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PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 - ROAD SAFETY AUDIT 2ND ADDENDUM

DECEMBER 2017



the journey is the reward

ARUN DISTRICT COUNCIL LU/121/17/RES

PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 - ROAD SAFETY AUDIT 2ND ADDENDUM

DECEMBER 2017

Project Code:	**S/PHLITTLE-INT.1.1Ad.6a**
Prepared by:	**Martyn Parr**
Approved by:	**Ken Fry**
Issue Date:	**December 2017**
Status:	**FINAL**

Mayer Brown Limited, Lion House, Oriental Road, Woking, Surrey GU22 8AB

[redacted]

ARUN DISTRICT COUNCIL LU/121/17/RES

Persimmon Homes Thames Valley

North Littlehampton

Internal Works, Parcels B2, B4 & C1

Littlehampton, West Sussex

Stage 1 - Road Safety Audit 2nd Addendum

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APPENDIX C: Audit Brief

APPENDIX D: Previous Stage 1 Road Safety Audits

1 Introduction

1.1 This report results from a Stage 1 Road Safety Audit 2nd Addendum carried out following instructions from Permission Homes at the request of West Sussex County Council, the Highway Project Sponsor.

1.2 An initial Stage 1 Road Safety Audit Report dated 17th March 2017 related to the internal development site highways arrangement (see **Appendix D**).

1.3 The Stage 1 Road Safety Audit 1st Addendum dated 1st September 2017 related to further amendments to the internal development site highways arrangement (see **Appendix D**).

1.4 This 2nd Addendum report results from a Stage 1 Road Safety Audit relates to further amendments to the internal development site highways arrangement, namely the repositioning of parking areas and the provision of trees within the development site.

1.5 This Stage 1 Road Safety Audit 2nd Addendum was carried out in December 2017.

1.6 The Road Safety Audit Team membership was as follows:

Ken Fry	I Eng, FIHE, RegRSA (IHE), HECoC Principal Consultant - Mayer Brown Limited (Certificate of Competency in Road Safety Audit gained in April 2015)
Martyn Parr	MSoRSA, RegRSA (IHE), MCIHT, HECoC Road Safety Manager – Mayer Brown Limited (Certificate of Competency in Road Safety Audit gained in February 2015)

1.7 The Road Safety Audit Addendum was undertaken in accordance with the Road Safety Audit Brief provided by Mr Adrian Barnley, included as **Appendix C**. The Audit Team has not been made aware of any departures from standard.

1.8 The Design Organization have advised that a site inspection is not required at this stage. It is understood that the works subject to this Road Safety Audit Report will not be subject to a Section 38 agreement. In addition, the works comprise a highway layout entirely within a development site, not an improvement scheme affected by existing traffic conditions, so this is considered to make no difference to the audit findings.

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1.9 The terms of reference of the Road Safety Audit are as described in HD 19/15, although in this case the members of the Audit Team have not carried out a site inspection. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

1.10 For avoidance of confusion, items identified in the previous 'Stage 1 Road Safety Audit' and the '1st Stage 1 Road Safety Audit Addendum' and that remain an issue, are re-iterated in this report.

1.11 Reduced-scale copies of plans 'A/PHLITTLE-INT.1/10-1 P11' and 'A/PHLITTLE-INT.1/10-2 P11' supplied with the Road Safety Audit Brief, are given as **Appendix B** to this report.

1.12 The proposals comprise the demolition of existing buildings and structures, and redevelopment to provide residential, business, neighbourhood centre and community uses, green infrastructure, new highway infrastructure and improvements to existing local highway network.

1.13 The Main Avenue through the scheme is proposed to be a tree lined avenue. Generally the scheme is intended to be subject to a 20mph speed limit with regular traffic calming features and off street parking. However, the speed limit in part of Main Avenue is 30mph.

1.14 A bus route is proposed through parts of the works subject to this 2nd Stage 1 Road Safety Audit Report Addendum.

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2 Items Raised at the Previous Stage 1 Road Safety Audit(s)

2.1 The road safety aspects of the internal site layout were the subject of comment in a Stage 1 Road Safety Audit Report undertaken in March 2017 and further comment in Stage 1 Road Safety Audit Report Addendum undertaken in September 2017 (see **Appendix D**).

2.2 **Item 3.1** (visibility splays) raised during the previous Stage 1 Road Safety Audit Addendum (partly) remains a problem and is referred to again in this Road Safety Audit Report. The proposed planting of trees within the visibility splays is considered an issue and it is subsequently subject to comment under the issue of 'visibility splays' (Item 3.1).

2.3 The authors of this report are satisfied that all other issues raised in the previous Stage 1 Road Safety Audit(s) have been resolved.

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3 Items Raised at the Stage 1 Road Safety Audit 2nd Addendum

General

3.1 **Problem**

Location: General

Summary: Visibility splays

Whilst some visibility splays have been formally identified on the drawings submitted, it will be important that all visibility splays remain free from obstruction. It is noted that some visibility splays extend across / through 3rd party land, cycle storage areas or parking bays (on 3rd party land).

A number of trees are shown within the verges of the development site, some of which appear to be within the junction visibility splays. Even if the trees are intended to be of relatively small girth and have clear stems, they will inevitably have some impact on sightlines; this effect will be greater the closer they are to the junction and will increase with time as the trees grow. This will increase the risks of vehicles emerging from the side roads being struck by passing traffic.

Recommendation

i. Provide visibility splays in accordance with relevant design standards and ensure that the splays will be kept free from obstruction.

ii. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m.

iii. Do not plant trees within the visibility splays.

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4 Audit Team Statement

4.0 AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out as described in HD 19/15, with the exception that no site visit was carried out because this is a new development site containing no existing roads.

ROAD SAFETY AUDIT TEAM LEADER

Ken Fry - I Eng, FIHE, RegRSA (IHE), HECoC
Principal Engineer
Mayer Brown Limited
B15 Whitecross Business Centre
Whitecross Lane
Shanklin
Isle of Wight
PO37 7EJ

Signe [redacted]

Date 07/12/17

ROAD SAFETY AUDIT TEAM MEMBER

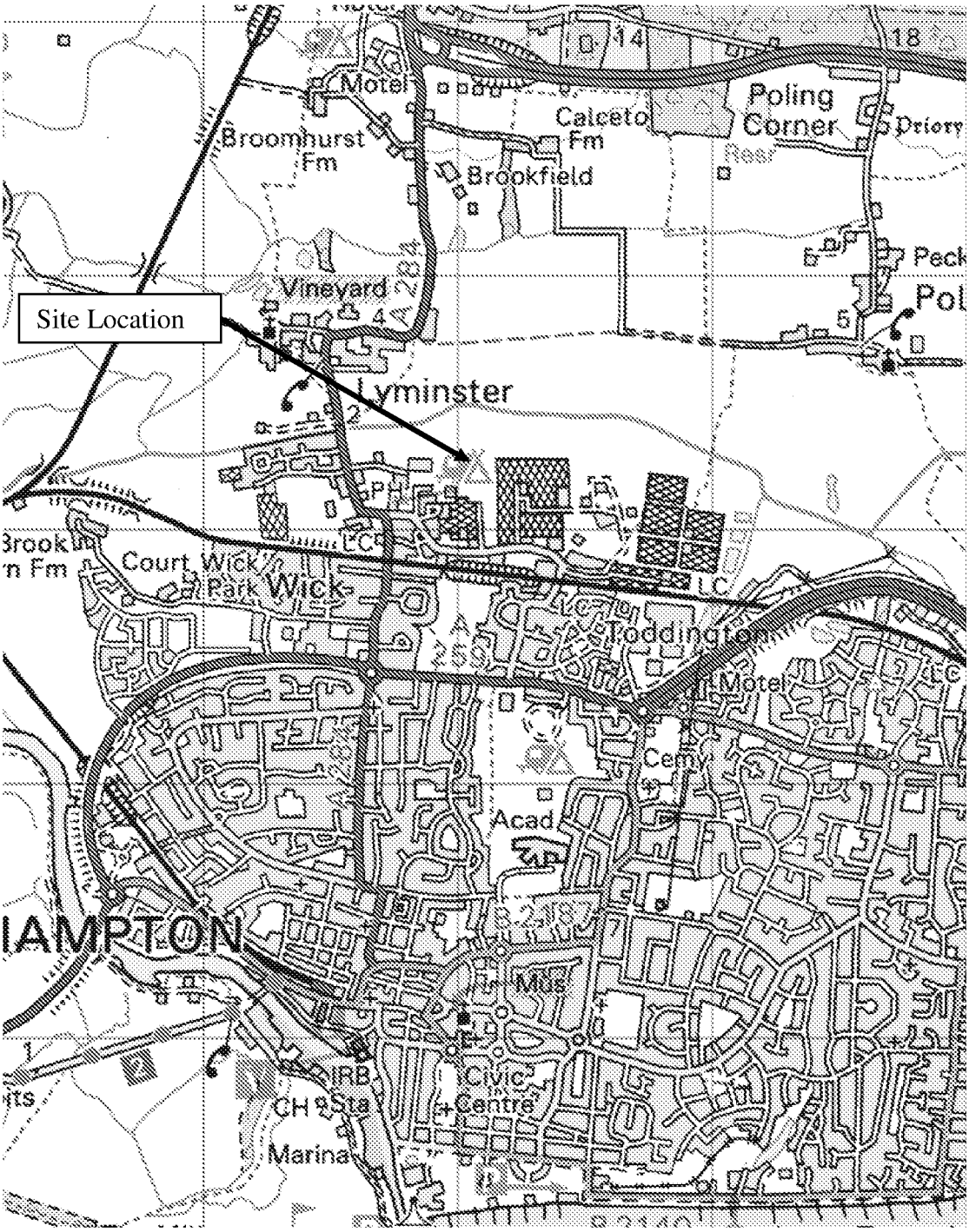
Martyn Parr - MSoRSA, RegRSA (IHE), MCIHT, HECoC
Road Safety Manager
Mayer Brown Limited
Lion House
Oriental Road
Woking
Surrey
GU22 8AR

Signe [redacted]

Date 07/12/17

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APPENDIX A: Site Location Plan


Site Location
Motel
Broomhurst Fm
Calceto Fm
Poling Corner
Brookfield
Vineyard
Lyminster
Court Wick
Park
Wick
Toddington
Motel
Cem
Acad
Mus
IRB
CH
Sta
Civic Centre
Marina
14
18
Priory
Rest
Peck
Pol
LC
PH

APPENDIX B: Reference Plans

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- DIAG 1234 PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- JUNCTION VISIBILITY SPLAY 2.4m x 43m
- JUNCTION VISIBILITY SPLAY 2.4m x 25m
- 43m PEDESTRIAN VISIBILITY SPLAYS
- 25m PEDESTRIAN VISIBILITY SPLAYS
- 25m CYCLE VISIBILITY SPLAYS
- 11m FORWARD VISIBILITY AROUND BEND
- 14m FORWARD VISIBILITY AROUND BEND
- 17m FORWARD VISIBILITY AROUND BEND
- PEDESTRIAN INTERVISIBILITY SPLAY 2.4m x 2.4m
- PROPOSED TREES
- SITE BOUNDARY

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-2

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A0H029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
3. Landscaping layout taken from WYG drawing numbered LA101 Rev 3.
4. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P11	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P10	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P9	Layout amended following updated site layout received 07/09/2017 and updated landscaping layout received 08/09/2017. (OJN)	AB	08/09/2017
P8	Private drives amended to suit vehicle swept paths and visibility splays updated following Stage 1 RSA Addendum Report. (OJN)	AB	05/09/2017
P7	Speed limit signs added and layout amended following updated site layout received from PHTV dated 22/08/2017. (OJN)	AB	30/08/2017
P6	Layout amended following updated site layout received from PHTV dated 08/08/2017. (OJN)	OJN	17/08/2017
P5	Layout updated following comments from WSCC dated 15/05/2017. (OJN)	AB	07/07/2017
P4	Tree locations added and drawing updated. (OJN)	SF	24/03/2017
P3	Pedestrian/cycle visibility splays and signs added, bus stop relocated and road markings amended following comments from Stage 1 Road Safety Audit dated 17/03/2017. (OJN)	AB	20/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
GENERAL ARRANGMENT DRAWING (1 OF 2)

drawing number
A/PHLITTLE-INT.1/10-1

rev.
P11

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
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NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
3. Landscaping layout taken from WYG drawing numbered LA101 Rev J.
4. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P11	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P10	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
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P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
GENERAL ARRANGMENT DRAWING (2 OF 2)

drawing number
A/PHLITTLE-INT.1/10-2

rev.
P11

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-1

APPENDIX C: Audit Brief

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PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 ROAD SAFETY AUDIT BRIEF ADDENDUM (2)

DECEMBER 2017



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PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 ROAD SAFETY AUDIT BRIEF ADDENDUM (2)

DECEMBER 2017

Project Code:	**A/PHLITTLE-INT.1**
Prepared by:	**OJN**
Approved by:	**AB**
Issue Date:	**December 2017**
Status:	**FINAL**

Mayer Brown Limited, Lion House, Oriental Road, Woking, Surrey GU22 8AR

ARUN DISTRICT COUNCIL LU/121/17/RES

Persimmon Homes Thames Valley
North Littlehampton
Internal Works, Parcels B2, B4 & C1
Littlehampton, West Sussex
Stage 1 Road Safety Audit Brief Addendum (2)

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ARUN DISTRICT COUNCIL LU/121/17/RES

Authorisation Sheet

Project:	North Littlehampton, Internal Works, Parcels B2, B4 & C1
Report Title:	Stage 1 Road Safety Audit Brief Addendum

Prepared By:

Name:	Oliver Nevett
Signed:	[redacted]
Organisation:	Mayer Brown Ltd
Date:	7 December 2017

ARUN DISTRICT COUNCIL LU/121/17/RES

Introduction

1.0.1 Mayer Brown Limited has been appointed by Persimmon Homes Thames Valley in respect of the design of the internal highway works associated with Planning Application Ref LU/47/11.

1.0.2 The site is known as "North Littlehampton" and lies to the north of Toddington Lane in Littlehampton, West Sussex. The site is currently largely glasshouses and would be developed to create an urban extension

1.0.3 The proposals comprise the demolition of existing buildings and structures, and redevelopment to provide residential, business, neighbourhood centre and community uses, green infrastructure, new highway infrastructure and improvements to existing local highway network.

Application LU/47/11 includes the following:

1.0.4 *Outline application with some matters reserved for mixed use development comprising: demolition of existing buildings and structures, up to 1,260 residential dwellings (out of a potential 1,460 dwelling masterplan), up to 13,000 sqm of B1 employment floorspace (including 3,000 sqm Enterprise Centre), up to 3,500 sqm of Class A local facilities, a 100 bed hotel, 60 bed care home, a new 2 Form Entry primary school, community centre, youth and leisure facilities, combined heat & power plant, extension to existing household recycling centre, landscaping, replacement and additional allotments, multi-functional green infrastructure including sports pitches (& associated changing facilities), informal open space, children's play areas, primary vehicular access from a new access from the A259 bridging over the railway line with additional access from Mill Lane & Toddington Lane. This application is the subject of an Environmental Impact Assessment & a departure from the development plan. This application affects a public right of way*

1.0.5 **Figure 1.1** below shows the approximate site location in relation to the local highway network.

1.0.6 This Stage 1 Road Safety Audit Addendum Brief follows a previous Stage 1 undertaken in March 2017 and a further Addendum dated September 2017. This further Addendum is proposed at the request of West Sussex County Council to enable amendments to the scheme to be safety audited.

