) Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised.
- c) Opportunities to promote walking, cycling and public transport use are identified and pursued;
- d) The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- e) Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.

(NPPF Para. 102)

Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

(NPPF Para. 103)

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

(NPPF Para. 109)

All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

(NPPF Para. 111)

West Sussex Transport Plan (LTP3)

3.2 The West Sussex Transport Plan (2011-2026) sets out West Sussex's transport strategy and identified a range of policies, including:

- Promoting economic growth;
- Tackling climate change;
- Providing access to services, employment and housing; and
- Improving safety, security and health.

3.3 West Sussex's LTP3 also identified an implementation plan for Arun District, of which the keys aims which relate to this planning application are:

- Maintaining roads and public rights of ways to a good standard;
- All new developments should provide enough secure cycle parking to meet the needs of the development and be within close proximity to public transport;
- Making the best use of the existing road network and improving the way in which the network is managed to reduce levels of congestion;
- Safeguarding against traffic generated by new development resulting in the capacity of the highway network being exceeded, by including measures to encourage sustainable travel behaviour; and
- Encouraging sustainable travel by improving the existing cycle and pedestrian network through improved signing, connecting routes where appropriate and repairing and maintaining surfaces.

Arun District Council Local Plan 2011-2031 (July 2018)

- 3.4 The Arun Local Plan 2011-2031 was adopted by resolution of Full Council on 18th July 2018. Section 6 of the Local Plan discusses sustainable development with paragraph 6.1.5. highlighting the importance of improving connections, both through the road network and pedestrian and cycle networks. Policy SD SP1 states that *‘when considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will work pro-actively with applicants to jointly find solutions which mean that proposals can be approved wherever possible and to secure development that will contribute to the social, economic and environmental conditions south of the National Park through to the coast and through its settlements (both coastal and inland). This presumption will not be applicable where development required an Appropriate Assessment or where consideration of the need for one is being undertaken. This presumption will not be applicable where development requires an Appropriate Assessment or where consideration of the need for one is being undertaken.’*
- 3.5 Individual site policies under ‘12 Housing Delivery’ also have their own transport and infrastructure requirements.
- 3.6 Chapter 15 of the Local Plan relates to Transport and outlines Arun’s strategic objectives for Transport which are outlined below:
- *‘Reduce the need to travel and promote sustainable forms of transport’*
 - *‘Plan for climate change and work in harmony with the environment to conserve natural resources and increase biodiversity’*
 - *Create vibrant, attractive, safe and accessible towns and villages that build upon their unique characters to provide a wide range of uses and which are a focus for quality shopping, entertainment, leisure, tourism and cultural activities’*
 - *Promote strong, well integrated and cohesive communities, through the promotion of healthy lifestyles, provision of good quality accessible community facilities and a safe environment, which delivers an enhanced quality of life to all. This includes meeting the needs of a growing elderly population’*
 - *‘Strengthen Arun’s economic base and provide local job opportunities by increasing, diversifying and improving the quality of employment within the District through the provision of appropriate employment sites, better infrastructure, including road and rail access, quality affordable accommodation and the development of business support and partnerships’*

- 3.7 Policy T SP1 outlines that the Council *'will ensure that development; provides safe access on to the highway network; contributes to highway improvements and promote sustainable transport, including the use of low emissions fuels, public transport improvements and the cycle, pedestrian and bridleway network'*.
- 3.8 Policy T DM1 outlines that *'new development must ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport and community transport services where a need has been identified. Access to alternative modes of transport including public transport services, the public right of way and cycle network, must be available and accessible to all members of the community'*.
- 3.9 This TS and the proposed development has considered national, regional and local policies to ensure the objectives are met and the proposals adhere to these.

4. PROPOSED DEVELOPMENT

- 4.1 The proposed development would consist of 6 residential units with a summary of the accommodation schedule provided in **Table 4**, and the proposed development site layout included as **Appendix A**.

General Residential	
Size of Dwelling	Unit Numbers
3 Bedroom	5
4 Bedroom	1

Table 4: Accommodation Schedule

Trip Generation

- 4.2 In order to establish the number of trips the proposed development would generate, the industry standard TRICS database has been consulted. By comparing the site to those with similar characteristics, it is possible to calculate the spread and volume of trips across the day. The TRICS criteria included the following:
- Houses Privately Owned for sites between 6-40 units;
 - Sites in England and Wales only (excluding Greater London);
 - Sites located with 'Edge of Town' and 'Neighbourhood Centre';
 - Surveys undertaken on weekdays only (no weekend data); and
 - Sites with no Travel Plans.
- 4.3 The TRICS data outputs are attached as **Appendix E** for reference whilst the peak period daily trip generation for the proposed development is presented in **Table 5**.

TRICS	AM Peak (0800-0900)		PM Peak (1700-1800)		Total Daily Trips
	Arrivals	Departures	Arrivals	Departures	
Trip Rate per unit	0.137	0.335	0.281	0.142	4.299
Trip Generation (6 units)	1	2	2	1	26

Table 5: Proposed Trip Generation

- 4.4 The trip rate assessment indicates that the proposed development would generate approximately 3 vehicle trips in the both the AM (0800-0900hrs) and PM (1700-1800hrs) peak and 26 trips across the day. However, it is worth noting that the existing dwelling due to be demolished on the site would have also generated some vehicular movements, and therefore the overall daily net increase would be 22 vehicle trips, on the premise that the single dwelling currently generates 4 daily trips using the trip rates identified in **Table 5**.

Access Arrangement

- 4.5 The access would utilise the existing shared access with the Business Park which is considered suitable for the proposed scheme. To assess conditions at the existing access a visibility splay assessment has been undertaken, informed by the 85th percentile speed results from a speed survey on North End Road to the south of the existing access. In accordance with these speeds visibility has been measured to 2.4m x 52.9m in the primary direction and 2.4m x 57.3m in the secondary direction (both in accordance with MfS). The required visibility splays are demonstrated as achievable to the kerbline in both directions within highway land in **Appendix F**.
- 4.6 An independent Stage 1 Road Safety Audit (RSA) has been undertaken of the access and the full report including the Designers Response is provided in **Appendix G**. The RSA highlighted no issues with the proposed access arrangement.

Parking Strategy

- 4.7 The number of parking spaces required to serve the residential dwellings has been informed by WSCC's Guidance on Parking at New Developments (August 2019) and ADC's 'Parking Standards Supplementary Planning Document' (January 2020) with the site being categorised as being in Parking Behaviour Zone 1.
- 4.8 The site proposes 2 allocated spaces per 3-bedroom unit and 3 allocated spaces for the single 4-bedroom unit. In addition 2 visitor parking spaces are proposed in accordance with WSCC/ADC standards of 20% of the total number of residential units. The site therefore accords with local parking standards and would therefore not result in an overspill of parking onto the local road network.
- 4.9 Where garages are provided as spaces the internal dimensions are a minimum of 6m x 3m internally in accordance with MfS standards. Allocated/unallocated and visitor parking spaces would have dimensions in accordance with Manual for Streets (MfS) of 2.4m x 4.8m (perpendicular) or 2m x 6m (parallel).
- 4.10 In accordance with WSCC's and ADC's standards, 20% of all parking spaces should be provided with 'active' vehicle charging points. As the parking spaces are all driveways or garages, the developer is able to provide a plug socket per unit to allow for active vehicle charging (for allocated parking only).
- 4.11 The site would also provide cycle parking in accordance with WSCC (August 2019) and ADC (January 2020) standards with each unit being provided with a shed or garage to accommodate bicycles.

Refuse and Servicing

- 4.12 Provision for servicing of the site is provided with adequate on-site turning facilities for refuse and emergency vehicles, therefore ensuring such vehicles can enter and exit the proposed development site in a forward gear. A vehicle tracking exercise demonstrating turning manoeuvres is attached as **Appendix H**.
- 4.13 Access to all dwellings can be achieved within 45m of the proposed units and would not require emergency vehicles to reverse more than 20m, in line with Building Regulations Part M requirements (See **Appendix H**).

Internal Layout

- 4.14 The site operates as an informal shared surface, which given the small number of units and low vehicle trip rates is considered sufficient.