ARUN DISTRICT COUNCIL LU/121/17/RES

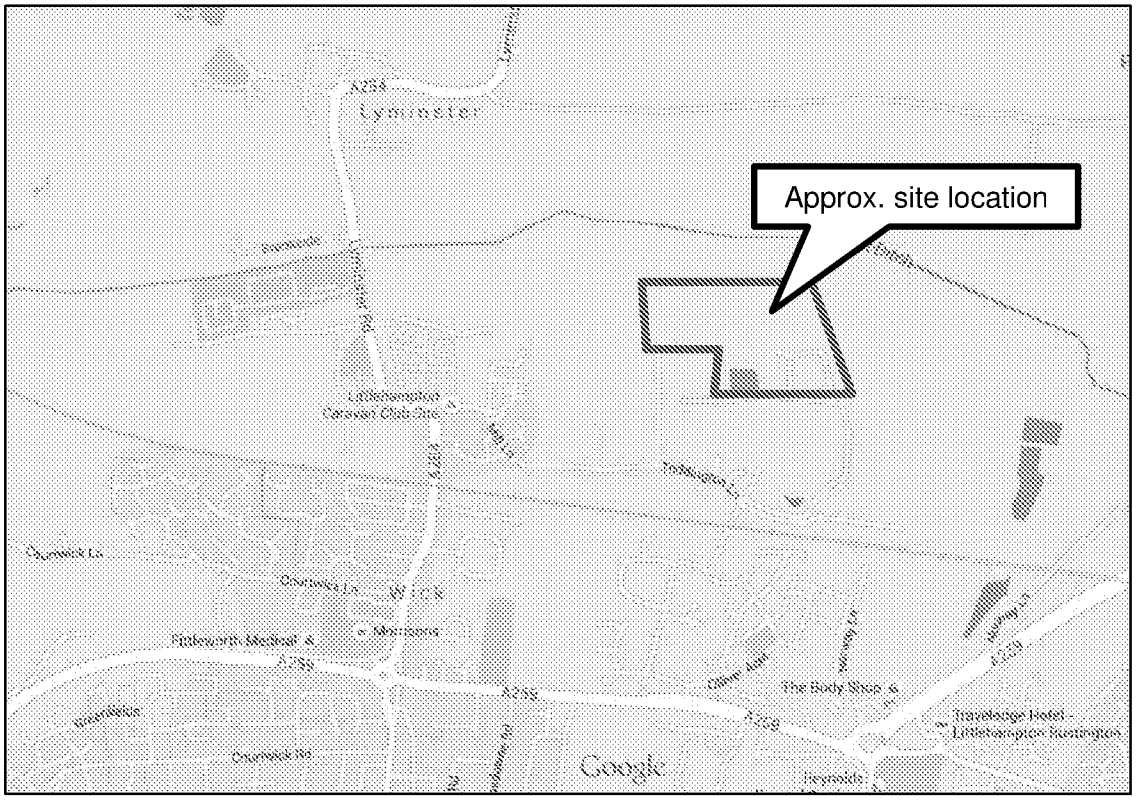


Figure 1.1: Approximate Site Location Plan

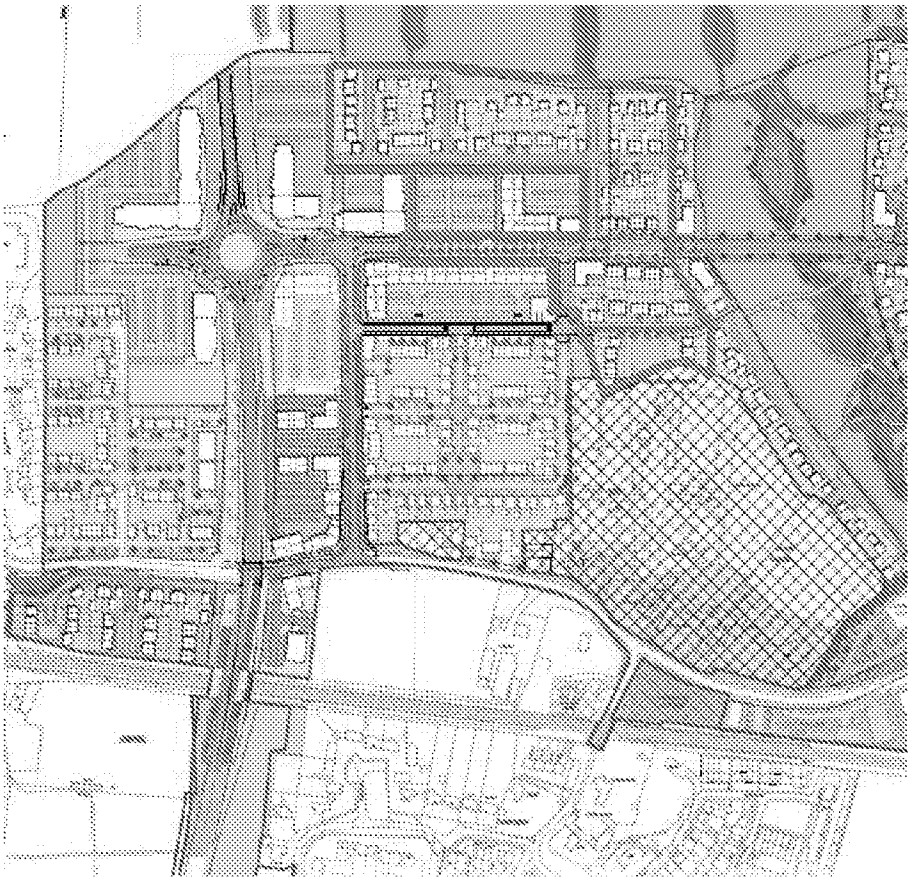


Figure 1.2: Extract from Illustrative Masterplan Site Edged in Blue

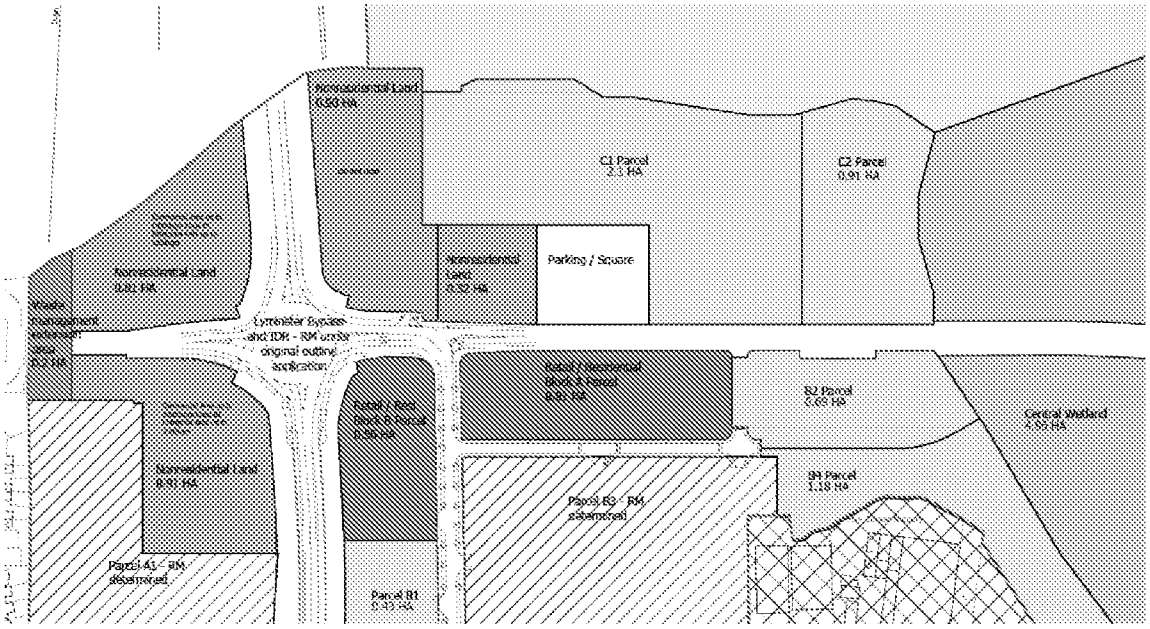


Figure 1.3: Extract from Illustrative Masterplan with use classes

1 General Details

1.1 *Highway Improvement Scheme Name and Road Number*

N/A – All New Roads

1.2 *Type of Scheme*

Residential Development

1.3 *Road Safety Audit Stage (tick as appropriate)*

1	2	1&2	3	Interim	4 (12 months)	4 (36 months)
✓						

1.4 *Highway Authority*

West Sussex County Council
Ground Floor Northleigh
County Hall
Chichester
PO19 1RH

1.5 *Design Organisation Details*

Mayer Brown Ltd
Lion House
Oriental Road
Woking
Surrey
GU22 8AR
T: 01483 750508

1.6 *Police Contact Details (Required for Stage 3 only)*

N/A

1.7 *Maintaining Agent (where applicable)*

TBC

1.8 Road Safety Audit Team will comprise a minimum of two of the following auditors

Ken Fry

Qualifications –

- I Eng FIHE, RegRSA (IHE),
- Highways England Certificate of Competency

Company Name –

Mayer Brown Road Safety Team

John Reid

Qualifications -

- Fellow of the Society of Road Safety Auditors
- Member of the Institute of Traffic Accident Investigators
- Highways England Certificate of Competency

Company Name –

Mayer Brown Road Safety Team

Martyn Parr

Qualifications –

- MCIHT Member of the Chartered Institution of Highways and Transportation
- MSoRSA Member of the Society of Road Safety Auditors
- RoSPA Road Safety Engineering Accreditation
- HECoC Highways England Certificate of Competence
- RegRSA (IHE) Registered Road Safety Auditor

1.8.1 The Audit Team are requested to invite the following to the Audit:

N/A

1.8.2 Any changes in the Audit Team personnel shall be referred to the Designer for approval in advance of undertaking the Audit.

1.9 Terms of Reference

1.9.1 This Safety Audit is to be undertaken fully in accordance with the DMRB Standard HD 19/15, as well as the contents of this Road Safety Audit Brief and provided direct to the Designer. Contact details as follows:

Adrian Barnley
Director
Mayer Brown Limited
Lion House
Oriental Road
Woking
Surrey
GU22 8AR

[redacted]

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2 Scheme Description/Objective

2.1 *General (provide a brief description of the scheme and its objectives)*

2.1.1 The works are required as part of the Residential Development to provide parcels B2, B4 and C1. The works are shown on the drawings included at **Appendix A**.

2.2 *Design Standards Applied to the Scheme Design*

2.2.1 The scheme has been designed with reference to the following design standards

- DfT's Manual for Streets
- CIHT's Manual for Streets 2
- Local Transport Note 1/07 – Traffic Calming
- Traffic Advisory Leaflet 9/99 – 20mph speed limits and zones.
- The Traffic Signs Regulations and General Directions 2016
- Department for Transport – LTN 1/12 Shared Use Routes for Pedestrians and Cyclists September 2012
- Department for Transport – LTN 2/08 Cycle Infrastructure Design October 2008
- Traffic Signs Manuals
- DfT's Inclusive Mobility
- DETR Guidance on the use of Tactile Paving Surfaces
- WSCC's Standard Details, Approved dated June 2016
- WSCC's Lighting of Developer Promoted Highway Schemes in West Sussex, Rev 11 Feb 2016
- DMRB, in particular TD42/95 Geometric Design of Major/Minor Priority Junctions

2.3 *Design Speeds*

2.3.1 The Design Speed for this scheme is 32kph (20mph) and 45kph (30mph)

2.4 *Speed Limit*

2.4.1 Initial 160m m section of Main Avenue subject to 30mph speed limit.

2.4.2 All other areas subject to speed limit 20mph.

2.5 *Existing Traffic Flows/Queues*

2.5.1 N/A, All new roads.

2.6 *Forecast Traffic Flows*

2.5.2 Forecast traffic flows are included in the Transport Statement at **Appendix B**.

ARUN DISTRICT COUNCIL LU/121/17/RES

2.7 *Non-Motorised User (NMU) Desire Lines*

A 3m wide shared footway / cycleway will be provided on the southern side of the Main Avenue which continues through the site as a future Phase. All other roads are proposed to have 2m footpaths on either side and will benefit from raised junctions, dropped kerbs and tactile paved crossing points as indicated on the scheme drawings. Small cul-de-sacs will be provided as shared surfaces. Where provided, the paths surrounding the parking bays are provided as a minimum 900mm.

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3 Description of Locality

3.1 *General Description*

3.1.1 Parcels B2, B4 and C1 are an extension to the new residential development in North Littlehampton, the development is located to the north of Toddington Lane and will be the next Phase of residential development and will link to the previous B3/B5 phase of housing, situated to the south.

3.1.2 Initial access to the scheme will be through the existing privately maintained access road located along the northern boundary of the B3/B5 developments which links to the wider adopted public highway network via the IDR and Toddington Lane.

3.1.3 Once constructed, access to Main Avenue will be from the new Lyminster Bypass via the eastern arm of the roundabout.

3.1.4 The main changes since the previous Road Safety Audit are as follows:

A/PHLITTLE-INT.1/10-1 & 2

- Road Markings to DIAG 1062 added to Speed Tables
- Trees added to drawings (previously included Landscape Arch Drawings)
- Additional Parking lay-bys outside plots 33 – 35 & 59/60
- Minor parking amendments outside plots 66 – 79 to add more trees.
- Parking amendments along the Main Avenue outside plots 80 – 94 including footpath/cycleway realignments and additional trees.
- Minor parking amendments outside plots 105 – 126 to accommodate more trees
- Trees added to the Main Avenue Again

A/PHLITTLE-INT.1/11-1 & 2

In support of the above General Arrangement changes;

- Verges have been created where parking amendments have been made to accommodate trees
- Granite Sett construction type along the Main Avenue changed to Marshalls 'Keyblok' paving and tree grilles amended.
- Permeable paved private driveway areas added.

A/PHLITTLE-INT.1/13-1 & 2

In support of the above General Arrangement changes;

- Indicative Lighting column locations have been amended to suit amended parking and landscaping layout where necessary.

A/PHLITTLE-INT.1/19-1 & 2

In support of the above General Arrangement changes;

- Minor level amendments where necessary.

A/PHLITTLE-INT.1/TK-1 & 2

- Minor Swept path amendments where necessary

A/PHLITTLE-INT.1/TK-3 & 4

- Minor Swept path amendments where necessary

ARUN DISTRICT COUNCIL LU/121/17/RES

3.2 *Relevant Factors which may Affect Road Safety*

3.2.1 The Main Avenue is proposed to be a tree lined avenue. Contrary to the previous Designer Response to problems 2.1 and 3.1 of the previous RSA1's, the scheme has been amended to include street trees located within a 2m verge between the main carriageway and the footways, some of which shall be within visibility splays.

3.2.2 The Designer is advised that *the species of tree proposed is Tilia cordata 'Greenspire', which is an excellent street and avenue tree. The trees will have a minimum clear stem of 2m from ground level to the bottom of the canopy (at the time of planting) and the height after 25 years is expected to be 10m with a spread of 5m and a stem diameter of 500mm. An image of such a tree is indicated below:*



Figure 3.1: Typical Image of Tilia cordata 'Greenspire' at 25 years

3.2.3 On the southern side it has been possible to locate all but one trees outside of the visibility splays. However, on the northern side, there are 3 no. proposed footway crossover junctions to a small parking square/non-residential area and one priority junction (Road 4) with trees located within visibility splays. As a result, these will create momentary obstruction within visibility splays for vehicles exiting and approaching these junctions.

3.2.4 This is discussed further in Section 5.

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3.3 *Adjacent Land Uses*

3.3.1 Below is a list of the sites neighbouring land uses:

Address/Location	*Land Use*
Southern Side	Residential
Western Side	Proposed Non-Residential
Northern Side	Existing open green space between development and the Black Ditch
East Side	Proposed Residential Development

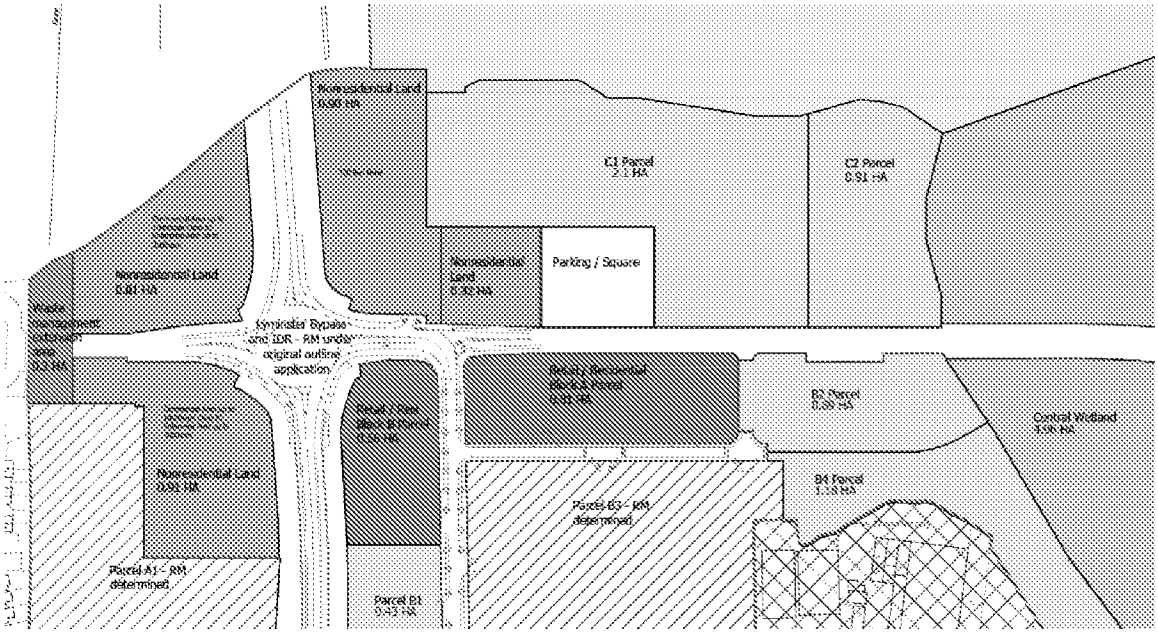


Figure 3.2: Extract Land Use Parameter Plan

4 Personal Injury Collision Analysis

4.0.1 This is a new development and therefore, there are no recorded personal injury collisions.

5 Departures and Relaxations from Standards

5.1.1 The following Departures and Relaxations from the MfS standards have been identified:

5.1.2 The Main Avenue is proposed to be a tree lined avenue. Contrary to the previous Designer Response to problems 2.1 and 3.1 of the previous RSA1's, the scheme has been amended to include street trees located within a 2m verge between the main carriageway and the footways, some of which shall be within visibility splays.

5.1.3 The Designer is advised that *the species of tree proposed is Tilia cordata 'Greenspire', which is an excellent street and avenue tree. The trees will have a minimum clear stem of 2m from ground level to the bottom of the canopy (at the time of planting) and the height after 25 years is expected to be 10m with a spread of 5m and a stem diameter of 500mm. An image of such a tree is indicated below:*



Figure 5.1: Typical Image of Tilia cordata 'Greenspire' at 25 years

5.1.4 On the southern side it has been possible to locate all but one trees outside of the visibility splays. However, on the northern side, there are 3 no. proposed footway crossover junctions to a small parking square/non-residential area and one priority junction (Road 4) with trees located within visibility splays. As a result, these will create momentary obstruction within visibility splays for vehicles exiting and approaching these junctions.

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5.1.5 It is noted that MfS's (Para 7.8.6) acknowledges that obstacles to visibility such as street trees should be assessed in terms of the impact on the overall envelope of visibility and that in general occasional obstacles to visibility that are not large enough to fully obscure a whole vehicle or a pedestrian will not have significant impact on road safety.

Furthermore, TD42 does not preclude the planting of landscaping within visibility splays, but states:

> 7.13 Vehicles parked within splay lines may obstruct visibility. Where necessary, parking and access should be controlled to prevent this. Care should also be taken in the placing of signs, landscaping and street furniture within the visibility splay areas to ensure that their obstructive effect is minimal.

5.1.6 TD9 (Para 2.7) goes on to suggest a width for obstructions by stating that isolated slim objects of width 550mm or under can be ignored.

> **Obstructions to Sight Distance**
>
> 2.7 Care shall be taken to ensure that no substantial fixed obstructions obstruct the sightlines including road furniture such as traffic signs. However, isolated slim objects such as lamp columns, sign supports, or slim footbridge supports of width 550mm or under can be ignored. Similarly, the effect of short intermittent obstructions, such as bridge parapets of minor roads under, can be ignored. Lay-bys should, wherever possible, be sited on straights or on the outside of curves, where stopped vehicles will not obstruct sightlines.