5. SUMMARY AND CONCLUSIONS

- 5.1 This Transport Statement has been prepared by Paul Basham Associates on behalf of Crayfern Homes to support a planning application for the development of 6 residential units at Land off North End Road, Yapton. The scope of this TS has been guided by pre-application feedback received from WSCC.
- 5.2 The proposed site is located to the north of Yapton Village Centre, approximately an 800m (10-minute) walk, which hosts a selection of facilities and amenities including a convenience store, eateries, schools and a public house. The site benefits from being well connected to the local pedestrian network and is also within close proximity to a high frequency bus corridor providing connections towards Littlehampton, Bognor Regis and Chichester.
- 5.3 Personal Injury Accident data has been reviewed for the most recent five-year period in the site vicinity. Within the study area a total of 3 PIAs were recorded of which two were 'slight' in nature and one was 'serious' in nature. One serious incident occurred in close proximity to the access and therefore further investigation was warranted. However, this accident involved a goods vehicle striking a cyclist when overtaking and is therefore not a result of highways design. The frequency and distribution of the PIAs do not indicate any cause for concerns regarding highway safety.
- 5.4 The trip generation associated with the proposed development has been calculated using the industry standards TRICS database. The trip generation assessment indicated the proposed development would generate a total of 26 daily vehicle trips, with 3 vehicle trips in both the AM peak and PM peak. However, when the net impact is reviewed against the existing dwelling on the site the daily vehicle trips reduces to 22.
- 5.5 The site would utilise the existing shared access arrangement with Orchard Business Park which, considering the size of the development, is considered suitable. Visibility splays have also been demonstrated as achievable from this access in accordance with recorded 85th percentile speeds. A Stage 1 Road Safety Audit has been completed on the proposed access arrangement which highlighted no issues.
- 5.6 Parking for the site would be provided in accordance with WSCC and ADC's parking standards with 2 spaces per 3-bedroom unit and 3 spaces per 4-bedroom unit. In addition, 2 visitor/unallocated spaces would be provided. Parking space dimensions have been provided in accordance with Manual for Streets.

- 5.7 The proposed development has been provided with suitable turning areas to ensure large vehicles such as refuse vehicles and fire tenders are able to enter the site, turn and leave in a forward gear.
- 5.8 This Transport Statement has demonstrated that the proposed development would not have a material impact on the operation of the local highway network and has been designed in accordance with local policy. We would therefore encourage WSCC and ADC to look favourably upon the highway matters of this application.

North End Road, Yapton
Transport Statement

Appendix A

Paul Basham Associates Ltd
Report No. 125.0001/TSS/3

Existing access re-used & modified in accordance with highway engineers design & detail.

EXISTING ACCESS FOR BUSINESS PARK

RESIDENTIAL DEVELOPMENT UNDER CONSTRUCTION

NORTH

SCHEDULE OF UNITS - 6 Total

LEGEND :

DIGITAL / ORDNANCE SURVEY APPLICATION SITE BOUNDARY

INDICATES INDIVIDUAL BIN STORE FOR 3 BINS IN EACH PRIVATE GARDEN

NOTE : ALL GARAGES TO MEASURE A MINIMUM OF 6x3m INTERNALLY, CYCLE STORAGE TO REAR OF EACH GARAGE.

c/b INDICATES 1.2m HIGH CLOSEBOARDED FENCE

p/r INDICATES 900mm HIGH POST & RAIL RAIL FENCE

b/w INDICATES 1.2m HIGH FACING BRICK GARDEN WALL

g. INDICATES GARAGE

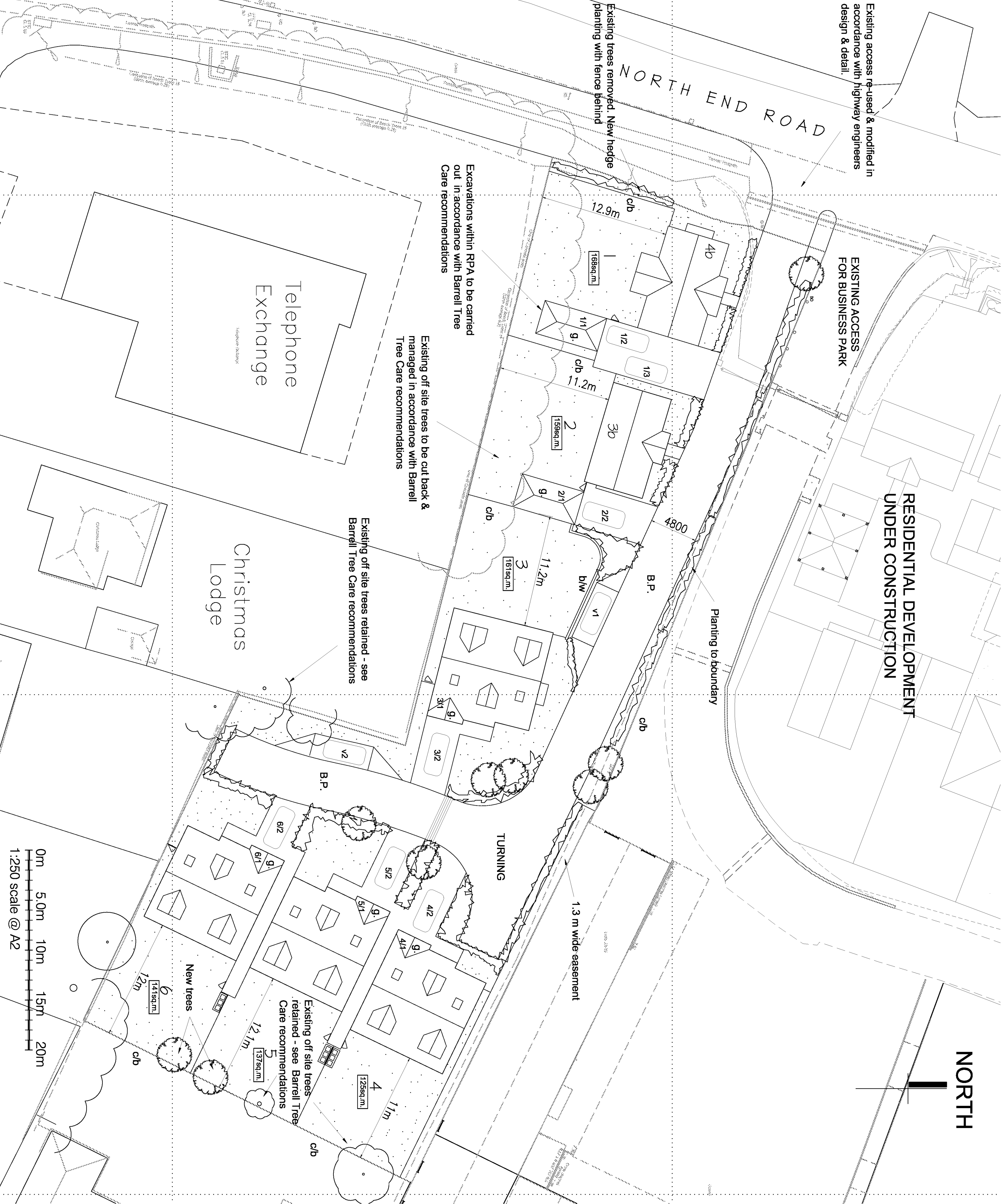
p. INDICATES COVERED PARKING

△ INDICATES GATE ACCESS TO REAR GARDEN

B.P. INDICATES BLOCK PAVED ROAD FINISH - Access road, private drives & parking spaces are Block Paved.