5.1.7 In terms of the visibility envelope for vehicles at these junction, this has been assessed on drawing numbered A/PHLITTLE-INT.1/VIS-1 Rev P1 and shows the visibility restrictions at 'x' 4m (being the maximum visibility splay start i.e. back of footway) and 'x' 2m (being the absolute minimum prescribed by MfS). This demonstrates where the trees provide intermittent obstructions to the visibility of approaching vehicles.

5.1.8 Furthermore, the drawing indicates achievable unobstructed visibility to the left from 'x' 2.4m, when measured to the centre of the road (i.e. the offside of an approaching car) achieves and to the right when measured to the channel. This indicates the extent of the achievable unobstructed visibility splays.

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5.1.9 In conclusion, it is necessary to plant some street trees within visibility splays to maintain the tree lined avenue gateway effect into the development. The width of the trees when planted will have a stem diameter of much less than 500mm. At 25 years the stem can grow to approx. 500mm, which is less than the 550mm limit prescribed in the DMRB for slim objects that can be ignored, in terms of visibility. The visibility envelope has been considered and discussed above along with the minimum unobstructed visibility distance achievable on exit from the junctions.

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6 Previous Road Safety Audit Reports, Designer's Responses and Exception Reports

6.0.1 This Stage 1 Road Safety Audit Addendum Brief follows a previous Stage 1 undertaken in March 2017 and a further Addendum dated September 2017. The Designer Response Reports to the previous Audits are contained within **Appendix C**.

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7 Strategic Decisions – Items Outside the Scope of this Road Safety Audit

7.1 *General*

7.1.1 The access points into the development from the south and west are fixed due to their connection with other residential developments that have been constructed or are linked with other future highway schemes agreed in principle via the Planning Consent referred to in Section 1.

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8 List of Included Documents and Drawings

8.1 Drawings (Provided at Appendix A)

Drawing Number	*Title*
A/PHLITTLE-INT.1/10-1 Rev P11	General Arrangement Drawing (1 of 2)
A/PHLITTLE-INT.1/10-2 Rev P11	General Arrangement Drawing (2 of 2)
A/PHLITTLE-INT.1/11-1 Rev P12	Surface Treatment Drawings (1 of 2)
A/PHLITTLE-INT.1/11-2 Rev P12	Surface Treatment Drawing (2 of 2)
A/PHLITTLE-INT.1/13-1 Rev P6	Street Lighting Drawing (1 of 2)
A/PHLITTLE-INT.1/13-2 Rev P6	Street Lighting Drawing (2 of 2)
A/PHLITTLE-INT.1/19-1 Rev P5	Contours and Levels Drawing (1 of 2)
A/PHLITTLE-INT.1/19-2 Rev P5	Contours and Levels Drawing (1 of 2)
A/PHLITTLE-INT.1/VIS-1 Rev P1	Visibility Envelope
A/PHLITTLE-INT.1/TK-1 Rev P8	Anticipated Swept Path of a Large Refuse Vehicle and Large Car Accessing the Site (1 of 2)
A/PHLITTLE-INT.1/TK2 Rev P8	Anticipated Swept Path of a Large Refuse Vehicle and Large Car Accessing the Site (2 of 2)
A/PHLITTLE-INT.1/TK3 Rev P4	Anticipated Swept Path of a Fire Tender Accessing the Site (1 of 2)
A/PHLITTLE-INT.1/TK4 Rev P4	Anticipated Swept Path of a Fire Tender Accessing the Site (1 of 2)

8.2 Documents (Provided at Appendix B)

Title	*Date*
Transport Statement	August 2017
Stage 1 RSA – Road safety Audit Response Report [Rev P2]	27 October 2017
Stage 1 RSA - Road Safety Audit Addendum Response Report [Rev P3]	27 October 2017

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9 Checklist

9.1 Documents

RSA Brief	✓	Site Location Plan	✓
Scale Layout Plans	✓	Construction/Typical Details	N/A
Previous RSA Reports	N/A (same audit team – therefore, not supplied)	Previous RSA Designer's Response Reports	✓
Road Safety Audit Exception Reports	N/A	Departures and Relaxations from Standards	✓
Traffic Signal Staging Refer to drawing ??	N/A	Personal Injury Collision Data	N/A
Personal Injury Collision Drawing	N/A	Traffic Counts	N/A
Speed Surveys	N/A	NMU Desire Lines and Volumes	✓
NMU Context and Audit Report	✓	Items Outside the Scope of the RSA/Strategic Decisions	✓
Other Factors that may Impact on Road Safety	✓	Design Speeds/Speed Limits	✓
Design Standards Used	✓	Adjacent Land Uses	✓

Grey = Not Mandatory for Stage 1 RSA

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APPENDIX A: Drawings

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- DIAG 1234 PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- JUNCTION VISIBILITY SPLAY 2.4m x 43m
- JUNCTION VISIBILITY SPLAY 2.4m x 25m
- 43m PEDESTRIAN VISIBILITY SPLAYS
- 25m PEDESTRIAN VISIBILITY SPLAYS
- 25m CYCLE VISIBILITY SPLAYS
- 11m FORWARD VISIBILITY AROUND BEND
- 14m FORWARD VISIBILITY AROUND BEND
- 17m FORWARD VISIBILITY AROUND BEND
- PEDESTRIAN INTERVISIBILITY SPLAY 2.4m x 2.4m
- PROPOSED TREES
- SITE BOUNDARY

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-2

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A0H029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
3. Landscaping layout taken from WYG drawing numbered LA101 Rev 3.
4. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P11	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
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P9	Layout amended following updated site layout received 07/09/2017 and updated landscaping layout received 08/09/2017. (OJN)	AB	08/09/2017
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P7	Speed limit signs added and layout amended following updated site layout received from PHTV dated 22/08/2017. (OJN)	AB	30/08/2017
P6	Layout amended following updated site layout received from PHTV dated 08/08/2017. (OJN)	OJN	17/08/2017
P5	Layout updated following comments from WSCC dated 15/05/2017. (OJN)	AB	07/07/2017
P4	Tree locations added and drawing updated. (OJN)	SF	24/03/2017
P3	Pedestrian/cycle visibility splays and signs added, bus stop relocated and road markings amended following comments from Stage 1 Road Safety Audit dated 17/03/2017. (OJN)	AB	20/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
GENERAL ARRANGMENT DRAWING (1 OF 2)

drawing number
A/PHLITTLE-INT.1/10-1

rev.
P11

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NOTES:

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PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
GENERAL ARRANGMENT DRAWING (2 OF 2)

drawing number
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FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-3

KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED BITUMEN MACADAM CARRIAGEWAY SURFACING (WSCC DETAIL S278/38/21)
- PROPOSED MARSHALLS BLOCK PAVED CARRIAGEWAY SURFACING (BRINDLE) LAID IN HERRINGBONE PATTERN (WSCC DETAIL S278/38/21)
- PROPOSED MARSHALLS BLOCK PAVED RAMP (BRINDLE) CONSTRUCTION TYPE 5 (WSCC DETAIL S278/38/16)
- PROPOSED MARSHALLS BLOCK PAVED SHARED / PRIVATE DRIVE SURFACING (BRACKEN) LAID IN HERRINGBONE PATTERN (WSCC DETAIL S278/38/21)
- PROPOSED MARSHALLS PRIORA PERMEABLE BLOCK PAVED SHARED / PRIVATE DRIVE SURFACING (BRACKEN) LAID IN HERRINGBONE PATTERN
- PROPOSED MARSHALLS BUFF COLOURED SLAB PRIVATE FOOTWAY CONSTRUCTION
- PROPOSED BITUMEN MACADAM FOOTWAY CONSTRUCTION (WSCC DETAIL S278/38/04)
- PROPOSED BITUMEN MACADAM FOOTWAY CROSSOVER TYPE 1 (WSCC DETAIL S278/38/07)
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- PROPOSED V-GROOVE KEYBLOK PAVING LAID IN HERRINGBONE PATTERN WITH TREE PITS (REFER TO LANDSCAPE ARCHITECT DRAWINGS)
- PROPOSED SOFT LANDSCAPING (REFER TO LANDSCAPE ARCHITECT DRAWINGS)
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- SITE BOUNDARY

KERB TYPES

1. TYPE 1 - HB2 - 125mm UPSTAND
2. TYPE 2 - BN - 0 - 6mm UPSTAND (DROPPED CROSSING)
3. TYPE 3 - BN - 25mm UPSTAND (VEHICULAR CROSSOVER)
4. TYPE 4 - BN - 50mm UPSTAND (UPSTAND ON RAISED TABLE)
5. TYPE 5 - EF - FLUSH
6. TYPE 6 - BUS KERB - 160mm UPSTAND
7. TYPE 7 - 40mm x 150mm TIMBER EDGING (WSCC DETAIL S278/38/06)

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A0H4029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.

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scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
SURFACE TREATMENTS DRAWING (1 OF 2)

drawing number
A/PHLITTLE-INT.1/11-1

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PARCEL C1 AND PART PARCELS, B2, B4 & C2

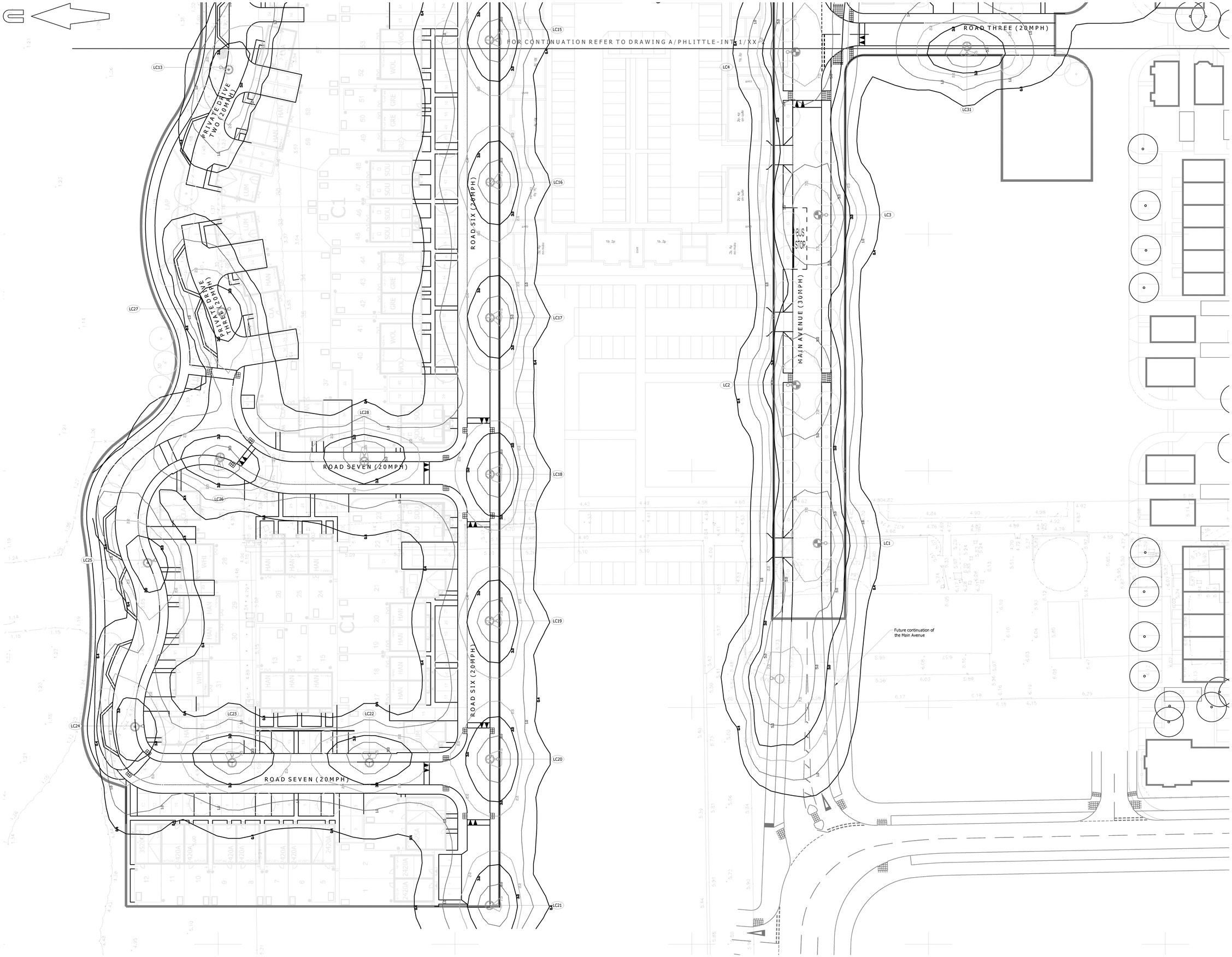
scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
SURFACE TREATMENTS DRAWING (2 OF 2)

drawing number
A/PHLITTLE-INT.1/11-2

rev.
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- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- STREET LIGHTING COLUMN FOR FUTURE JUNCTION DESIGN
- PROPOSED 6m LIGHTING COLUMN WITH PHILIPS LUMA MICRO BGP615 DW50 LUMINAIRE WITH LED-HB SS/657 LAMP - 5.00 klm FLUX (DW50_5000lm_20LED_469mA_SS_CLO_L90_CW) POST-TOP MOUNTED WITH 0° TILT
- PROPOSED 6m LIGHTING COLUMN WITH PHILIPS LUMA MICRO BGP615 DX70 LUMINAIRE WITH LED-HB SS/657 LAMP - 2.40 klm FLUX (DX70_2400lm_20LED_212mA_SS_CLO_L90_CW) POST-TOP MOUNTED WITH 0° TILT
- PROPOSED 6m LIGHTING COLUMN WITH PHILIPS LUMA MICRO BGP615 DM50 LUMINAIRE WITH LED-HB SS/657 LAMP - 1.60 klm FLUX (DM50_1600lm_12LED_293mA_SS_CLO_L90_CW) POST-TOP MOUNTED WITH 0° TILT
- LC01 PROPOSED LIGHTING COLUMN REFERENCE
- PROPOSED TREES
- SITE BOUNDARY

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/AOH4029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
3. Main Avenue lit to Class P4 from BS 5489-1:2013.
4. Residential roads to Parcels C1, C2, B2 & B4 lit to Class P6 from BS 5489-1:2013.
5. For street lighting calculations refer to MB Lighting Reports numbered LR1, LR2 & LR3.
6. Lighting proposals are indicative only and are based on WSCC 'Lighting of Developer Promoted Highway Schemes in West Sussex' dated 11th February 2016. Exact specification and arrangements to be designed by SSE.
7. Landscaping layout taken from WYG drawing numbered LA101 Rev J.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P6	Landscaping amended following updated site layout received 06/12/2017 & note 6 amended. (OJN)	AB	07/12/2017
P5	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P4	Layout amended following updated site layout received 07/09/2017 and updated landscaping layout received 08/09/2017. (OJN)	AB	11/09/2017
P3	Lighting updated following amended site layout received from PHTV dated 05/09/2017. (OJN)	AB	05/09/2017
P2	Layout updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P1	Initial issue. (PB)	AB	17/03/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	PB	checked by	AB
date	MARCH 2017	cad file	MASTER.DWG		

title
STREET LIGHTING DRAWING (1 OF 2)

drawing number
A/PHLITTLE-INT.1/13-1

rev.
P6

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- STREET LIGHTING COLUMN FOR FUTURE JUNCTION DESIGN
- PROPOSED 6m LIGHTING COLUMN WITH PHILIPS LUMA MICRO BGP615 DW50 LUMINAIRE WITH LED-HB SS/657 LAMP - 5.00 klm FLUX (DW50_5000lm_20LED_469mA_SS_CLO_L90_CW) POST-TOP MOUNTED WITH 0° TILT
- PROPOSED 6m LIGHTING COLUMN WITH PHILIPS LUMA MICRO BGP615 DX70 LUMINAIRE WITH LED-HB SS/657 LAMP - 2.40 klm FLUX (DX70_2400lm_20LED_212mA_SS_CLO_L90_CW) POST-TOP MOUNTED WITH 0° TILT
- PROPOSED 6m LIGHTING COLUMN WITH PHILIPS LUMA MICRO BGP615 DM50 LUMINAIRE WITH LED-HB SS/657 LAMP - 1.60 klm FLUX (DM50_1600lm_12LED_293mA_SS_CLO_L90_CW) POST-TOP MOUNTED WITH 0° TILT
- LC01 PROPOSED LIGHTING COLUMN REFERENCE
- PROPOSED TREES
- SITE BOUNDARY

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
3. Main Avenue lit to Class P4 from BS 5489-1:2013.
4. Residential roads to Parcels C1, C2, B2 & B4 lit to Class P6 from BS 5489-1:2013.
5. For street lighting calculations refer to MB Lighting Reports numbered LR1, LR2 & LR3.
6. Lighting proposals are indicative only and are based on WSCC 'Lighting of Developer Promoted Highway Schemes in West Sussex' dated 11th February 2016. Exact specification and arrangements to be designed by SSE.
7. Landscaping layout taken from WYG drawing numbered LA101 Rev J.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P6	Landscaping amended following updated site layout received 06/12/2017 & note 6 amended. (OJN)	AB	07/12/2017
P5	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P4	Layout amended following updated site layout received 07/09/2017 and updated landscaping layout received 08/09/2017. (OJN)	AB	11/09/2017
P3	Lighting updated following amended site layout received from PHTV dated 05/09/2017. (OJN)	AB	05/09/2017
P2	Layout updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P1	Initial issue. (PB)	AB	17/03/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

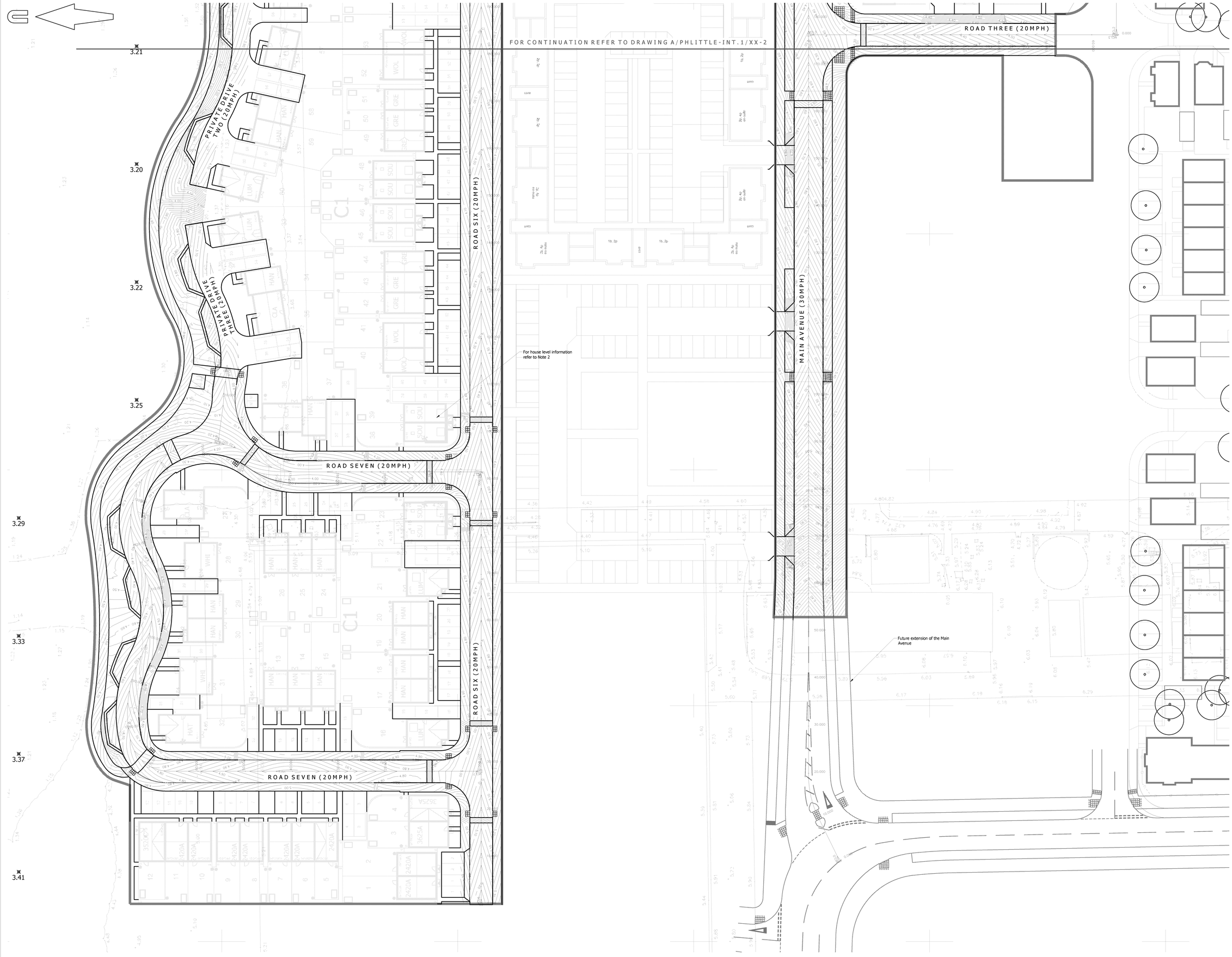
scale	1:250	drawn by	PB	checked by	AB
date	MARCH 2017	cad file	MASTER.DWG		

title
STREET LIGHTING DRAWING (2 OF 2)

drawing number
A/PHLITTLE-INT.1/13-2

rev.
P6

ARUNDEL DISTRICT COUNCIL - 17/03/2017



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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- 3.20 1 IN 100 YEAR FLOOD LEVEL TAKEN FROM WYG FLOOD COMPENSATION REPORT
- SITE BOUNDARY

NOTES:

1. This drawing is not to be scaled
2. The proposed road and footpath levels have been set to ensure they are a minimum of 300mm above the nearest 1in100yr flood level (excl. CC) as described in the WYG flood compensation report. The finished floor levels of the proposed dwellings will be above the adjacent road and footpath levels to ensure they are a minimum of 500mm above the flood level.
3. This drawing is to be read in conjunction with the proposed Surface Treatments drawings A/PHLITTLE-INT.1/11-1 & 11-2
4. This drawing is to be read in conjunction with the latest revision of the Topographic Survey undertaken by WYG in July 2008, drawing numbered GGL/A0H4029/LAY/01.
5. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
6. Southern end of Road Three and western end of Road Two tie in levels have been taken from Glanville drawing CV814O927/615 Rev C1 received from PHTV dated 24/02/2017.
7. Levels Strategy based on flood level information received from PBA dated 07/03/2017.
8. All FFLs to be set to ensure access in accordance with Part M.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P5	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P4	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P3	Drawing amended following updated site layout received from PHTV dated 07/09/2017. (OJN)	AB	11/09/2017
P2	Layout updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P1	Initial issue. (OJN)	AB	17/03/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	MARCH 2017	cad file	MASTER.DWG		

title
CONTOURS AND LEVELS DRAWING (1 OF 2)

drawing number
A/PHLITTLE-INT.1/19-1

rev.
P5

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KEY

- EXISTING KERB LINE
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- PROPOSED DROPPED KERB
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- SITE BOUNDARY

Assumes a middle crest, 62.5m of bridge to be accommodated by drainage

Start of bridge structure (Approximate level 4.2m AOD)

Future continuation of Road Six

Future extension of the Main Avenue

Future continuation of Road Two

For house level information refer to Note 2

PRIVATE DRIVE ONE (20MPH)

ROAD SIX (20MPH)

MAIN AVENUE (20MPH)

ROAD TWO (20MPH)

ROAD ONE (20MPH)

ROAD FIVE (20MPH)

ROAD FOUR (20MPH)

ROAD THREE (20MPH)

PRIVATE DRIVE TWO (20MPH)

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-1

NOTES:

1. This drawing is not to be scaled
2. The proposed road and footpath levels have been set to ensure they are a minimum of 300mm above the nearest 1in100yr flood level (incl. CC) as described in the WYG flood compensation report. The finished floor levels of the proposed dwellings will be above the adjacent road and footpath levels to ensure they are a minimum of 500mm above the flood level.
3. This drawing is to be read in conjunction with the proposed Surface Treatments drawings A/PHLITTLE-INT.1/11-1 & 11-2
4. This drawing is to be read in conjunction with the latest revision of the Topographic Survey undertaken by WYG in July 2008, drawing numbered GGL/A04029/LAY/01.
5. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV E.
6. Southern end of Road Three and western end of Road Two tie in levels have been taken from Glanville drawing CV8140927/615 Rev C1 received from PHTV dated 24/02/2017.
7. Levels Strategy based on flood level information received from PBA dated 07/03/2017.
8. All FFLs to be set to ensure access in accordance with Part M.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P5	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P4	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P3	Drawing amended following updated site layout received from PHTV dated 07/09/2017. (OJN)	AB	11/09/2017
P2	Layout updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P1	Initial issue. (OJN)	AB	17/03/2017

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PERSIMMON HOMES THAMES VALLEY

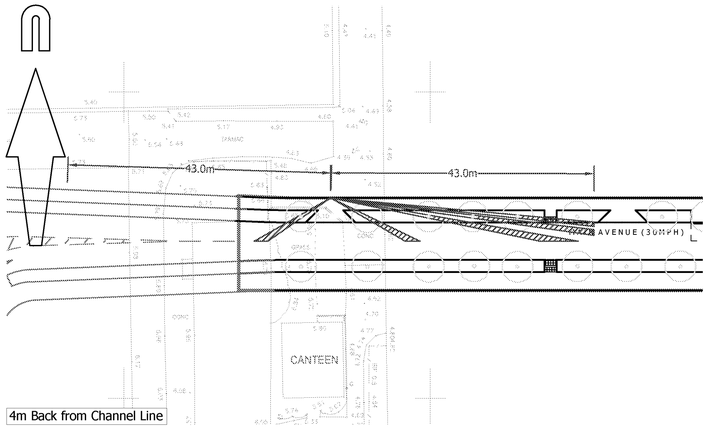
project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	MARCH 2017	cad file	MASTER.DWG		

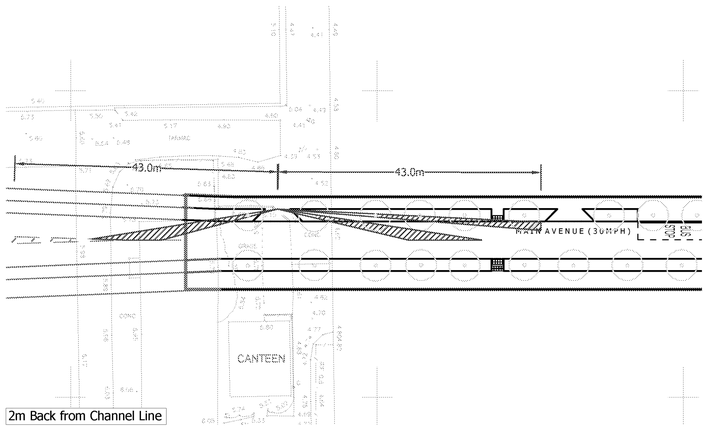
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CONTOURS AND LEVELS DRAWING (2 OF 2)

drawing number
A/PHLITTLE-INT.1/19-2

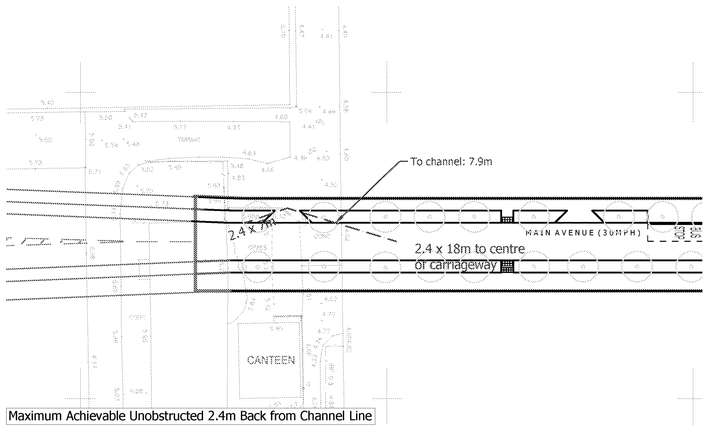
rev.
P5



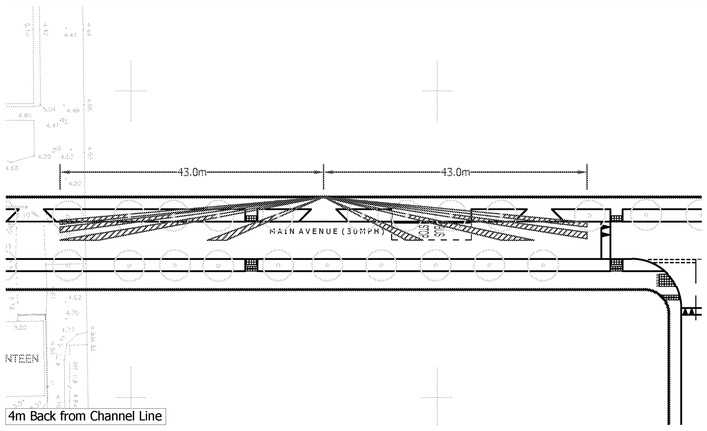
4m Back from Channel Line



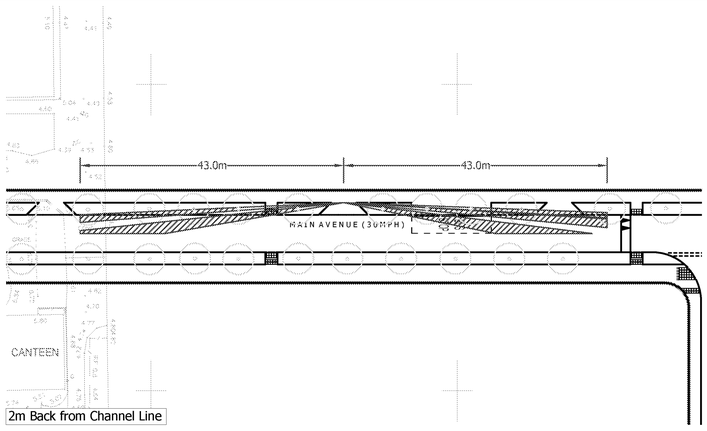
2m Back from Channel Line



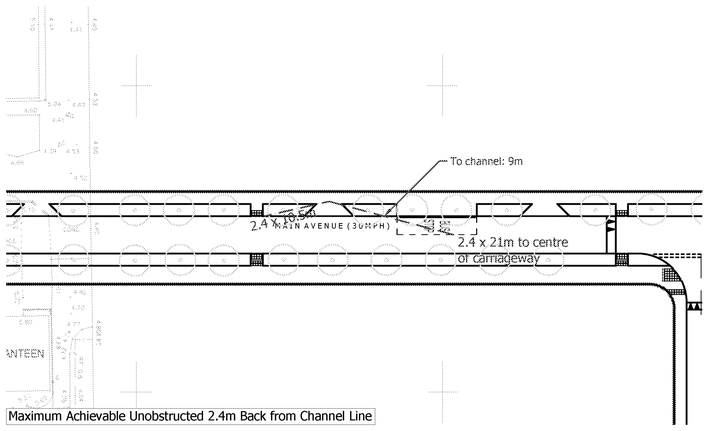
Maximum Achievable Unobstructed 2.4m Back from Channel Line



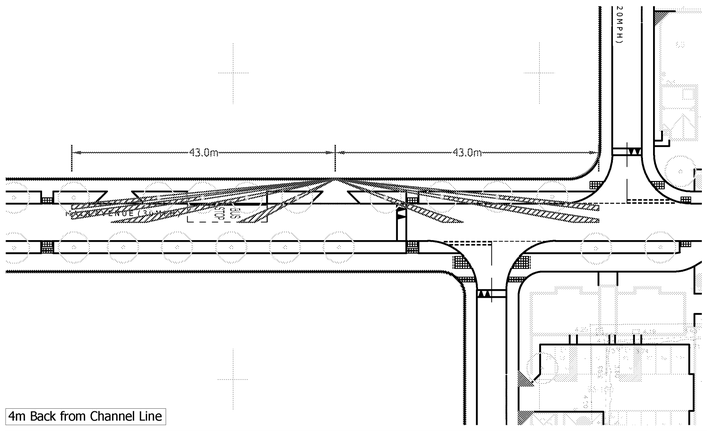
4m Back from Channel Line



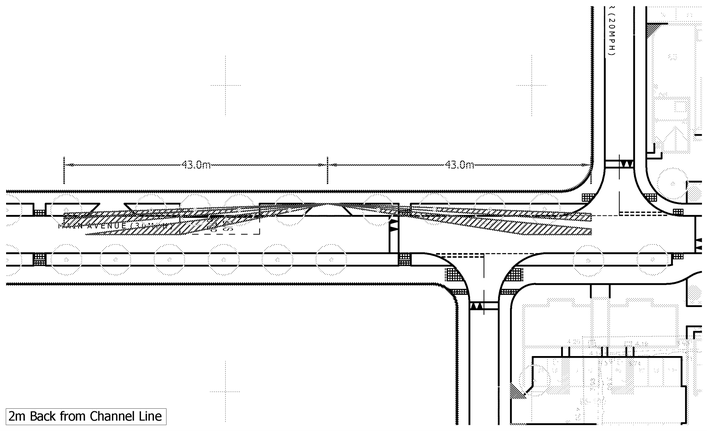
2m Back from Channel Line



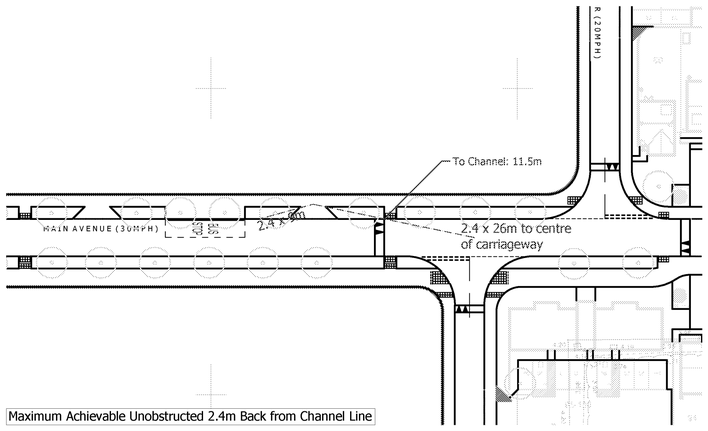
Maximum Achievable Unobstructed 2.4m Back from Channel Line