GRANITE SETTS RUMBLE STRIP

118sq.m. GARDEN SIZE



Preliminary

CROSSLEY DESIGN
ARCHITECTURE

25 HAZELHURST CRESENT FINDON VALLEY WORTHING BN14 0HW
t. 01903 877221 e. mail@crossleydesign.co.uk w. www.crossleydesign.co.uk

client CRAFTERN HOMES

project RESIDENTIAL DEVELOPMENT
LAND SOUTH OF ORCHARD BUSINESS PARK
CHURCH LANE
TAPTON, BN18 0GA

drawing

SITE PLAN

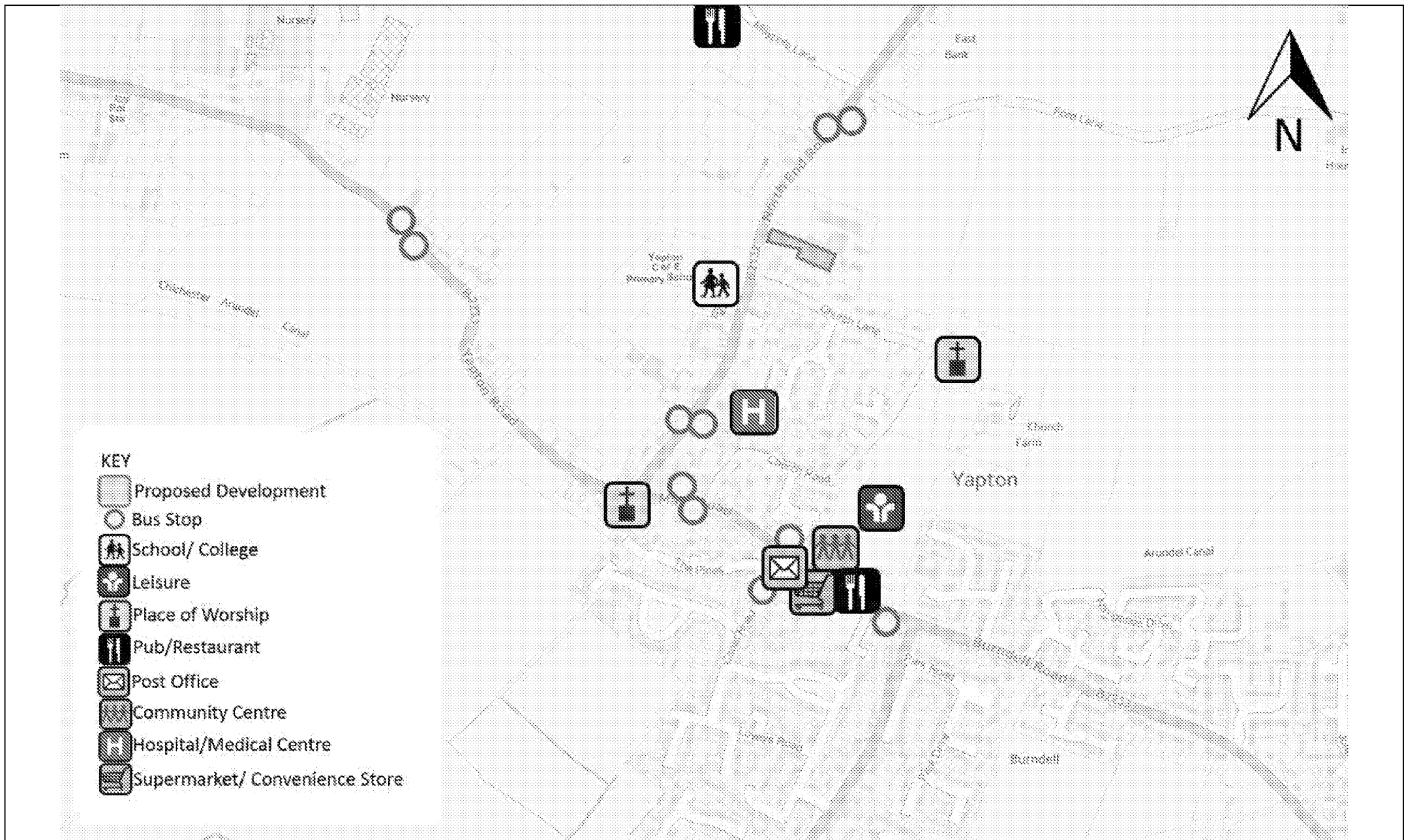
scale	date	job no.	dwing no.	rev.
1:250 @A2	NOV. 14	1410	2.01	P

This drawing is the copyright of Crossley Design Architecture

North End Road, Yapton
Transport Statement

Appendix B

Paul Basham Associates Ltd
Report No. 125.0001/TSS/3



Project Number: 125.0001	Title: Accessibility Map		Checked By: JH	Checked Date: 08.05.18	Scale: N/A
Project Name: North End Road, Yapton			Drawn By: JL	Drawn Date: 02.05.18	Drawing No: N/A

Appendix C

Site No: 00000041
NORTH END RD YAPTON SOUTHERN SITE

Site Reference: 00000041

From 26/01/2018 To 02/02/2018

Channel: NORTHBOUND

Time	Total	85th	Mean	Std.	Bin 1	Bin 2	Bin 3	Bin 4	Bin 5	Bin 6	Bin 7	Bin 8	Bin 9	Bin 10	Bin 11	Bin 12	Bin 13
Begin	Vol.	%ile	Ave.	Dev.	<16Mph	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61	61-<66	66-<71	=>71
00:00	3	-	34.8	-	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	-	30.2	-	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	-	33.5	-	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	8	-	36.5	8	0	0	0	1	2	1	1	0	0	0	0	0	0
04:00	30	42.5	36.3	5.9	0	0	1	3	9	9	6	0	0	0	0	0	0
05:00	100	40.1	34.5	5.7	0	0	7	16	39	27	8	2	0	0	0	0	0
06:00	300	36.5	32	4.8	0	1	20	109	123	39	8	1	0	0	0	0	0
07:00	282	33.5	27.5	5.9	9	23	70	106	58	12	2	0	0	0	0	0	0
08:00	148	35.3	29.6	5.8	0	6	29	59	37	14	2	0	0	0	0	0	0
09:00	119	35.8	30.8	5.4	0	4	16	44	40	14	3	0	0	0	0	0	0
10:00	109	35.8	30.8	5.5	0	4	14	42	36	13	1	0	0	0	0	0	0
11:00	114	36.8	31.5	5.6	0	2	13	40	42	15	5	0	0	0	0	0	0
12:00	121	36.3	30.9	5.7	0	2	19	40	38	15	3	0	0	0	0	0	0
13:00	124	35.9	30.2	6.1	1	5	22	44	34	15	2	0	0	0	0	0	0
14:00	117	34.4	27.3	6.8	5	15	26	34	25	8	1	0	0	0	0	0	0
15:00	95	37.8	31.6	6	1	1	9	34	27	15	4	0	0	0	0	0	0
16:00	88	38.4	33	5.4	0	0	5	25	35	17	3	0	0	0	0	0	0
17:00	70	39	33	6.1	0	1	5	21	22	15	4	0	0	0	0	0	0
18:00	47	39.9	34.1	5.6	0	0	1	13	15	10	4	0	0	0	0	0	0
19:00	32	38.9	33.5	5.6	0	0	2	7	13	6	0	0	0	0	0	0	0
20:00	21	39.1	33.4	6.1	0	0	1	6	7	5	1	0	0	0	0	0	0
21:00	17	39.2	33.7	7.2	0	0	1	4	5	3	1	0	0	0	0	0	0
22:00	10	-	35.9	5.5	0	0	0	1	1	4	0	0	0	0	0	0	0
23:00	4	-	34.6	4.6	0	0	0	0	2	0	0	0	0	0	0	0	0
12H 7-19	1434	35.8	30	5.9	16	63	229	502	408	163	34	0	0	0	0	0	0
16H 6-22	1804	35.9	30.4	5.8	16	64	253	628	556	216	44	1	0	0	0	0	0
18H 6-24	1818	36	30.5	5.8	16	64	253	629	559	220	44	1	0	0	0	0	0
24H 0-24	1959	36.6	30.8	5.9	16	64	261	649	609	257	59	3	0	0	0	0	0
Am	06:30	-	02:30	-	07:30	07:15	07:00	06:30	06:15	06:00	05:30	05:30	06:15	05:45	05:45	-	-
Peak	353	-	37.3	-	10	25	70	147	133	39	9	2	0	0	0	-	-
Pm	12:45	-	22:30	21:15	13:30	13:30	13:45	12:45	12:00	15:15	15:15	15:45	17:45	18:45	22:30	-	-
Peak	125	-	36.4	7.5	7	17	28	46	39	18	5	1	1	0	0	-	-