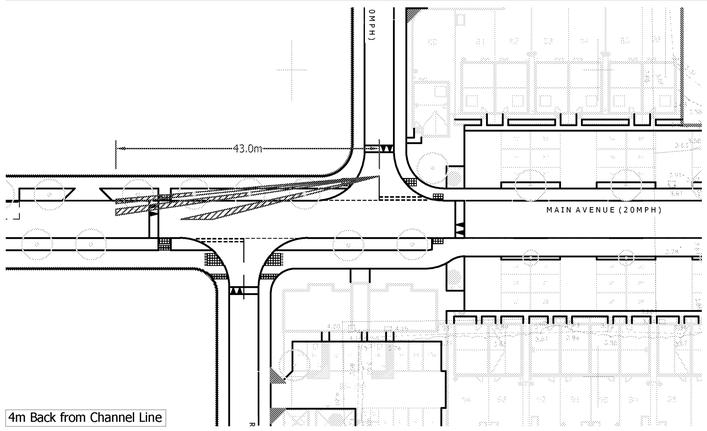
4m Back from Channel Line



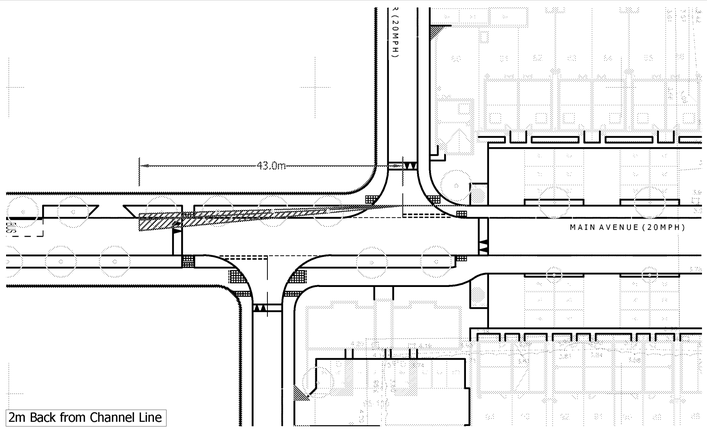
2m Back from Channel Line



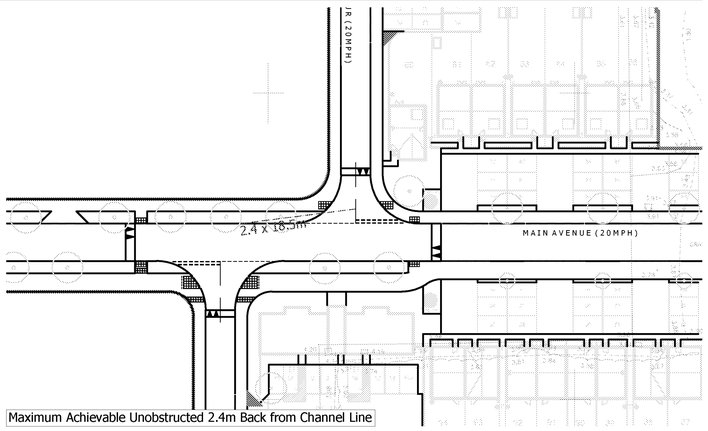
Maximum Achievable Unobstructed 2.4m Back from Channel Line



4m Back from Channel Line



2m Back from Channel Line



Maximum Achievable Unobstructed 2.4m Back from Channel Line

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PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P1	Initial issue. (JME)	AB	07/12/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON
PARCELS C1, B2 & B4

scale	1:500	drawn by	JME	checked by	AB
date	DECEMBER 2017	cad file	VIS-1-P1.DWG		

title
VISIBILITY ENVELOPS AT JUNCTIONS
OBSTRUCTED BY TREES

drawing number
A/PHLITTLE-INT.1/VIS-1

rev.
P1

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FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-2

ROAD THREE (20MPH)

PRIVATE DRIVE TWO (20MPH)

PRIVATE DRIVE THREE (20MPH)

ROAD SIX (20MPH)

MAIN AVENUE (30MPH)

ROAD SEVEN (20MPH)

VIEWPORT 1

VIEWPORT 2

VIEWPORT 3

VIEWPORT 4

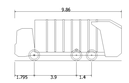
Future continuation of the Main Avenue

KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- 10m REFUSE DRAG DISTANCE OFFSET
- REFUSE COLLECTION POINT
- SITE BOUNDARY



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



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

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV C.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P8	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P7	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P6	Drawing amended following updated site layout received from PHTV dated 08/09/2017. (OJN)	AB	11/09/2017
P5	Drawing amended and swept paths updated following updated layout received from PHTV dated 05/09/2017. (OJN)	AB	05/09/2017
P4	Drawing amended and swept paths updated following updated layout received from PHTV dated 22/08/2017. (OJN)	AB	31/08/2017
P3	Drawing updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
ANTICIPATED SWEPT PATH OF A LARGE REFUSE VEHICLE & LARGE CAR ACCESSING THE SITE (1 of 2)

drawing number
A/PHLITTLE-INT.1/TK-1

rev.
P8

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KEY

- EXISTING KERB LINE
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- PROPOSED DROPPED KERB
- PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- 10m REFUSE DRAG DISTANCE OFFSET
- REFUSE COLLECTION POINT
- LIMIT OF WORKS

VIEWPORT 1

VIEWPORT 2

VIEWPORT 3

VIEWPORT 4

VIEWPORT 5

VIEWPORT 6

VIEWPORTS 1 & 2

VIEWPORT 7

Future continuation of Road Six

Future continuation of the Main Avenue

Future continuation of Road Two

ROAD ONE (20MPH)

ROAD TWO (20MPH)

ROAD THREE (20MPH)

ROAD FOUR (20MPH)

ROAD FIVE (20MPH)

ROAD SIX (20MPH)

MAIN AVENUE (20MPH)

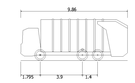
PRIVATE DRIVE ONE (20MPH)

PRIVATE DRIVE TWO (20MPH)

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-1



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



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

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV C.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P8	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P7	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P6	Drawing amended following updated site layout received from PHTV dated 08/09/2017. (OJN)	AB	11/09/2017
P5	Drawing amended and swept paths updated following updated layout received from PHTV dated 05/09/2017. (OJN)	AB	05/09/2017
P4	Drawing amended and swept paths updated following updated layout received from PHTV dated 22/08/2017. (OJN)	AB	31/08/2017
P3	Drawing updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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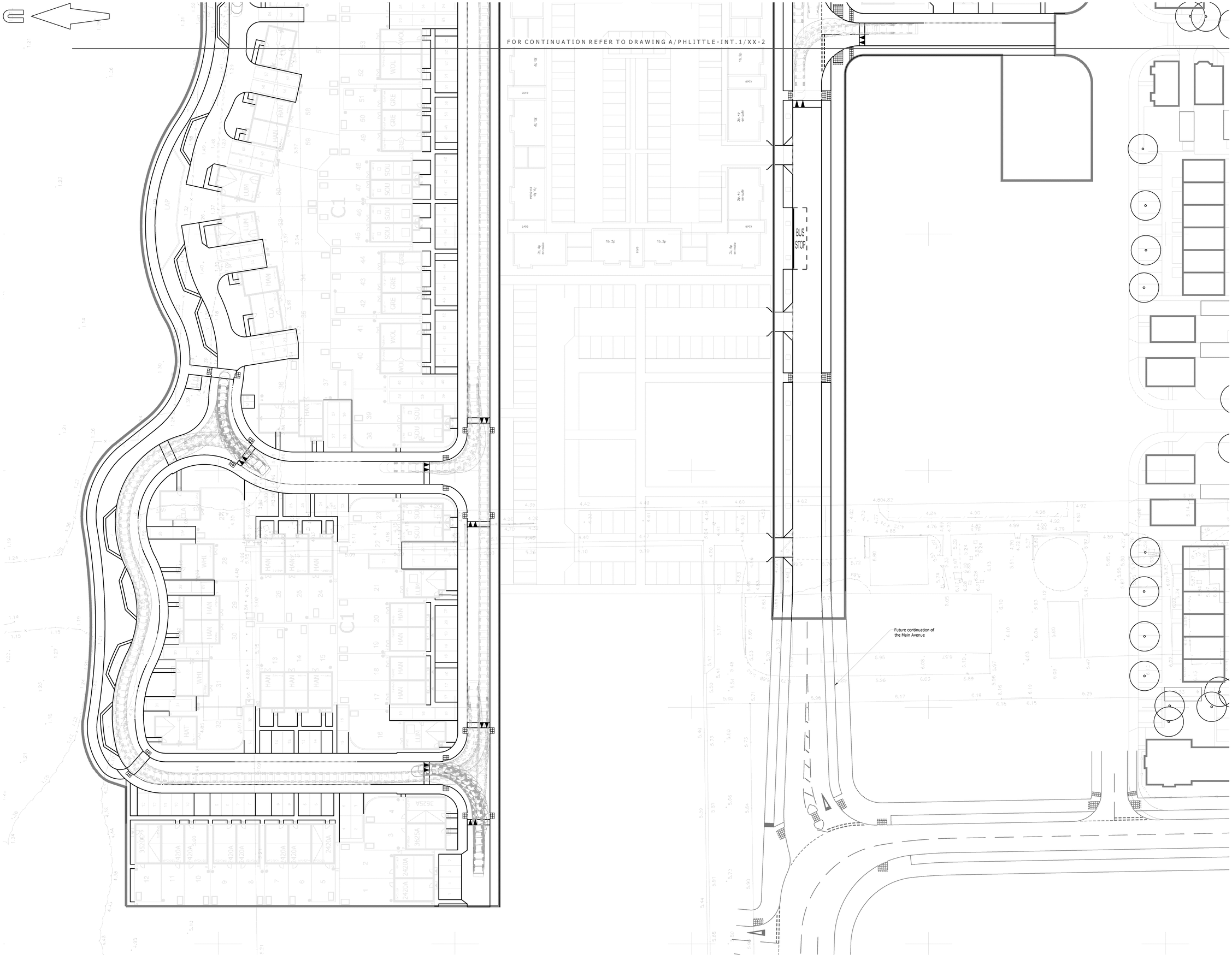
client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title
ANTICIPATED SWEPT PATH OF A LARGE REFUSE VEHICLE & LARGE CAR ACCESSING THE SITE (2 of 2)

drawing number	rev.
A/PHLITTLE-INT.1/TK-2	P8



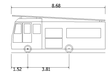
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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- SITE BOUNDARY



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

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV B.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P4	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P3	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P2	Drawing amended following updated site layout received from PHTV dated 08/09/2017. (OJN)	AB	11/09/2017
P1	Initial issue. (OJN)	AB	05/09/2017

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PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	drawn by	checked by
1:250	OJN	AB

date	cad file
SEPTEMBER 2017	MASTER.DWG

title
ANTICIPATED SWEPT PATH OF A FIRE TENDER ACCESSING THE SITE (1 of 2)

drawing number
A/PHLITTLE-INT.1/TK-3

rev.
P4

ARUN DISTRICT COUNCIL 14 FEB 2018

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- LIMIT OF WORKS

Future continuation of Road Six

Future continuation of the Main Avenue

Future continuation of Road Two

VIEWPORT 5



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

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A0H029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV B.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P4	Landscaping amended following updated site layout received 06/12/2017. (OJN)	AB	07/12/2017
P3	Parking outside plots 80-94 amended and other minor amendments following updated site layout received 26/10/2017. (OJN)	AB	31/10/2017
P2	Drawing amended following updated site layout received from PHTV dated 08/09/2017. (OJN)	AB	11/09/2017
P1	Initial issue. (OJN)	AB	05/09/2017

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project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	SEPTEMBER 2017	cad file	MASTER.DWG		

title
ANTICIPATED SWEPT PATH OF A FIRE TENDER ACCESSING THE SITE (2 of 2)

drawing number
A/PHLITTLE-INT.1/TK-4

rev.
P4

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-1

APPENDIX B: Transport Statement

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PERSIMMON HOMES THAMES VALLEY NORTH LITTLEHAMPTON (TODDINGTON) PHASE 2 RESIDENTIAL DEVELOPMENT BY PERSIMMON HOMES, COMPRISING PARCEL C1 AND PART PARCELS B2, B4 AND C2

TRANSPORT STATEMENT

SEPTEMBER 2017



the journey is the reward

ARUN DISTRICT COUNCIL LU/121/17/RES

PERSIMMON HOMES THAMES VALLEY

NORTH LITTLEHAMPTON (TODDINGTON)

PHASE 2 RESIDENTIAL DEVELOPMENT BY PERSIMMON HOMES, COMPRISING PARCEL C1 AND PART PARCELS B2, B4 AND C2

TRANSPORT STATEMENT

SEPTEMBER 2017

Project Code:	**PHLittlehampton.1**
Prepared by:	**John Gilby/George Stow**
Approved by:	**Paul Stocker**
Issue Date:	**September 2017**
Status:	**Final**

Mayer Brown Limited, Lion House, Oriental Road, Woking, Surrey GU22 8AR

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[redacted]

Persimmon Homes Thames Valley
North Littlehampton (Toddington)
Phase 2 Residential Development by Persimmon Homes, Comprising Parcel C1 and Part Parcels B2, B4 and C2
Transport Statement

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APPENDIX B: Site in Relation to Other Proposed Developments in the NLSDA
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APPENDIX D: Parking Space Calculations

APPENDIX E: Vehicle Tracking, Sweep Paths

APPENDIX F: TRICS Results and Calculations

1 Introduction

1.1 Mayer Brown has been commissioned by Persimmon Homes Thames Valley to produce this Transport Statement in support of the proposed application to redevelop further plots of the North Littlehampton (Toddington) site, creating 126 residential dwellings, as part of a permitted larger scheme to create a sustainable urban extension to the town, known as 'the North Littlehampton Strategic Development Area' (NLSDA) (see app. ref. LU/47/11).

1.2 The location of the site in relation to the local highway network is shown in Figure 1.1 below:

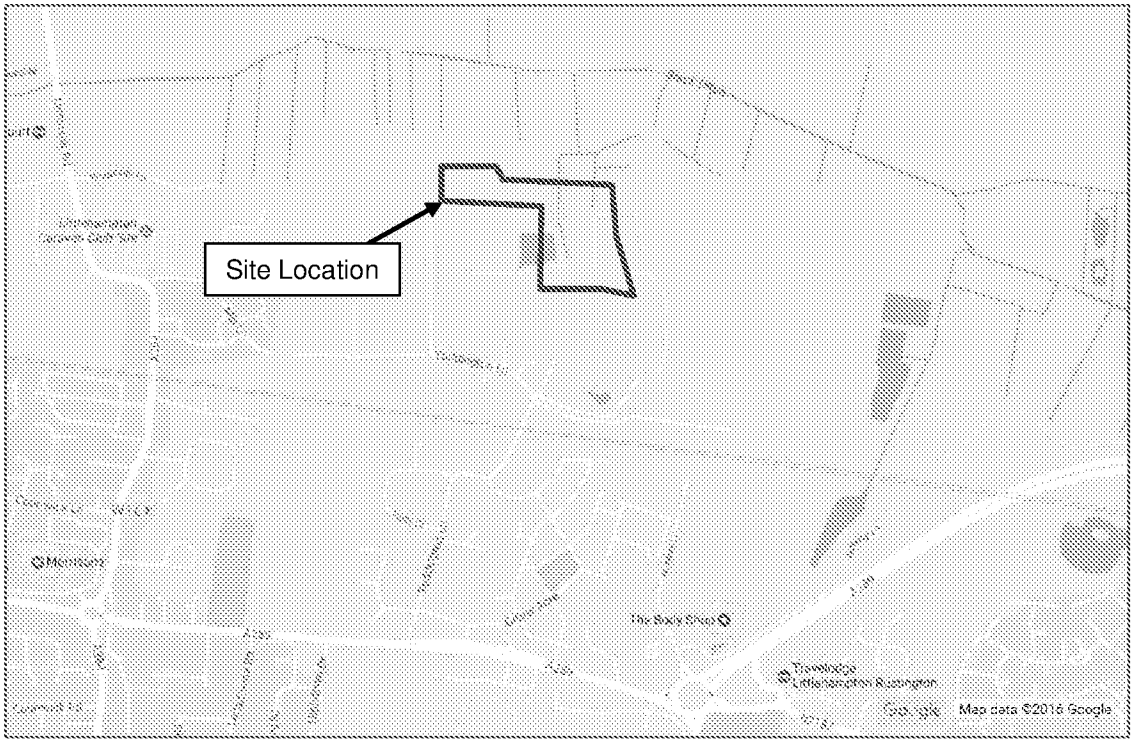


Figure 1.1: Site in Relation to the Local Highway Network

1.3 The location of the site in relation to the North Littlehampton Strategic Development Area proposals masterplan is shown in Figure 1.2 below:

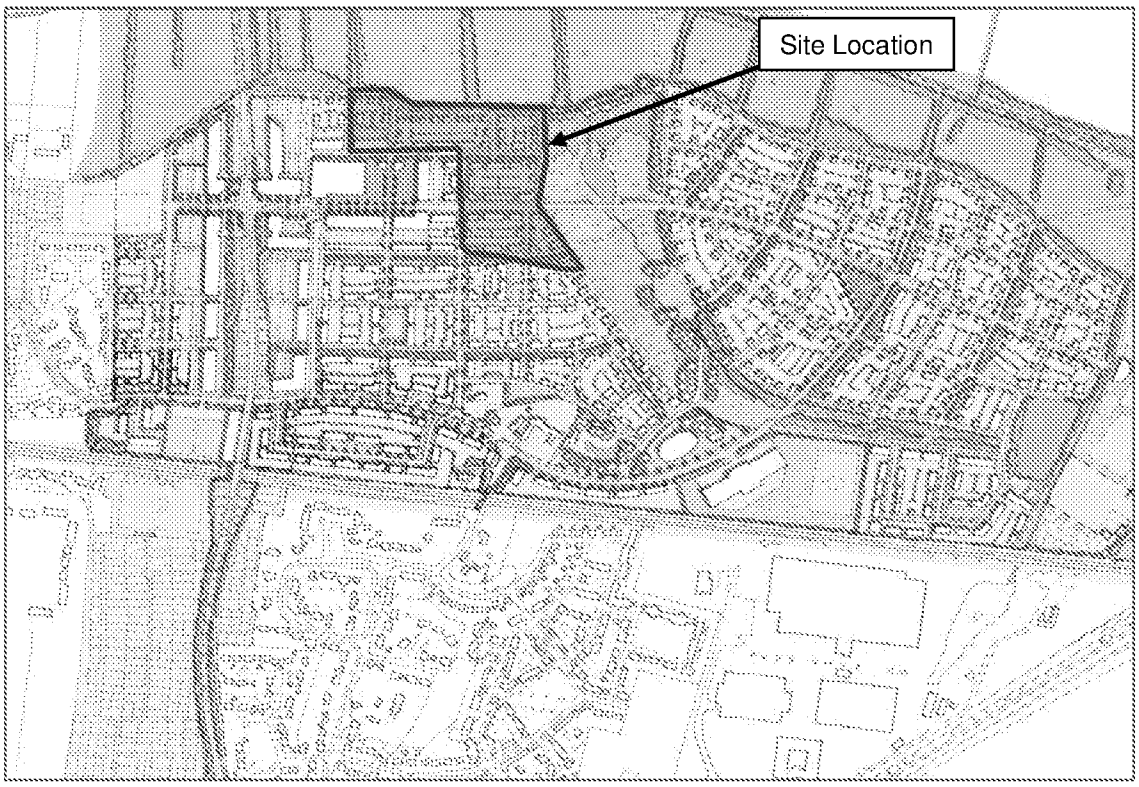


Figure 1.2: Site in Relation to the Proposed North Littlehampton Strategic Development Area

1.4 The site was previously part of a nursery.

1.5 The residential zones within the NLSDA have been divided into land parcels with alphanumeric names (e.g. E1, B5, etc). For cross-reference between this document and NLSDA documents, sites C1, C2, B2 and the northern side of B4 form what is referred to as 'the site' in this report.

1.6 The creation of these dwellings and the supporting infrastructure on the site is known as 'Phase 2' of the development of the NLSDA. Phase 1 (A1 site) is already approved and under construction, comprising of the creation of 114 residential dwellings north of Toddington Lane, to the west of the proposed bypass. Phase 1 (B3 & B5 sites) is also under construction and is located to the south of the site.

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1.7 The NLSDA approved outline application was subject to a comprehensive multi-modal Transport Assessment and the traffic impact of the proposals has already been considered in detail. Taking this into account and due to the predicted minimal traffic impact of the proposals, this assessment has been set out in the format of a Transport Statement providing:

- a detailed sustainability and accessibility assessment of the site
- a detailed examination of the development proposals
- an assessment of the net highways and transportation impacts of the proposed scheme

1.8 The remainder of the report consists of the following sections:

- Site Location & Existing Conditions
- Accessibility
- Development Proposals
- Traffic Impact
- Summary and Conclusions

1.9 This report concludes that the proposed development:

- is located within walking/cycling distance of key services in the area
- is easily accessible on foot or by cyclists, with public/communal transport links to be installed soon after completion
- will provide suitable access, parking and servicing arrangements
- will have no material impact on the operation of the local highway network

1.10 It is therefore concluded that there are no reasons why the proposed development should not be permitted on highways or transportation grounds.

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2 Site Location and Existing Conditions

2.1 The site is located to the north of Littlehampton, and will lie directly to the east of the proposed Lyminster Bypass. This bypass will improve north-south access to Littlehampton by removing delays associated with the existing A284 Lyminster Road and the Wick level crossing

2.2 Once constructed, the bypass will provide access to and from the A259 to the south and the A27 to the north.

2.3 The site lies just north of Toddington Lane, which itself runs parallel to the railway line running east-west from Ford to Angmering (additionally, a rail junction connecting Littlehampton to the south and Arundel to the north is a further 2km west). Toddington Lane crosses the railway at a level crossing to the southeast of the site, and connects, via Mill Lane, to Lyminster Road (A284) to the southwest, which in turn also crosses the railway at the Wick level crossing.

2.4 Recent improvement works to Toddington Lane have involved the installation of street lighting and the creation of a short one-way section of this otherwise two-way single carriageway. Toddington Lane is subject to a 30mph speed limit, and is the subject of an approved improvement scheme involving carriageway widening and the provision of additional street lighting and footways.

2.5 Mill Lane, connecting Toddington Lane to Lyminster Road, is a two-way single carriageway residential road subject to a 30mph speed limit and benefits from street-lit footways along either side of the carriageway. It feeds into a number of smaller residential roads, including a caravan club site. This road will also be improved as part of the Toddington Lane works.

2.6 Prior to the bypass' completion, most journeys from the site to amenities or local facilities will be via Toddington Lane/Mill Lane and Lyminster Road (A284).

2.7 A number of shops and facilities are located along the A284 further south towards Littlehampton, including:

- Morrisons supermarket and petrol filling station
- Post Office
- Primary schools
- Takeaway restaurants
- Pubs

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Accident Statistics

2.8 The road traffic accident data recorded over the past 5 years on the local highway network in the vicinity of the site has been assessed by reference to the CrashMap website, which provides information about recorded injury collisions on the roads of Great Britain. CrashMap only uses official data from incidents reported to the police so the results are the most reliable available.

2.9 The accident data provided identifies that over the period analysed, there has not been a recorded accident on Toddington Lane or Mill Lane, the main roads closest to the site. The data also shows that only one slight severity accident has occurred at the Mill Lane/A254 junction.

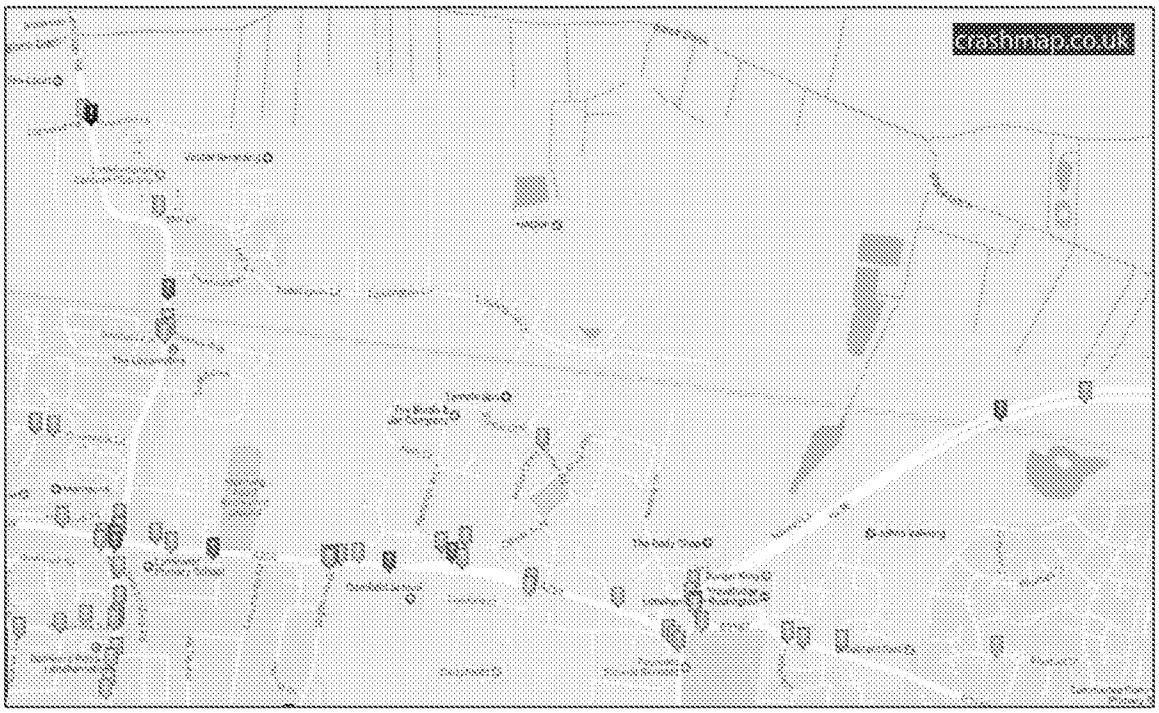


Figure 2.1: Accident Map

2.10 It is therefore evident that there are no significant road safety issues related to the existing roads serving the site. As set out later in this report, the proposals will have a beneficial impact in terms of traffic attraction compared to the consented use of the site and it can therefore be concluded that the proposals have no road safety implications.

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3 Accessibility

Bus Accessibility

3.1 The nearest bus stops to the site are the Six Bells bus stops, which lie on Lyminster Road, 270m north of where Mill Lane meets Lyminster Road. Mill Lane is a short road connecting Lyminster Road to Toddington Lane.

3.2 The Six Bells bus stops are situated approximately 1,100m from the site via present road access routes, which represents a 14-minute walk, assuming a comfortable walking speed of 80m/min.

3.3 The Seaton Road bus stops lie slightly further south on Lyminster Road and are virtually equidistant to the site as the Six Bells bus stops are.

3.4 Two bus services run from these stops, the 602 and the 700 Coastliner.

3.5 The 602 bus route is a school bus running to St Philip Howard School, and calls at the Six Bells bus stop northbound at 08:00 and southbound at 15:39, on weekdays during term time only. The route serves Barnham, Walberton, Arundel, Littlehampton and Rustington.

3.6 The 700 Coastliner bus service is a series of three bus routes, all known as 700 Coastliners, that together link Brighton to Littlehampton, Littlehampton to Chichester and Chichester to Portsmouth.

3.7 The Brighton to Littlehampton route stops at the Six Bells and Seaton Road bus stops, and provides access to Arundel to the north (with a stop at Arundel Rail Station), and Littlehampton town to the south. Further en route to Brighton, the bus has stops in East Preston, Goring-by-Sea, Worthing, Shoreham-by-Sea, Southwick, Hove and Brighton.

3.8 The 700 Coastliner is scheduled to stop at the Six Bells bus stop every half an hour, however additional 700 Coastliner services run from Selwyn Avenue bus stop, just two stops further on Brighton-bound (one stop further than Seaton Road bus stop). Selwyn Avenue bus stop is a further 500m from Seaton Road, or an approximately 6-minute walk.

3.9 From the Anchor Springs bus stops, which lie just 370m from Littlehampton Rail Station, 700 Coastliner buses run every 10 minutes.

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3.10 A summary of the 700 Coastliner bus service from Littlehampton towards Brighton is provided in the following table:

Bus Stop	First Bus	Subsequent Bus Frequency	Last Bus
Jarvis Road	06:27	2 per hour	18:43
The Six Bells	06:39	2 per hour	18:54
Selwyn Avenue	06:02	3 per hour until 07:52, then 2 per hour	18:57
Anchor Springs	06:10	3 per hour until 07:44, then 6 per hour until 19:30, then 1 per hour	22:30

Table 3.1: 700 Coastliner bus service from Littlehampton towards Brighton

3.11 The above has shown that the site is accessible by bus from Arundel – and Arundel Rail Station - to the north, and Littlehampton town to the south, with services continuing east along the south coast to Brighton.

3.12 In addition, a dedicated bus service will serve the NLSDA by the time the whole scheme is completed, with a stop proposed to be situated less than 150m west of the site.

3.13 The 2013 S106 document relating to the NLSDA details in Schedule 11 that a 'Bus Service Contribution' shall be paid by the owners to Arun District Council '*prior to the Occupation of more than 100 Dwellings'.* It is understood that this payment will occur before the completion of the proposals at the site, as over 200 dwellings are already consented to be built on other sites in the NLSDA.

3.14 Paragraph 3.59 of the NLSDA Transport Assessment states that '*The new* [bus] *service will operate 7 days a week and will provide a half hourly service operating 0600- 2100 on weekdays and 0900 to 1600 at weekends'.*

3.15 It is therefore evident that bus travel to the site from local areas is possible and will improve as the NLSDA is developed.

Rail Accessibility

3.16 The site is situated between Arundel Rail Station (2.37km north-west) and Littlehampton Rail Station (2.2km south-west) – the 700 Coastliner bus service calls at both of these stations, providing easy multi-modal public transport to further afield.

3.17 The now superseded Planning Policy Guidance 13 (Transport) had set out that cycling offers an attractive alternative to the car for trips of less than 5km, and this distance

ARUN DISTRICT COUNCIL LU/121/17/RES

remains a useful indicator of appropriate cycling distances. With these guidelines in mind, it is clear that the site's vicinity to Arundel and Littlehampton stations allows for the possibility of combined cycle and rail multi-modal journeys to and from the site.

3.18 Arundel station has 24 storage spaces for bicycles, in the form of stands located at platform 1 and in the carpark.

3.19 Littlehampton has 82 storage spaces for cycles, in the form of stands and wheel racks in the car park.

3.20 Travel to either station from the site will involve joining the A284 from Mill Lane. From this junction, the journey to Arundel Rail Station is 3.1km north, via traversing the A284 until its end at a roundabout junction with the A27, whereat Arundel Rail Station is 700m westbound.

3.21 From the Mill Lane/A284 junction to Littlehampton Rail Station, the 2.2km journey must be made south, continuing along the A284 until its southernmost point, where it joins Franciscan Way/Arundel Road, just 170m from the station.

3.22 Both Arundel and Littlehampton Rail Stations are served by exclusively Southern Rail train services. Both stations provide access to a wide range of destinations across the South-East, including Worthing, Hove, Brighton, London Bridge, London Victoria, Bognor Regis, Portsmouth Harbour and Southampton Central.

3.23 The peak hour rail services accessible from Littlehampton and Arundel are summarised in the following tables:

Terminus	Other Notable Stops On Route	AM Peak	PM Peak	Weekend Peak
Chichester	Barnham	2 per hour	1 per hour	1 per hour
Brighton	Worthing, Shoreham-by-Sea, Hove	2 per hour	1 per hour	1 per hour
London Bridge	Gatwick Airport, East Croydon	1 per hour	-	-
London Victoria	Worthing, Shoreham-by-Sea, Hove, Brighton, Gatwick Airport, East Croydon, Clapham Junction	2 per hour	2 per hour	2 per hour
Bognor Regis	Barnham	1 per hour	2 per hour	1 per hour
Portsmouth Harbour	Barnham, Southbourne, Portsmouth & Southsea	1 per hour	-	1 per hour
Portsmouth & Southsea	Barnham, Southbourne	1 per hour	1 per hour	1 per hour

Table 3.2: Direct Train Services from Littlehampton

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Terminus	Other Notable Stops On Route	AM Peak	PM Peak	Weekend Peak
Chichester	Barnham	2 per hour	-	1 per hour
London Bridge	Horsham, Crawley, Gatwick Airport, East Croydon	1 per hour	-	-
London Victoria	Horsham, Crawley, Gatwick Airport, East Croydon, Clapham Junction	2 per hour	2 per hour	2 per hour
Bognor Regis	Barnham	2 per hour	3 per hour	2 per hour
Littlehampton	-	1 per hour	-	-
Southampton Central	Barnham, Chichester, Southbourne, Havant, Cosham	1 per hour	-	1 per hour

Table 3.3: Direct Train Services from Arundel

Walking and Cycling Accessibility

3.24 Toddington Lane has a footway provision along its southern side and will be further improved as part of the approved improvement scheme referred to previously.

3.25 There is a Premier Supermarket Express 50m south of the Wick level crossing, placing it approximately 950m from the site by road (a 12-minute walk, assuming a leisurely walking speed of 80m/min). The Locomotive public house is situated across the road from the Premier Supermarket Express.

3.26 A further 370m from the Premier Supermarket Express south (a 5-minute walk) is a Morrisons supermarket.

3.27 The now superseded Planning Policy Guidance Note 13 describes 2km as a reasonable commuting walking distance, and this guideline still provides a useful indication of acceptable pedestrian trip length. The above local amenities are well within that range, and thus some shopping excursions can be made by foot from the site.

3.28 Part of the NLSDA involves making improvements to Toddington Lane, including the installation of additional street lighting and footways alongside the road with intent on making Toddington Lane much more accessible by foot or cycle, and preventing its use as a 'rat run'.

3.29 Littlehampton is a cycling destination, lying on Route 2 of the National Cycle Network, between Dover and St. Austell, and boasting stunning seafront views from the cycle route on the prom by the beach.

3.30 The now superseded Planning Policy Guidance Note 13 provides useful indications of acceptable journey lengths via sustainable modes of transport and recognises a cycle journey length of 5km as a recommended maximum for judging the viability of local journeys. Lyminster Primary School, Cornfield School, The Littlehampton Academy,

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White Meadows Primary Academy, St Catherine's Catholic Primary School and Riverbeach Primary School are all within 3km of the site, and so clearly within cycling distance.

3.31 The seafront is approximately 3.8km (or a 15-minute cycle, assuming an average cycling speed of 260m/min) from the site, and is therefore also within comfortable cycling distance.

3.32 With most, if not all, of Littlehampton within cycling distance of the site, including the station, it is reasonable to assume that many journeys to local amenities – or the daily commute for residents working in Littlehampton – could be made by cycle.

Accessibility Summary

3.33 It can be seen that the site is accessible by bus or cycle locally, with a bus/rail and cycle/rail multi-modal trip combination possible for visitors from further afield.

3.34 The close proximity of two stations with frequent services across the South-East allows the site to be accessed from further afield destinations such as Brighton, Bognor Regis and Chichester.

3.35 Given the proximity of the site to rest of the town, many journeys to amenities by the site's residents can be made by cycle, which will further contribute to keeping car use at the site to a minimum.

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4 Development Proposals

4.1 The proposed site layout is illustrated in Appendix A of this report.

4.2 The development proposed is for the construction of 126 dwellings, the vast majority houses, along with the associated roads, gardens and parking spaces.

4.3 16 of these dwellings will be socially rented, and a further 20 will have shared ownership. The remaining will be privately owned.

4.4 The 126 dwellings are comprised of:

- 6 socially rented flats
- 23 detached private houses
- 14 end terrace houses
- 9 mid terrace houses
- 74 semi-detached houses (including 10 socially rented houses)

4.5 This is one part of a much larger scheme to develop the land just north of the railway tracks that lie to the north of Littlehampton (the North Littlehampton Strategic Development Area - NLSDA), which will include further residential dwellings, two schools, a library, office space and shops, amongst other amenities.

Site Access

4.6 The main access to the site currently is from two private access roads with entry points from Toddington Lane – one heads directly north to the site from a central point along Toddington Lane, whilst the other begins at the most eastern point of Toddington Lane and curves anti-clockwise until it terminates at the site, at a more westernly point than where the road meets Toddington Lane.

4.7 Until the southern section of the bypass is completed, access to the site from Toddington Lane will be provided via the Internal Distributor Road (IDR), to be constructed parallel and to the east of the proposed bypass, connecting Toddington Lane, the Main Avenue through the site and the B3 access road – replacing, and in almost the same location, as the currently existing private road that provides access to the now-defunct nursery. Once the bypass has been completed, the main road through the site (Main Avenue) will be connected to the bypass by a roundabout. This highway network is illustrated in Appendix B.