Collated from 15 minute interval data

Created at 13:17:42 on 2 Feb 2018

Site No: 00000041
NORTH END RD YAPTON SOUTHERN SITE

Site Reference: 00000041

From 26/01/2018 To 02/02/2018

Channel: SOUTHBOUND

Time	Total	85th	Mean	Std.	Bin 1	Bin 2	Bin 3	Bin 4	Bin 5	Bin 6	Bin 7	Bin 8	Bin 9	Bin 10	Bin 11	Bin 12	Bin 13
Begin	Vol.	%ile	Ave.	Dev.	<16Mph	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61	61-<66	66-<71	=>71
00:00	5	-	33.5	5	0	0	0	0	1	0	0	0	0	0	0	0	0
01:00	2	-	33.8	-	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	-	32	-	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	-	30.4	-	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	7	-	32.5	4	0	0	0	3	3	0	0	0	0	0	0	0	0
05:00	19	35.6	31.8	4.1	0	0	0	7	9	3	0	0	0	0	0	0	0
06:00	50	34.8	30.1	5	0	2	7	20	19	2	0	0	0	0	0	0	0
07:00	93	31.6	25	6.8	10	16	24	28	14	3	0	0	0	0	0	0	0
08:00	106	33.4	28.1	5.3	0	7	23	48	23	5	0	0	0	0	0	0	0
09:00	95	34.4	29.5	4.9	1	4	9	45	30	5	0	0	0	0	0	0	0
10:00	106	34.1	28.9	5.5	3	3	16	45	30	4	0	0	0	0	0	0	0
11:00	128	34.8	29.7	5.1	0	5	17	54	40	8	1	0	0	0	0	0	0
12:00	125	34.5	29.6	4.9	1	4	15	57	40	7	0	0	0	0	0	0	0
13:00	132	34	28	6	4	11	27	51	33	7	0	0	0	0	0	0	0
14:00	191	33.2	26.8	6.2	7	26	47	66	35	8	1	0	0	0	0	0	0
15:00	221	35.1	30.5	4.7	1	6	18	97	81	19	0	0	0	0	0	0	0
16:00	260	34.8	30.3	4.4	0	2	30	122	88	16	3	0	0	0	0	0	0
17:00	153	35.3	30.6	4.8	0	3	14	70	49	13	2	0	0	0	0	0	0
18:00	74	35.3	30.9	4.7	0	0	8	33	26	7	0	0	0	0	0	0	0
19:00	46	36.6	31.9	5	0	0	4	15	19	6	2	0	0	0	0	0	0
20:00	35	35.5	31.4	5.2	0	0	3	15	13	5	1	0	0	0	0	0	0
21:00	28	35.7	31.3	5.1	0	0	4	12	10	3	1	0	0	0	0	0	0
22:00	18	37	32.4	5.1	0	0	1	6	7	2	1	0	0	0	0	0	0
23:00	11	37.7	32.6	5.8	0	0	0	5	4	2	0	0	0	0	0	0	0
12H 7-19	1684	34.5	29.1	5.4	27	87	248	716	490	103	7	0	0	0	0	0	0
16H 6-22	1843	34.7	29.3	5.4	27	89	266	778	551	119	11	0	0	0	0	0	0
18H 6-24	1872	34.7	29.3	5.4	27	89	267	789	562	123	12	0	0	0	0	0	0
24H 0-24	1906	34.7	29.4	5.4	27	89	267	799	574	127	12	0	0	0	0	0	0
Am	11:00	-	00:30	-	07:15	07:15	07:30	11:00	11:00	11:00	06:15	04:15	11:00	09:15	-	-	-
Peak	128	-	33.9	-	10	17	30	55	40	8	1	0	0	0	-	-	-
Pm	15:45	23:00	22:30	13:30	13:30	13:30	13:45	16:00	15:45	15:15	16:45	19:30	23:00	-	-	-	-
Peak	266	37.7	32.6	6.4	10	27	48	121	91	20	4	1	0	-	-	-	-

Collated from 15 minute interval data

Created at 13:17:42 on 2 Feb 2018

Site No: 00000041
NORTH END RD YAPTON SOUTHERN SITE

Site Reference: 00000041

From 26/01/2018 To 02/02/2018

Channel: NORTHBOUND

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5-Day	7-Day
Begin								Av	Av
00:00	1	4	0	3	1	4	2	2	2
01:00	0	0	1	1	1	2	1	1	1
02:00	0	0	2	1	2	1	2	1	1
03:00	12	5	14	10	10	6	2	10	8
04:00	39	33	37	44	38	17	8	38	31
05:00	130	126	128	155	122	19	17	132	100
06:00	403	440	345	427	366	78	43	396	300
07:00	364	389	346	381	324	103	64	361	282
08:00	140	146	152	181	161	159	97	156	148
09:00	133	104	103	124	60	175	132	105	119
10:00	113	119	115	141	0	148	130	98	109
11:00	117	127	120	112	-	152	145	119	127
12:00	131	133	120	126	107	102	124	123	120
13:00	120	150	120	127	127	99	120	129	123
14:00	107	153	133	136	123	69	97	130	117
15:00	89	92	111	110	136	42	83	108	95
16:00	72	103	105	98	106	64	66	97	88
17:00	62	59	85	86	93	41	65	77	70
18:00	37	39	54	58	55	39	42	49	46
19:00	30	32	40	35	33	26	25	34	32
20:00	25	15	17	31	33	14	13	24	21
21:00	16	10	14	17	26	24	7	17	16
22:00	4	3	10	10	15	14	4	8	9
23:00	4	1	5	0	9	8	1	4	4
12H,7-19	1485	1614	1564	1680	-	1193	1165	1586	1470
16H,6-22	1959	2111	1980	2190	-	1335	1253	2060	1841
18H,6-24	1967	2115	1995	2200	-	1357	1258	2069	1852
24H,0-24	2149	2283	2177	2414	-	1406	1290	2256	1996
Am	06:15	06:30	06:30	06:30	-	09:00	10:45	-	-
Peak	456	535	429	490	-	175	150	478	387
Pm	12:15	13:45	14:15	13:15	15:00	12:45	12:15	-	-
Peak	133	154	135	155	136	108	135	143	137

Collated from 15 minute interval data

Created at 13:17:24 on 2 Feb 2018

Site No: 00000041
NORTH END RD YAPTON SOUTHERN SITE

Site Reference: 00000041

From 26/01/2018 To 02/02/2018

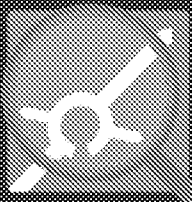
Channel: SOUTHBOUND

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	5-Day	7-Day
Begin								Av	Av
00:00	1	1	1	4	2	4	12	2	4
01:00	1	0	1	1	2	3	5	1	2
02:00	1	0	0	3	1	4	1	1	1
03:00	1	1	1	2	0	2	1	1	1
04:00	9	7	6	14	7	4	2	9	7
05:00	17	15	22	30	25	12	8	22	18
06:00	55	73	63	65	53	34	13	62	51
07:00	98	94	104	126	102	74	51	105	93
08:00	108	131	103	121	127	89	63	118	106
09:00	111	104	90	100	49	114	94	91	95
10:00	135	110	127	112	1	149	105	97	106
11:00	138	156	141	152	-	120	153	147	144
12:00	119	138	117	122	143	119	119	128	125
13:00	131	128	136	149	172	107	106	143	133
14:00	212	218	181	212	247	133	132	214	191
15:00	241	240	275	272	267	126	129	259	221
16:00	336	338	316	327	302	101	102	324	260
17:00	181	202	191	186	180	74	64	188	154
18:00	85	81	91	84	89	51	45	86	75
19:00	53	46	55	51	50	30	41	51	47
20:00	31	37	31	52	44	28	27	39	36
21:00	17	23	27	30	34	46	20	26	28
22:00	12	16	20	18	27	23	15	19	19
23:00	11	6	9	8	17	23	5	10	11
12H,7-19	1895	1940	1872	1963	-	1257	1163	1918	1715
16H,6-22	2051	2119	2048	2161	-	1395	1264	2095	1876
18H,6-24	2074	2141	2077	2187	-	1441	1284	2120	1903
24H,0-24	2104	2165	2108	2241	-	1470	1313	2155	1937
Am	10:30	11:00	10:45	11:00	-	10:15	11:00	-	-
Peak	151	156	149	152	-	153	153	152	152
Pm	16:00	15:45	15:45	15:45	16:00	14:15	14:30	-	-
Peak	336	346	327	351	302	134	142	332	277

Collated from 15 minute interval data

Created at 13:17:24 on 2 Feb 2018

Appendix D



2017 data is provisional and is subject to change

Crash Date: Sunday, June 18, 2017

Time of Crash: 1:00:00 PM

Crash Reference: 2017471703589

Highest Injury Severity: Serious
Highway Authority: West Sussex
Local Authority: Arun District
Weather Description: Fine without high winds

Road Surface Description: Dry

Speed Limit: 30

Light Conditions: Daylight: regardless of presence of streetlights

Carriageway Hazards: None

Junction Detail: Not at or within 20 metres of junction

Junction Pedestrian Crossing: No physical crossing facility within 50 metres

Road Type: Single carriageway

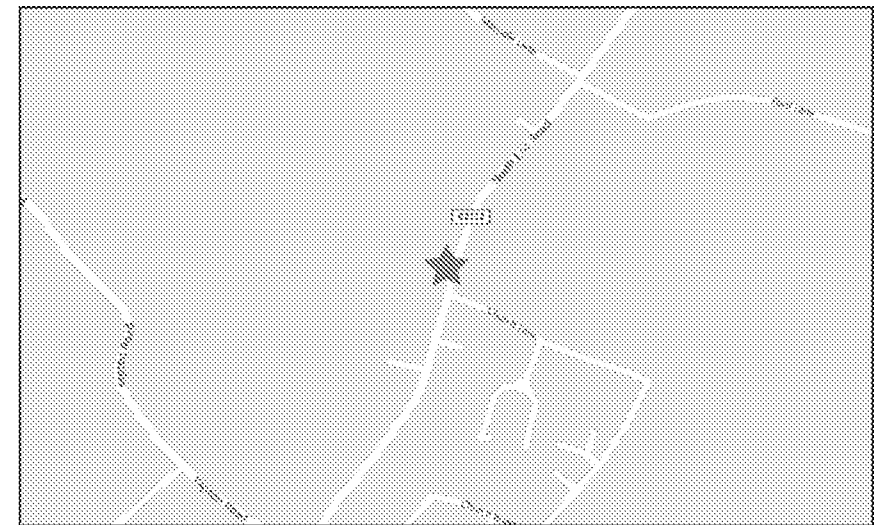
Junction Control: Unknown

Road Number: B2132

Number of Casualties: 1

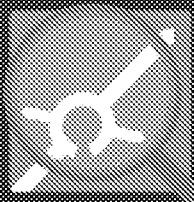
Number of Vehicles: 2

OS Grid Reference: 497819 103718



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions





2017 data is provisional and is subject to change

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Goods vehicle over 3.5 tonnes and under 7.5 tonnes mgw	-1	Unknown	NK	Vehicle is passing another moving vehicle on its offside	Unknown	Other	None	None
2	Pedal cycle	-1	Male	55-64	Vehicle proceeding normally along the carriageway, not on a bend	Unknown	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Serious	Driver or rider	Male	55-64	Unknown or other	Unknown or other

Accident Description:

Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Appendix E

Calculation Reference: AUDIT-247601-180511-0512

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLESSelected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	SM SOMERSET	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	2 days
08	NORTH WEST	
	CH CHESHIRE	1 days
	GM GREATER MANCHESTER	2 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days

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

Secondary Filtering 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: 8 to 39 (units:)
 Range Selected by User: 6 to 40 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 22/09/17

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	5 days
Tuesday	1 days
Wednesday	4 days
Thursday	3 days
Friday	3 days

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

Selected survey types:

Manual count	16 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:

Edge of Town	11
Neighbourhood Centre (PPS6 Local Centre)	5

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:

Residential Zone	12
Village	3
No Sub Category	1

Secondary Filtering selection:Use Class:

C1	1 days
C3	15 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:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	2 days
10,001 to 15,000	4 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	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	3 days
50,001 to 75,000	2 days
75,001 to 100,000	2 days
125,001 to 250,000	2 days
250,001 to 500,000	3 days
500,001 or More	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	9 days
1.6 to 2.0	1 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:

No	16 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.

PTAL Rating:

No PTAL Present	16 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CH-03-A-09	TERRACED HOUSES	CHESHIRE
	GREYSTOKE ROAD		
	HURDSFIELD		
	MACCLESFIELD		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	24	
	Survey date: MONDAY	24/11/14	Survey Type: MANUAL
2	DC-03-A-08	BUNGALOWS	DORSET
	HURSTDENE ROAD		
	CASTLE LANE WEST		
	BOURNEMOUTH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	28	
	Survey date: MONDAY	24/03/14	Survey Type: MANUAL
3	GM-03-A-10	DETACHED/ SEMI	GREATER MANCHESTER
	BUTT HILL DRIVE		
	PRESTWICH		
	MANCHESTER		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	29	
	Survey date: WEDNESDAY	12/10/11	Survey Type: MANUAL
4	GM-03-A-11	TERRACED & SEMI-DETACHED	GREATER MANCHESTER
	RUSHFORD STREET		
	LEVENSHULME		
	MANCHESTER		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of dwellings:	37	
	Survey date: MONDAY	26/09/16	Survey Type: MANUAL
5	KC-03-A-05	DETACHED & SEMI-DETACHED	KENT
	ROCHESTER ROAD		
	BURHAM		
	NEAR CHATHAM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	8	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
6	NF-03-A-03	DETACHED HOUSES	NORFOLK
	HALING WAY		
	THETFORD		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	10	
	Survey date: WEDNESDAY	16/09/15	Survey Type: MANUAL
7	NY-03-A-07	DETACHED & SEMI DET.	NORTH YORKSHIRE
	CRAVEN WAY		
	BOROUGHBRIDGE		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	23	
	Survey date: TUESDAY	18/10/11	Survey Type: MANUAL
8	NY-03-A-11	PRIVATE HOUSING	NORTH YORKSHIRE
	HORSEFAIR		
	BOROUGHBRIDGE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	23	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
9	SF-03-A-05	DETACHED HOUSES	SUFFOLK
	VALE LANE		
	BURY ST EDMUNDS		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	18	
	Survey date: WEDNESDAY	09/09/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10	SF-03-A-06	DETACHED & SEMI-DETACHED	SUFFOLK
	BURY ROAD		
	KENTFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	38	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
11	SH-03-A-06	BUNGALOWS	SHROPSHIRE
	ELLESMERE ROAD		
	SHREWSBURY		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	16	
	Survey date: THURSDAY	22/05/14	Survey Type: MANUAL
12	SM-03-A-01	DETACHED & SEMI	SOMERSET
	WEMBDON ROAD		
	NORTHFIELD		
	BRIDGWATER		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	33	
	Survey date: THURSDAY	24/09/15	Survey Type: MANUAL
13	TW-03-A-03	MIXED HOUSES	TYNE & WEAR
	STATION ROAD		
	BACKWORTH		
	NEAR NEWCASTLE		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	33	
	Survey date: FRIDAY	13/11/15	Survey Type: MANUAL
14	VG-03-A-01	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN
	ARTHUR STREET		
	BARRY		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	12	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL
15	WK-03-A-02	BUNGALOWS	WARWICKSHIRE
	NARBERTH WAY		
	POTTERS GREEN		
	COVENTRY		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	17	
	Survey date: THURSDAY	17/10/13	Survey Type: MANUAL
16	WM-03-A-04	TERRACED HOUSES	WEST MIDLANDS
	OSBORNE ROAD		
	EARLSDON		
	COVENTRY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of dwellings:	39	
	Survey date: MONDAY	21/11/16	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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