4.8 As set out above, improvement works are planned for Toddington Lane. The 2013 S106 document relating to the NLSDA details in schedule 10, paragraph 7 that the Toddington

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Lane improvements will be completed prior to the occupation of more than 100 dwellings. This is likely to occur before the completion of the proposed at the site, as over 200 dwellings are already consented to be built on other sites in the NLSDA.

4.9 To the southeast of the site, Toddington Lane crosses the railway line at a level crossing.

On-Site Parking Provision

4.10 A diagram of the proposed parking layout within the site is provided in Appendix C.

4.11 In the proposed site developments, allocated parking is provided adjacent – or in very close proximity – to the dwellings to which they are associated.

4.12 Most houses have 2 designated parking bays nearby. Houses 1, 2, 11, 91 and 92 (numeric labels as given in Appendix C) have only 1 allocated parking bay, however an extra unallocated space is provided adjacent to these bays (except for house 11).

4.13 Each of the six flats has 1 designated parking bay, though an additional 2 visitor parking spaces are provided within the flats' car park, as are 4 unallocated parking spaces.

4.14 The site is located within the ward Wick with Toddington. The Office for National Statistics provides online data from the 2011 census, revealing a ratio of 1.3 vehicles available to each household within the ward. Given the ratio of 249 allocated parking spaces for 126 properties (an average of 2.0 allocated parking bays per household), and the additionally provided visitor and unallocated parking bays, it is believed there will be ample parking capacity within the site upon its completion.

4.15 Further to the allocated parking bays, 8 houses will be built with garages, providing vehicle storage.

4.16 Arun District Council provides guidance for the recommended maximum provision of parking spaces for new developments in its 2000 parking standards supplementary planning guidance document. This guidance recommends providing 2 designated spaces per small dwelling (3 or less bedrooms and a floor area not exceeding 120sqm) and 3 spaces per large dwelling, in addition to 0.2 spaces per dwelling for visitors and service vehicles.

4.17 In total, this guidance recommends a maximum of 294.2 vehicle parking spaces for the site.

4.18 More recently, parking provision guidance comes from West Sussex County Council, who in their 2010 'Guidance for Parking in New Residential Development' document, provide a calculation tool that determines the recommended parking for a new

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development based upon factors including location, habitable rooms and number of units of each size. Its purpose is to '*calculate the number of parking spaces required at new residential development on a site specific basis'.*

4.19 Based solely on information sourced from the August 2017 draft plans (Appendices A-C), the calculator believes there is a parking demand of 282 spaces, of which 249 are the already allocated residential parking bays and garages. In addition to these, the guidelines calculator requires another 8.2 unallocated spaces for residents and 24.4 unallocated spaces for visitors.

4.20 The current plans closely reflect these requirements, providing 14 unallocated parking spaces and 18 visitor parking spaces.

4.21 Appendix D contains the calculations and methodology employed to obtain the parking space requirement figures for all requirement models presented in this report.

4.22 Within age ranges 55-64, 65-74 and 75+, Wick with Toddington ward has proportionally higher populations than the average in the South-East or in England as a whole. As such, parking has been provided with disabled access in mind.

4.23 West Sussex Parking Standards 2010 (WSPS10) Principle F 2.11 d reads 'Spaces for disabled people – *Provision should be consistent with guidance in "Manual for Streets".'.* Manual for Streets (MfS) 8.3.25 reads '*It is preferable to provide these spaces in unallocated areas, including on-street, as it is not normally possible to identify which properties will be occupied by or visited by disabled people. It is recommended that spaces for disabled people are generally located as close as possible to building entrances.'.*

4.24 89 allocated and unallocated bays have been designed with accessibility as a priority, and these bays are marked on the parking schedule in Appendix C of this report. All parking bays in the development are off-street and are generally behind footways with flush kerbs, allowing easier access for wheelchair or disability scooter users.

4.25 All parking bays are a minimum of 2.4m wide and 4.8m long and approximately two thirds are not directly bound by parking spaces on either side, in accordance with MfS' requirements in paragraph 8.3.58 – *'The recommended dimensions of off street parking bays are that they are laid out as a rectangle at least 4.8 m long by 2.4 m wide for the vehicle, along with additional space as set out in Inclusive Mobility.'.*

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4.26 WSPS10 provides guidance on the provision that ought to be made for cycles on new developments. It recommends 1 or 2 cycle spaces per house, depending on size, and 0.5 cycle spaces per flat.

4.27 With these guidelines, the proposed development requires 210 cycle parking spaces.

4.28 As all new dwellings in the proposed development have gardens – bar the flats – cycles are recommended to be kept inside a shed in the back garden. Assuming each shed could store 2 bicycles, cycle parking space requirements are easily met.

4.29 Parking provision for 4 cycles for the flats is provided in a bike and bin storage outbuilding within the flats' car park.

4.30 West Sussex Parking Standard 2003 (WSPS03) recommends one visitor cycle parking space per 8 dwellings, requiring 16 visitor cycle parking spaces for the development. This is provided by way of 4 sets of public cycle stands throughout the development, each with capacity for 4 cycles.

4.31 WSPS10 Principle F 2.11 e reads 'Motorcycle parking - *Provision should be consistent with guidance in "Manual for Streets".*'. MfS 8.4.6 reads *'In planning for private residential parking, in most situations motorcycles will be able to use car parking spaces, but in some situations it will be appropriate to provide designated motorcycle parking areas*…".

4.32 MfS gives no specific figure for the level of motorcycle parking provision, but highlights in paragraph 8.4.1 that motorcycles comprise approximately 5% of motor vehicles and that adequate parking must be provided.

4.33 The development will provide 10 motorcycle parking spaces on the site, with adequate fixed features to provide security. Garages also provide an ideal location for motorcycle parking, and with this considered, the development will provide 18 suitable motorcycle parking spaces - 6% of motor vehicle parking provision.

4.34 MfS 8.4.3 recommends a footprint of 2.0m by 0.8m for motorcycle parking bays, and this requirement is met in the development plans.

4.35 Parking has been designed on the site such that there should be no need for on-street or footway parking, which can reduce visibility, thus decreasing road safety both for drivers and pedestrians, and increasing journey times.

Servicing

4.36 The scheme has been designed to accommodate a large refuse vehicle with turning heads provided at the end of cul-de-sacs where appropriate. There are some locations

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where a refuse vehicle is required to reverse up to 25m in a clear unobstructed straight line due to some turning heads being brought in at a later phase.

4.37 Details of refuse vehicle tracking are provided in Appendix E. This confirms that service vehicles can negotiate the proposed site layout.

4.38 It is known that emergency vehicles are smaller than refuse lorries and, as refuse vehicle tracking has been shown to have satisfactory manoeuvrability within the proposed site layout, it is understood that emergency vehicles can also access the site without issue.

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5 Traffic Impact

5.1 As mentioned above, the site is a former nursery, currently in disuse awaiting redevelopment. The proposals comprise the creation of 23 detached houses, 74 semi-detached houses, 23 terraced houses and 6 flats, in addition to a supporting road network to serve these new residential dwellings.

5.2 To further mitigate any traffic impact, the site will also operate a Travel Plan containing measures and incentives to promote the use of sustainable travel and reduce single occupancy car use.

5.3 The projected traffic impact of the whole NLSDA has already been assessed in prior reports and determined as acceptable, subject to improvement works being undertaken. Given that Phase 2 is compliant with the outline consent in terms of the number of dwellings and access arrangements, further assessment has been done only for robustness and the integrity of this report.

Existing Traffic Attraction Potential

5.4 The site itself is currently generating negligible traffic, as a disused nursery awaiting transformation, but the other facilities accessible from Toddington Lane are still creating traffic demand.

Proposed Traffic Attraction Potential

5.5 The TRICS database is a well-recognised method of establishing the traffic impact of land uses. The following projections are based on models derived from this database.

5.6 Due to the nature of the development – a mixture of both private and publicly owned houses and flats – there are multiple categories of model in the TRICS database that correspond. As such, for robustness, models were run for all the potential categories and the highest possible traffic generation applied.

5.7 The TRICS raw data results and relevant calculations can be found in Appendix F of this report.

5.8 The TRICS models used for weekdays were:

- Houses, Privately Owned
- Houses, Privately Owned + Affordable/Local Authority Houses + Affordable/Local Authority Flats
- Mixed Private (Flats and Houses)

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- Mixed Private/Affordable Housing

5.9 The Mixed Private/Affordable Housing model resulted in lower trip rates than all other models at any point, so can be ignored henceforth.

5.10 Only Houses, Privately Owned could supply adequate data for estimating trip rate increases on weekends.

5.11 The resulting predicted weekday trips likely to be generated by the proposals are set out in the following table:

Time Period	Arrivals	Departures	Total
AM Peak: 0800-0900	18	52	70
PM Peak: 1700-1800	45	26	72

Table 5.2: Proposed Predicted Weekday Traffic Flows

5.12 It can be seen from Table 5.2 that the proposed development will generate 45 arrivals and 26 departures during the evening weekday peak hour (17:00 – 18:00), which averages out as 1.18 vehicles per minute. This level of traffic will have a negligible impact, and will not cause any capacity issues on Toddington Lane, even before the bypass is operational.

5.13 Due to the closure of the Toddington Lane level crossing, it is expected traffic will decrease significantly along this route, which will offset any increase in traffic caused by the development.

Traffic Impact Summary

5.14 The above traffic impact assessments demonstrate that the traffic generated by the proposals will be minimal and will be offset by the restructuring of the local highway network under the various plans in the NLSDA.

5.15 Additionally, the site's Travel Plan will reduce the development's impact on local highway infrastructure by promoting sustainable travel.

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6 Summary and Conclusions

6.1 Mayer Brown has been commissioned by Persimmon Homes Thames Valley to produce this Transport Statement in support of the proposed application to redevelop land parcel C1 and parts of land parcels C2, B2 and B4 in the North Littlehampton Strategic Development Area, near Toddington, creating 126 residential dwellings.

6.2 The proposals to which this report relates are just one phase (Phase 2) of the wider North Littlehampton Master Plan, which has been approved in outline - including access and scale - but with all other matters reserved.

6.3 The site is currently a defunct plant nursery, without adequate road or utility services needed for a residential area. As such, the proposals also include building the infrastructure required for these houses and flats.

6.4 Due to the predicted minimal traffic impact of the proposals, this assessment has been set out in the format of a Transport Statement providing:

- a detailed sustainability and accessibility assessment of the site
- a detailed examination of the development proposals
- an assessment of the net highways and transportation impacts of the proposed scheme

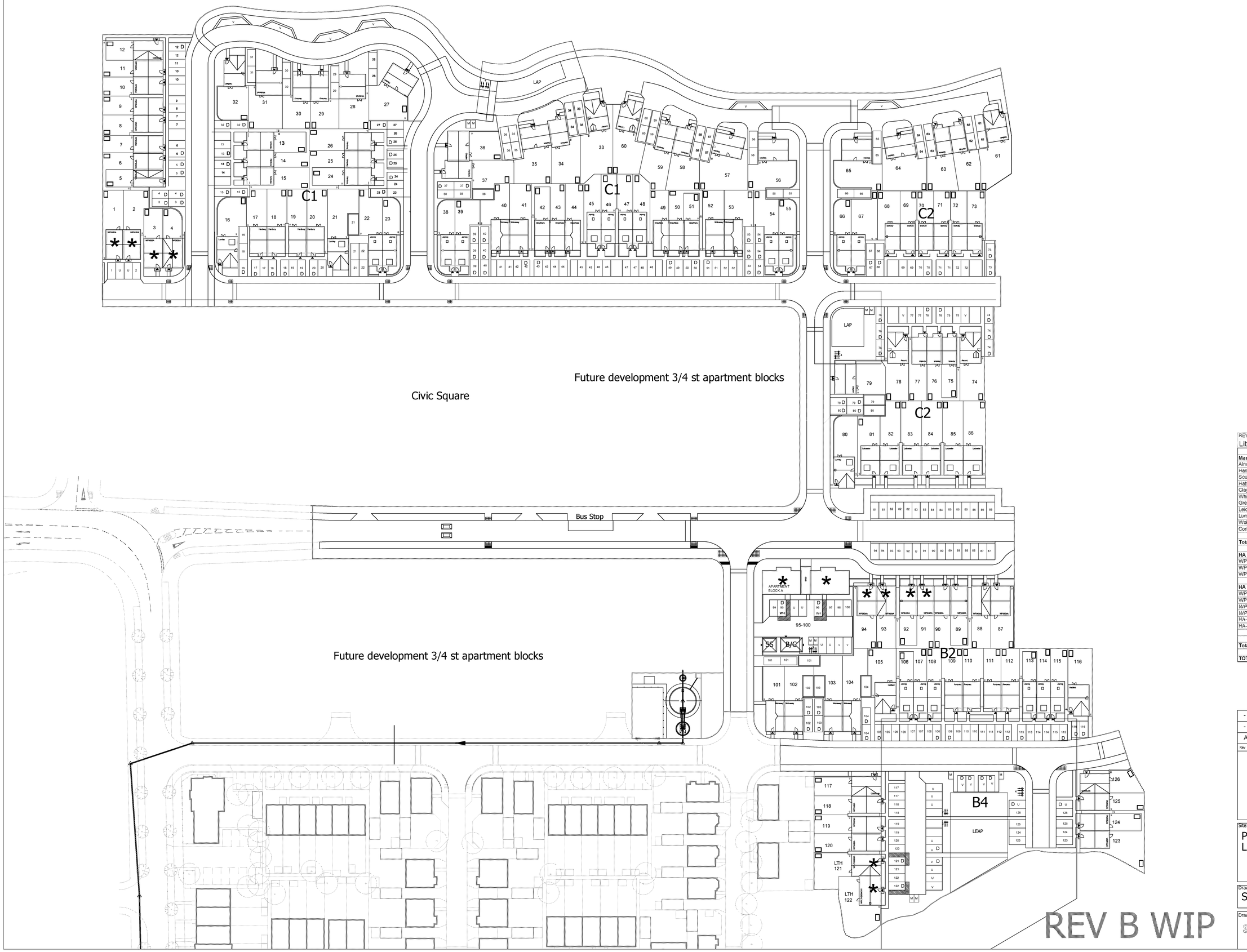
6.5 This report concludes that the proposed development:

- is located within walking/cycling distance of key services in the area
- is easily accessible on foot or by cyclists, with public/communal transport links to be installed soon after completion
- will provide suitable access, parking and servicing arrangements
- will have no material impact on the operation of the local highway network

6.6 It is therefore concluded that there are no reasons why the proposed development should not be permitted on highways or transportation grounds.

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APPENDIX A: Proposed Site Layout



REV B2

Littlehampton Phase 2

	SQF	Bedrooms	NO ON SITE	TOTAL SQF
Market:				
Alnwick	638	2	11	7018
Hanbury	761	3	20	15220
Souter	932	3	18	16776
Hatfield	969	3	4	3876
Clayton	999	3	8	7992
Whitehall	1013	4	2	2026
Greyfriars	1068	3	6	6408
Leicaster	1162	4	6	6972
Lumley	1220	4	7	8540
Wolvesey	1339	4	8	10712
Corfe	1414	5	0	0
Total Market			**90**	**85540**
HA Shared Ownership				
WP2420A	803	2	15	12045
WP3520C	909	3	3	2727
WP3625A	1200	3	2	2400
			20	17172
HA Social Rented				
WP2420A	803	2	4	3212
WP3625A	1200	3	4	4800
WPLTH3520A	1014	3	1	1014
WPLTH3520C-01	1014	3	1	1014
HA-F, 2bed, 4 person	740	2	4	2960
HA-F-WH, 2 bed, 3 person	779	2	2	1558
			16	14558
Total HA (28.5%)			**36**	**31730**
TOTAL ON SITE			**126**	**117270**

SCALE 1/500

0m 5m 10m 15m 20m 25m

Rev		Date
-	-	-
-	-	-
A	Site layout revised to accommodate LA comments.	07.07.2017

PERSIMMON
Together, we make a home

Persimmon Homes Thames Valley
Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site:
Phase 2
Littlehampton

Date:
February 2017

Scale:
1:500 @ A1

Drg No:
543_PL_SITE LAYOUT_100

Drawing Title:
Site Layout - INFORMATION

Drawing Status:
SUBMITTED

Drawn:
KJ

Rev:
REV B

APPENDIX B: Site in Relation to Other Proposed Developments in the NLSDA



LEGEND - LOCATION PLAN

RMA RED LINE BOUNDARY

0 100m

Scale 1:2500

Rev		Date
-		-
-		-
-		-

PERSIMMON
Together, we make a home

Persimmon Homes Thames Valley
Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site: Phase 2 Littlehampton