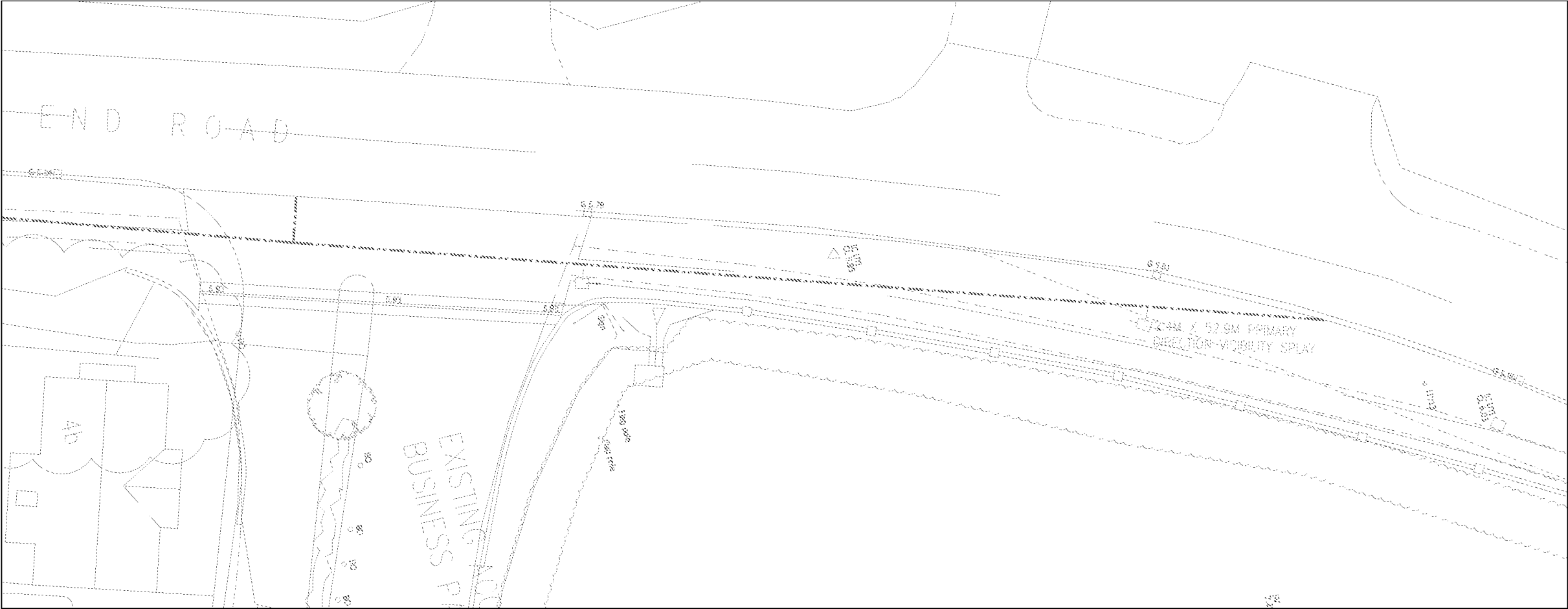
VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

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	16	24	0.072	16	24	0.201	16	24	0.273
08:00 - 09:00	16	24	0.137	16	24	0.335	16	24	0.472
09:00 - 10:00	16	24	0.121	16	24	0.173	16	24	0.294
10:00 - 11:00	16	24	0.170	16	24	0.162	16	24	0.332
11:00 - 12:00	16	24	0.165	16	24	0.175	16	24	0.340
12:00 - 13:00	16	24	0.173	16	24	0.183	16	24	0.356
13:00 - 14:00	16	24	0.155	16	24	0.157	16	24	0.312
14:00 - 15:00	16	24	0.188	16	24	0.149	16	24	0.337
15:00 - 16:00	16	24	0.227	16	24	0.224	16	24	0.451
16:00 - 17:00	16	24	0.268	16	24	0.152	16	24	0.420
17:00 - 18:00	16	24	0.281	16	24	0.142	16	24	0.423
18:00 - 19:00	16	24	0.186	16	24	0.103	16	24	0.289
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.143			2.156			4.299

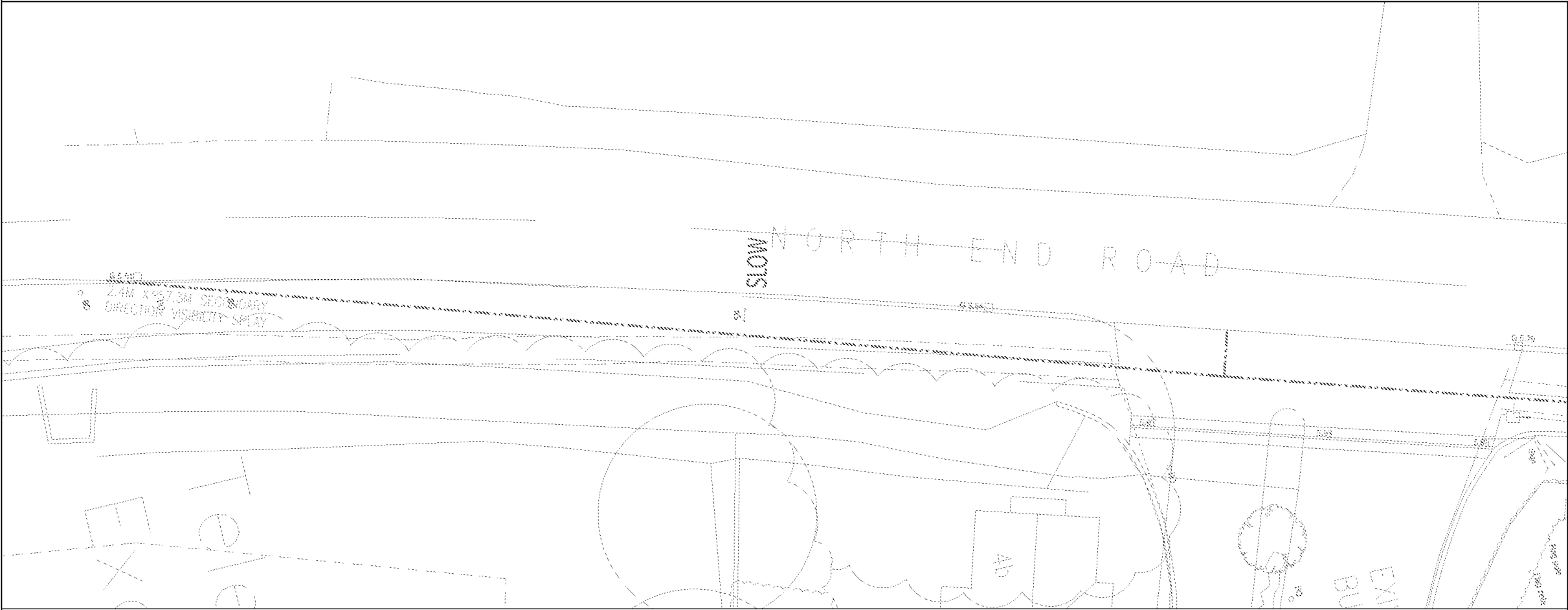
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.

Appendix F



2.4M X 52.9M VISIBILITY SPLAY IN THE PRIMARY DIRECTION



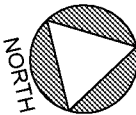
2.4M X 57.3M VISIBILITY SPLAY IN THE SECONDARY DIRECTION

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

VISIBILITY SPLAYS

1. VISIBILITY SPLAYS HAVE BEEN MEASURED TO 2.4M X 52.9M IN THE PRIMARY DIRECTION AND 2.4M X 57.3M IN THE SECONDARY DIRECTION IN LINE WITH 85TH PERCENTILE SPEEDS OF 34.7MPH SOUTHBOUND AND 36.6MPH NORTHBOUND



D	UPDATED SITE LAYOUT	10.12.19	JL	MS
C	CLIENT COMMENTS	30.05.18	JL	JH
B	UPDATED SITE LAYOUT	09.05.18	JL	JH
A	UPDATED VISIBILITY SPLAYS	06.03.18	JL	PE
Rev	Description	Date	By	Chk

Project Name NORTH END ROAD YAPTON	Title EXISTING SHARED ACCESS VISIBILITY SPLAYS	 Paul Basham Associates Ltd Lancaster Court, 8 Domes Hill Road, Fareham PO15 3PU 01489 380134 info@paulbashamassociates.com - www.paulbashamassociates.com	Client 	Checked By JL	Checked Date 23.02.18	Scale 1:250	(AT A3 SIZE)		
Project Phase PRELIMINARY				Drawn By SM	Drawn Date 21.02.18	Client Drawing No. -	PBA Drawing No. 125.0001.002	Revision D	ARUN DISTRICT COUNCIL

Appendix G

**NORTH END ROAD
YAPTON**

**PROPOSED ACCESS ARRANGEMENTS
SOUTHERN ACCESS**

STAGE 1 ROAD SAFETY AUDIT

MAY 2018

GM
Traffic Consultants Ltd
Registered in England No. 07100121.
Registered Office: 7 Bournemouth Rd, Chandlers Ford Eastleigh, Hants, SO53 3DA

GM

TRAFFIC CONSULTANTS

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Mark Barrett	Ian Medd		10 May 2018
Designer's Response				
Authority's Response				
Audit Response				

Client:
PBA

Engineer:
GM
Traffic Consultants Ltd
33 Riverside Gardens
Romsey
SO51 8HN

Date: 10 May 2018

TABLE OF CONTENTS

1.0	INTRODUCTION	3
2.0	ITEMS CONSIDERED	4
3.0	MATTERS ARISING FROM THIS STAGE 1 RSA.....	5
4.0	AUDITOR STATEMENT	6

APPENDIX A	Location Plan
APPENDIX B	Designers Response
APPENDIX C	Local Highway Authority Response

1.0 INTRODUCTION

1.1 General

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on a proposed access arrangements for residential developments on North End Road in Yapton.
- 1.1.2 The southern site will share an access with the adjacent Business Park to the north.
- 1.1.3 The RSA was carried out at the request of PBA.
- 1.1.4 GM Traffic Consultants Ltd carried out the Audit between 9th May and 10th May 2018. The Auditors were:
Mark Barrett Highways England Cert. of Comp
Ian Medd MCIHT FSoRSA
- 1.1.5 The Audit Team are independent of the project design team and has also undertaken a Stage 1 RSA on the northern access for the development. They have had no other involvement with the project.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.
- 1.1.7 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.
- 1.1.8 The Audit consisted of a desk top study and a site visit, which was carried out on Thursday 10th May 2018 at 14:00. Traffic flows were light and the weather dry and sunny.
- 1.1.9 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.
- 1.1.10 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.
- 1.1.11 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.

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
125.0001.002	C	Existing Shared Access Visibility Splays

- 2.2 The Audit Team have not been informed of any Departure from Standards.

3.0 MATTERS ARISING FROM THIS STAGE 1 RSA

- 3.1 Following the desk top study and subsequent site visit, the Audit Team raises no concerns regarding the proposals.

4.0 AUDITOR STATEMENT

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

AUDIT TEAM LEADER

Mark Barrett

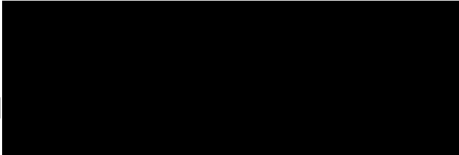
GM Traffic Consultants Ltd

Signed:

TEL: 07787 158 834

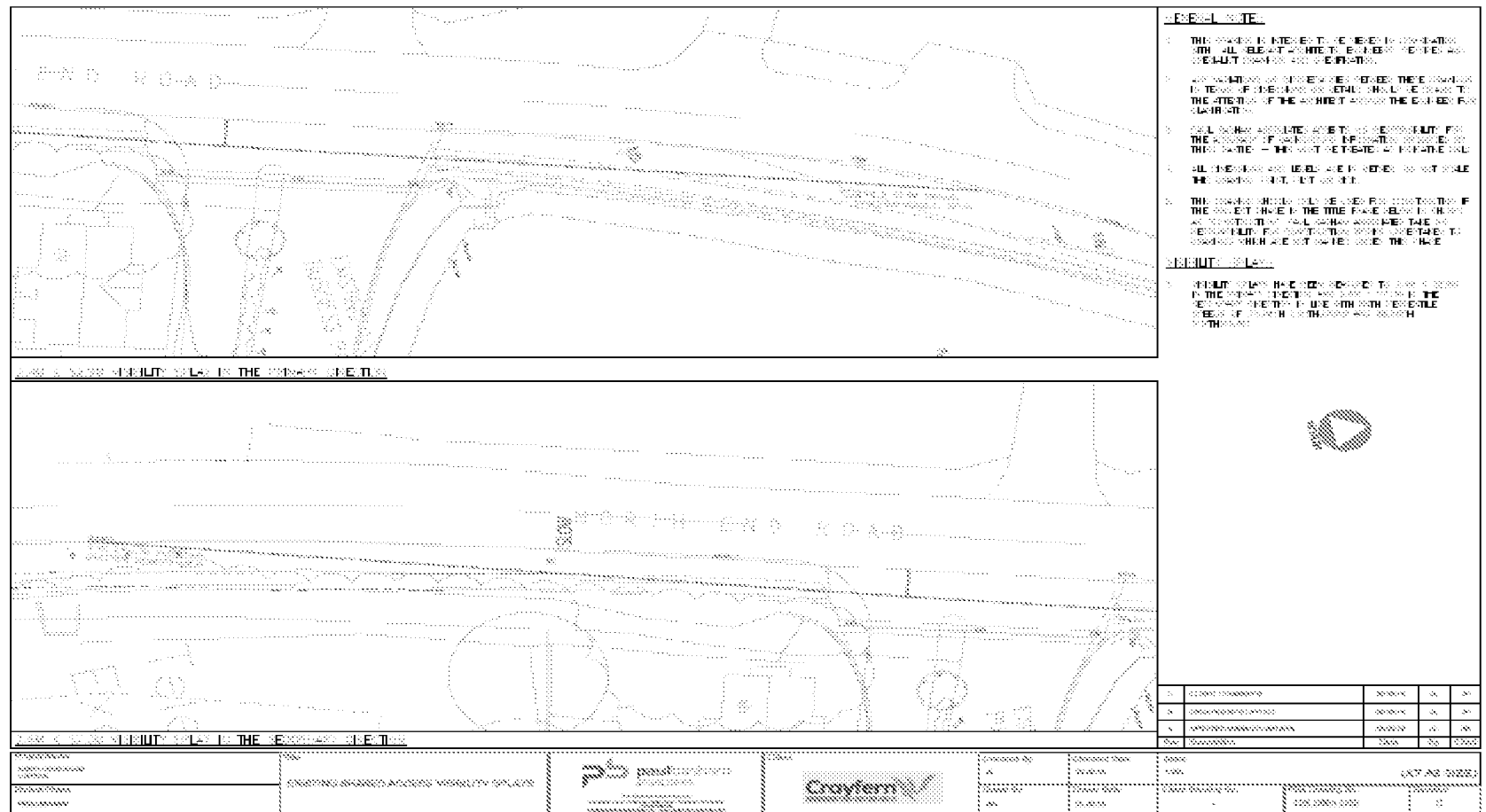
AUDIT TEAM MEMBER

Ian Medd

Signed 

Date: 10 May 2018

APPENDIX A: LOCATION PLAN



APPENDIX B: DESIGNERS RESPONSE

Auditors: Mark Barrett (Team Leader) and Ian Medd (Team Member)

Scheme: North End Road, Yapton - Proposed Access Arrangements - Southern Site

Date Audit Completed: 10 May 2018

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)
NO ISSUES HAVE BEEN RAISED			

APPENDIX C: LOCAL HIGHWAY AUTHORITY RESPONSE

Principal Engineer's Statement:

Road Safety Audit for North End Road, Yapton - Proposed Access Arrangements - Southern Site

I certify that I have considered the items that have arisen 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.....

Principal Engineer

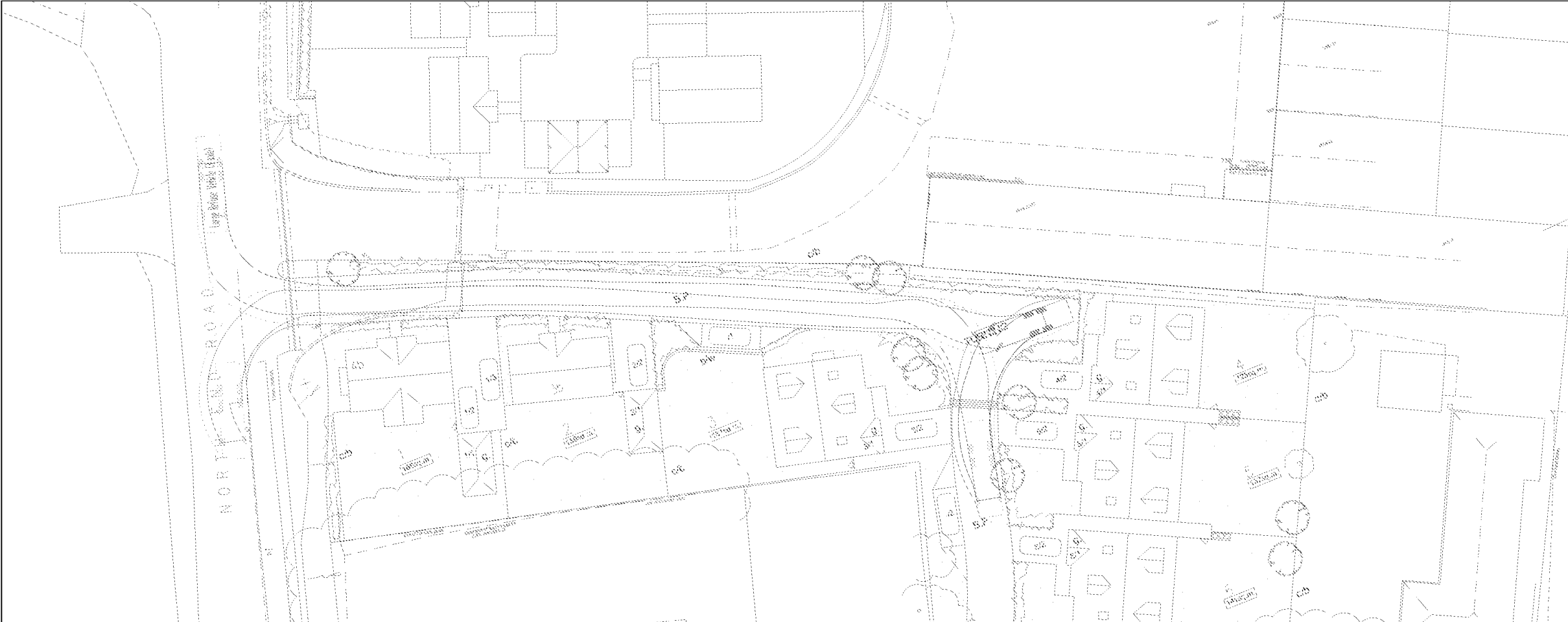
Chief Engineer's Decision:

I accept these proposals by the Principal Engineer.

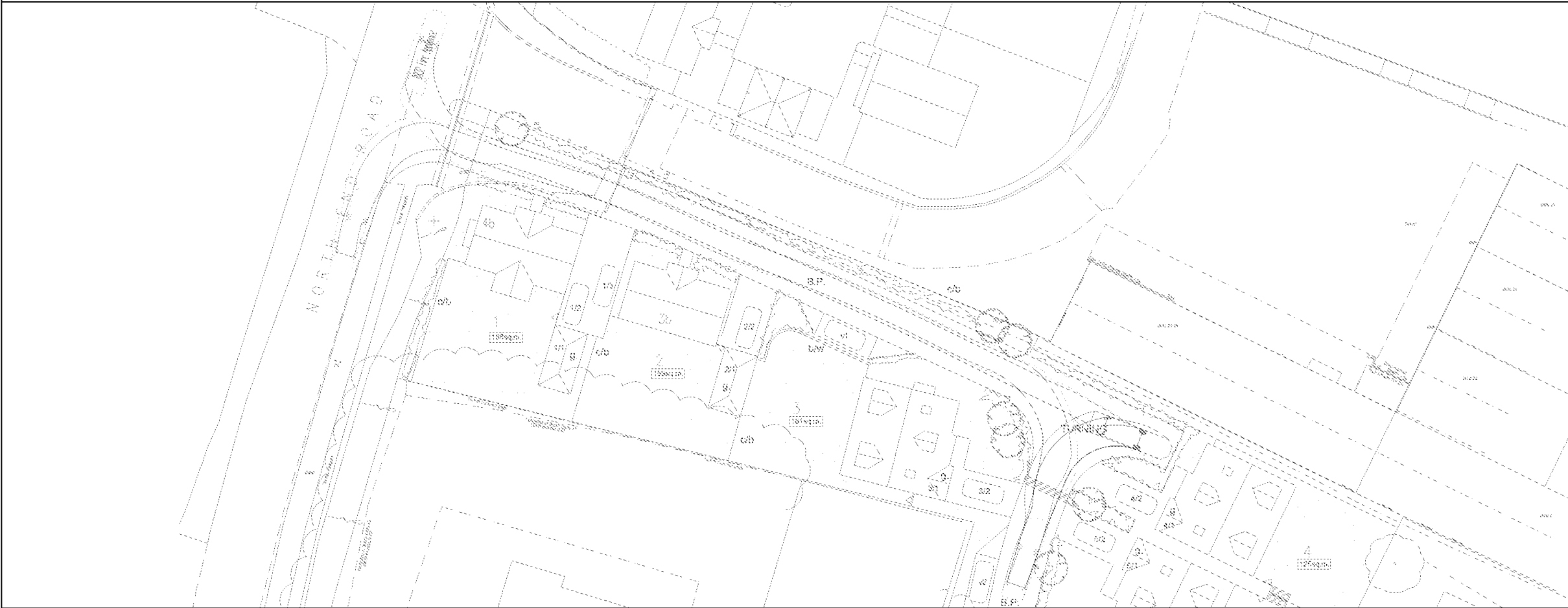
..... Date.....

Chief Engineer

Appendix H



REFUSE VEHICLE TRACKING

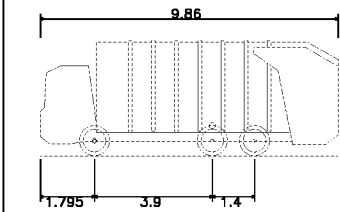


FIRE TENDER TRACKING

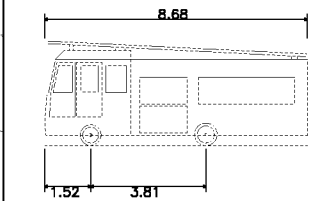
GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

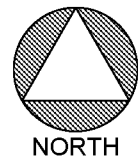
VEHICLE PROFILES



Large Refuse Vehicle (3 axle)
Overall Length 9.860m
Overall Width 2.450m
Overall Body Height 3.814m
Min Body Ground Clearance 0.366m
Track Width 2.450m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.500m



DB32 Fire Appliance
Overall Length 8.680m
Overall Width 2.180m
Overall Body Height 3.452m
Min Body Ground Clearance 0.337m
Max Track Width 2.121m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 7.910m



B	UPDATED SITE LAYOUT	10.12.19	JL	MS
A	CLIENT COMMENTS	30.05.18	JL	JH
Rev	Description	Date	By	Chk

Project Name NORTH END ROAD YAPTON	Title REFUSE VEHICLE AND FIRE TENDER TRACKING	 Paul Basham Associates Ltd Lancaster Court, 8 Domes Road, Fareham PO15 3PU 01496 360124 info@paulbashamassociates.com www.paulbashamassociates.com	Client 	Checked By JH	Checked Date 09.05.18	Scale 1:500	(AT A3 SIZE)		
Project Phase PRELIMINARY				Drawn By ME	Drawn Date 03.05.18	Client Drawing No. N/A	PBA Drawing No. 125.0001.004	Revision B	ARUN DISTRICT COUNCIL