Date: February 2017

Scale: 1:2500 @ A3

Drg No: 543_PL_SITE LAYOUT_001

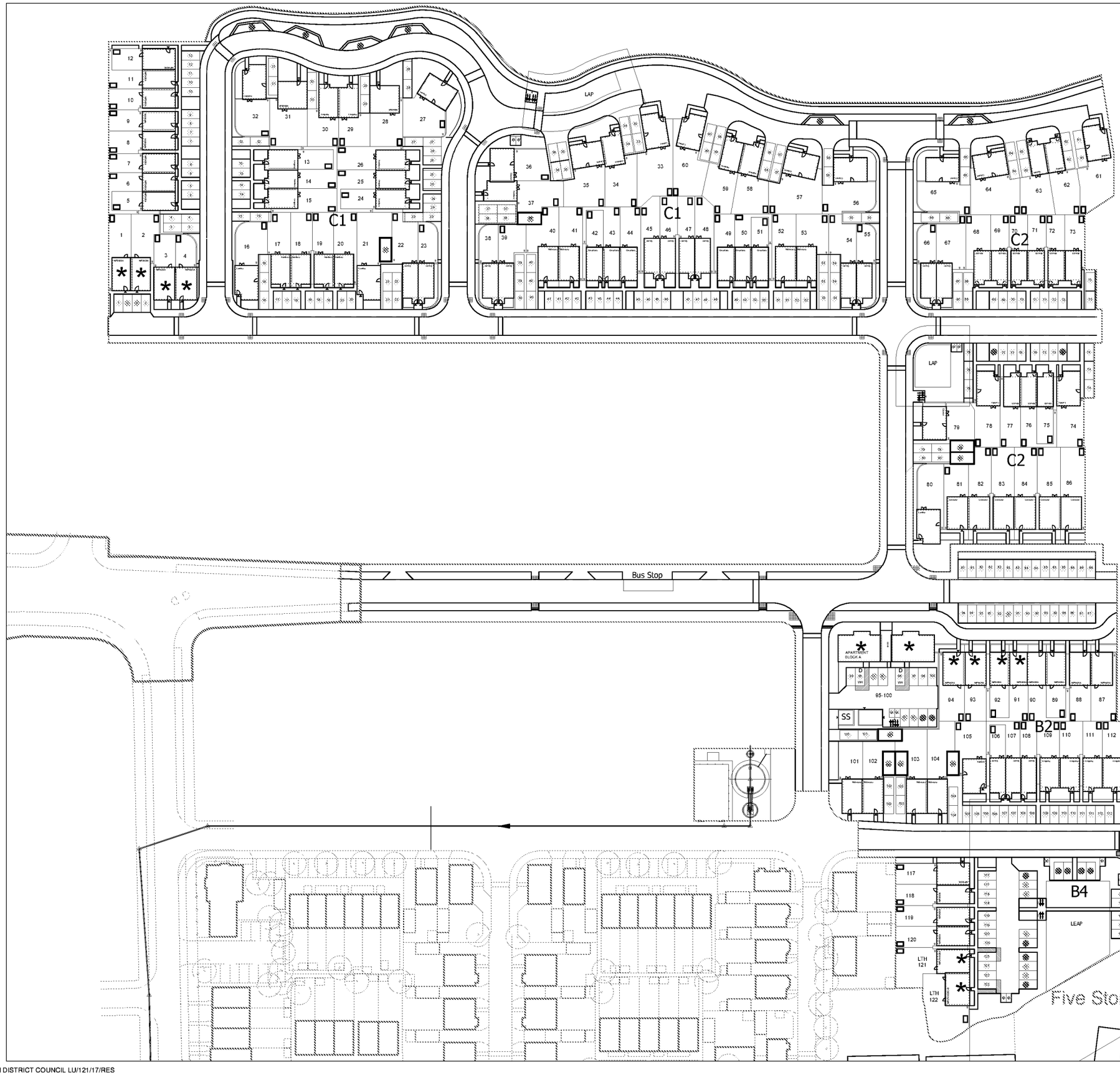
Drawing Title: LOCATION PLAN

Drawing Status: SUBMITTED

Drawn: KJ

Rev: -

APPENDIX C: Proposed Site Parking



LEGEND - PARKING ALLOCATION

249	Allocated Parking 249 spaces total
8	Allocated Garage 8 spaces total
18	Unallocated Visitors Parking 18 spaces total
14	Unallocated Resident Parking 14 spaces total
10	Unallocated Visitor Motorcycle Parking 10 spaces total

Total of 299 parking spaces on site
(297 spaces required - see WSCC car parking demand calculator)

Cycle Visitor Parking
20 spaces total
(min required $\frac{126}{8}$ = 16)

Hatching / 'D' mark
Mobility impaired parking spaces

SCALE 1/1000

0m 5m 10m 15m 20m 25m

Rev		Date
-	-	-
B	Drawing revised to reflect layout changes.	30.08.2017
A	Site layout revised to accommodate LA comments.	07.07.2017

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Persimmon Homes Thames Valley
Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site: Phase 2 Littlehampton

Date: February 2017

Scale: 1:1000 @ A3

Drg No: 543_PL_SITE LAYOUT_105

Drawing Title: Site Layout - PARKING STRATEGY

Drawing Status: SUBMITTED

Drawn: KJ

Rev: B

ARUN DISTRICT COUNCIL LU/121/17/RES

APPENDIX D: Parking Space Calculations

Plot	Name	Bedrooms	*Parking Spaces (allocated)*	Garages	Ft²	sqm	Large/Small	Required Parking Provision				
								Car	Cycle	*Car*	Cycle	Car
							Source:	Arun 2000	West Sussex 2003	West Sussex 2003	West Sussex 2010	West Sussex 2010
1	WP2420A	2	*1*		803	74.6	Small	2.2	4	*2*	#REF!	*Based on West Sussex's Parking Calculator*
2	WP2420A	2	*1*		803	74.6	Small	2.2	2	*2*	#REF!	*249 Allocated*
3	WP3625A	3	*2*		1200	111.5	Small	2.2	2	*2*	#REF!	*8.21 Unallocated for residents*
4	WP3625A	3	*2*		1200	111.5	Small	2.2	2	*2*	#REF!	*24.4 Unallocated for visitors*
5	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
6	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
7	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
8	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
9	WP2420A	2	*2*		803	74.6	Small	2.2	4	*2*	#REF!	
10	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
11	WP2420A	2	*1*		803	74.6	Small	2.2	2	*2*	#REF!	
12	WP3520C	3	*2*		909	84.4	Small	2.2	2	*2*	#REF!	
13	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
14	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
15	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
16	Lumley	4	*3*		1220	113.3	Large	3.2	2	*3*	#REF!	
17	Hanbury	3	*2*		761	70.7	Small	2.2	4	*2*	#REF!	
18	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
19	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
20	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
21	Lumley	4	*2*	1	1220	113.3	Large	3.2	0	*3*	#REF!	
22	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
23	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
24	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
25	Hanbury	3	*2*		761	70.7	Small	2.2	4	*2*	#REF!	
26	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
27	Clayton	3	*2*		999	92.8	Small	2.2	2	*2*	#REF!	
28	Whitehall	4	*2*		1013	94.1	Large	3.2	2	*3*	#REF!	
29	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
30	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
31	Whitehall	4	*2*		1013	94.1	Large	3.2	2	*3*	#REF!	
32	Hatfield	3	*2*		969	90.0	Small	2.2	2	*2*	#REF!	
33	Lumley	4	*2*		1220	113.3	Large	3.2	4	*3*	#REF!	
34	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
35	Clayton	3	*2*		999	92.8	Small	2.2	2	*2*	#REF!	
36	Clayton	3	*2*		999	92.8	Small	2.2	2	*2*	#REF!	
37	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
38	Souter	3	*2*	1	951	88.4	Small	2.2	0	*2*	#REF!	
39	Souter	3	*3*		951	88.4	Small	2.2	2	*2*	#REF!	
40	Wolvesey	4	*3*		1339	124.4	Large	3.2	2	*3*	#REF!	
41	Wolvesey	4	*2*		1339	124.4	Large	3.2	4	*3*	#REF!	
42	Greyfriars	3	*2*		1068	99.2	Small	2.2	2	*2*	#REF!	
43	Greyfriars	3	*2*		1068	99.2	Small	2.2	2	*2*	#REF!	
44	Greyfriars	3	*2*		1068	99.2	Small	2.2	2	*2*	#REF!	
45	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
46	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
47	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
48	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
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53	Wolvesey	4	*3*		1339	124.4	Large	3.2	2	*3*	#REF!	
54	Souter	3	*3*		951	88.4	Small	2.2	2	*2*	#REF!	
55	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
56	Clayton	3	*2*		999	92.8	Small	2.2	2	*2*	#REF!	
57	Clayton	3	*2*		999	92.8	Small	2.2	4	*2*	#REF!	
58	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
59	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
60	Lumley	4	*2*		1220	113.3	Large	3.2	2	*3*	#REF!	
61	Hatfield	3	2		969	90.0	Small	2.2	2	*2*	#REF!	
62	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
63	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
64	Clayton	3	*2*		999	92.8	Small	2.2	2	*2*	#REF!	
65	Clayton	3	*2*		999	92.8	Small	2.2	4	*2*	#REF!	
66	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
67	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
68	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
69	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
70	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
71	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
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73	Alnwick	2	*2*		638	59.3	Small	2.2	4	*2*	#REF!	
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76	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
77	Alnwick	2	*2*		638	59.3	Small	2.2	2	*2*	#REF!	
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79	Clayton	3	*2*	1	999	92.8	Small	2.2	0	*2*	#REF!	
80	Lumley	4	*2*	1	1220	113.3	Large	3.2	0	*3*	#REF!	
81	Leicester	4	*2*		1162	108.0	Large	3.2	4	*3*	#REF!	
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83	Leicester	4	*2*		1162	108.0	Large	3.2	2	*3*	#REF!	
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85	Leicester	4	*2*		1162	108.0	Large	3.2	2	*3*	#REF!	
86	Leicester	4	*2*		1162	108.0	Large	3.2	2	*3*	#REF!	
87	WP3625A	3	*2*		1200	111.5	Small	2.2	2	*2*	#REF!	
88	WP3625A	3	*2*		1200	111.5	Small	2.2	2	*2*	#REF!	
89	WP2420A	2	*2*		803	74.6	Small	2.2	4	*2*	#REF!	
90	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
91	WP2420A	2	*1*		803	74.6	Small	2.2	2	*2*	#REF!	
92	WP2420A	2	*1*		803	74.6	Small	2.2	2	*2*	#REF!	
93	WP3625A	3	*2*		1200	111.5	Small	2.2	2	*2*	#REF!	
94	WP3625A	3	*2*		1200	111.5	Small	2.2	2	*2*	#REF!	
95	HA-F-WH	2	*1*		756	70.2		1.2	2	*2*	#REF!	
96	HA-F-WH	2	*1*		756	70.2		1.2	2	*2*	#REF!	
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98	HA-F	2	*1*		756	70.2		1.2	2	*2*	#REF!	
99	HA-F	2	*1*		756	70.2		1.2	2	*2*	#REF!	
100	HA-F	2	*1*		756	70.2		1.2	2	*2*	#REF!	
101	Wolvesey	4	*2*	1	1339	124.4	Large	3.2	0	*3*	#REF!	
102	Wolvesey	4	*2*	1	1339	124.4	Large	3.2	0	*3*	#REF!	
103	Wolvesey	4	*2*	1	1339	124.4	Large	3.2	0	*3*	#REF!	
104	Wolvesey	4	*2*	1	1339	124.4	Large	3.2	0	*3*	#REF!	
105	Hatfield	3	2		969	90.0	Small	2.2	4	*2*	#REF!	
106	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
107	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
108	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
109	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
110	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
111	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
112	Hanbury	3	*2*		761	70.7	Small	2.2	2	*2*	#REF!	
113	Souter	3	*2*		951	88.4	Small	2.2	4	*2*	#REF!	
114	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
115	Souter	3	*2*		951	88.4	Small	2.2	2	*2*	#REF!	
116	Hatfield	3	2		969	90.0	Small	2.2	2	*2*	#REF!	
117	WP3520C	3	*2*		909	84.4	Small	2.2	2	*2*	#REF!	
118	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
119	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
120	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
121	WPLTH3520A	3	*2*		1014	94.2	Small	2.2	4	*2*	#REF!	
122	WPLTH3520C-01	3	*2*		1014	94.2	Small	2.2	2	*2*	#REF!	
123	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
124	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
125	WP2420A	2	*2*		803	74.6	Small	2.2	2	*2*	#REF!	
126	WP3520C	3	*2*		909	84.4	Small	2.2	2	*2*	#REF!	
						Spaces Required		**294.2**	**268**	*275*	*#REF!*	282

APPENDIX E: Vehicle Tracking, Sweep Paths

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- 10m REFUSE DRAG DISTANCE OFFSET
- REFUSE COLLECTION POINT
- SITE BOUNDARY

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-2

PRIVATE DRIVE TWO (20MPH)

PRIVATE DRIVE THREE (20MPH)

ROAD SIX (20MPH)

ROAD SEVEN (20MPH)

ROAD THREE (20MPH)

MAIN AVENUE (30MPH)

STOP

VIEWPORT 1

VIEWPORT 2

VIEWPORT 3

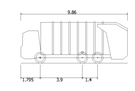
VIEWPORT 4

Future continuation of the Main Avenue



Large Car (2006)

Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



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

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV B.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P4	Drawing amended and swept paths updated following updated layout received from PHTV dated 22/08/2017. (OJN)	AB	31/08/2017
P3	Drawing updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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client: PERSIMMON HOMES THAMES VALLEY

project: NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	drawn by	checked by
1:250	OJN	AB

date	cad file
FEBRUARY 2017	MASTER.DWG

title: ANTICIPATED SWEPT PATH OF A LARGE REFUSE VEHICLE & LARGE CAR ACCESSING THE SITE (1 of 2)

drawing number: A/PHLITTLE-INT.1/TK-1 rev. P4

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- 10m REFUSE DRAG DISTANCE OFFSET
- REFUSE COLLECTION POINT
- LIMIT OF WORKS

VIEWPORT 1

VIEWPORT 2

VIEWPORT 3

VIEWPORT 4

VIEWPORT 5

VIEWPORT 6

VIEWPORTS 1 & 2

VIEWPORT 7

Future continuation of Road Six

Future continuation of the Main Avenue

Future continuation of Road Two

ROAD ONE (20MPH)

ROAD TWO (20MPH)

ROAD THREE (20MPH)

ROAD FOUR (20MPH)

ROAD FIVE (20MPH)

ROAD SIX (20MPH)

MAIN AVENUE (20MPH)

PRIVATE DRIVE ONE (20MPH)

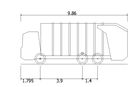
PRIVATE DRIVE TWO (20MPH)

FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-1



Large Car (2006)

Overall Length	5.079m
Overall Width	1.972m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



Large Refuse Vehicle (3 axle)

Overall Length	9.860m
Overall Width	2.490m
Overall Body Height	3.514m
Min Body Ground Clearance	0.366m
Track Width	2.450m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV B.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P4	Drawing amended and swept paths updated following updated layout received from PHTV dated 22/08/2017. (OJN)	AB	31/08/2017
P3	Drawing updated following Stage 1 Road Safety Audit received 17/03/2017. (OJN)	SF	24/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017. (OJN)	AB	17/03/2017
P1	Initial issue. (OJN)	AB	28/02/2017

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	OJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

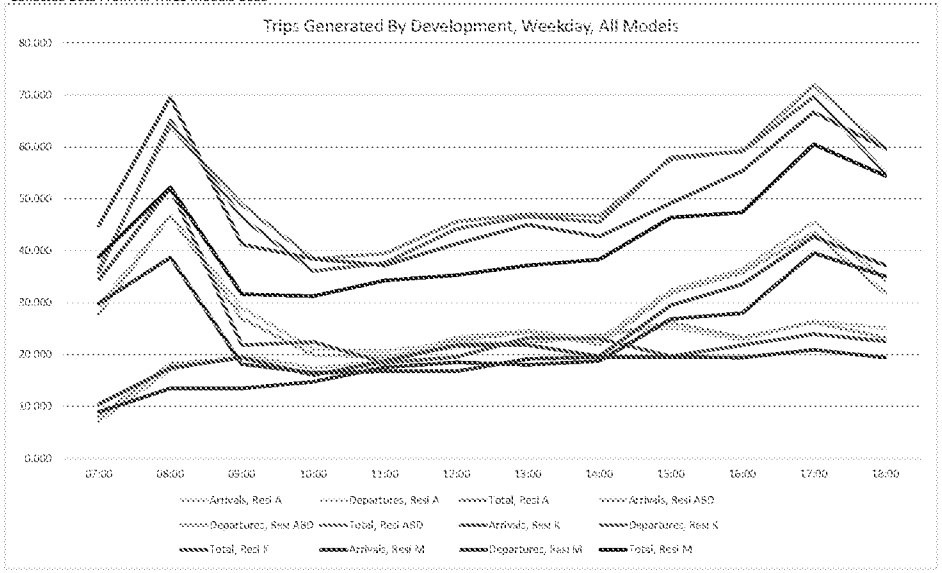
title
ANTICIPATED SWEPT PATH OF A LARGE REFUSE VEHICLE & LARGE CAR ACCESSING THE SITE (2 of 2)

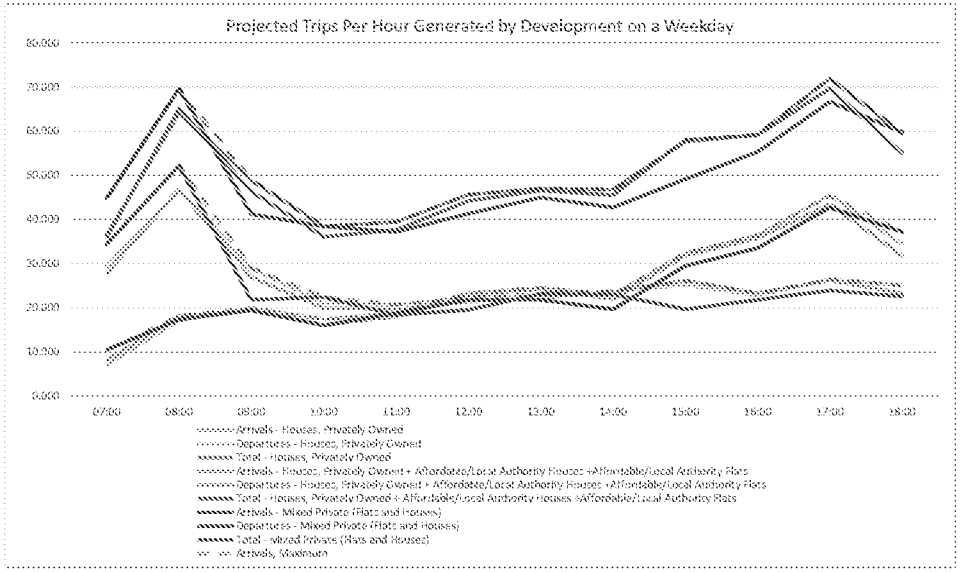
drawing number A/PHLITTLE-INT.1/TK-2 rev. P4

PLANNING/TPMC DOCS/L-A/1315663

APPENDIX F: TRICS Results and Calculations

Collected Data From All TRICS Models Used



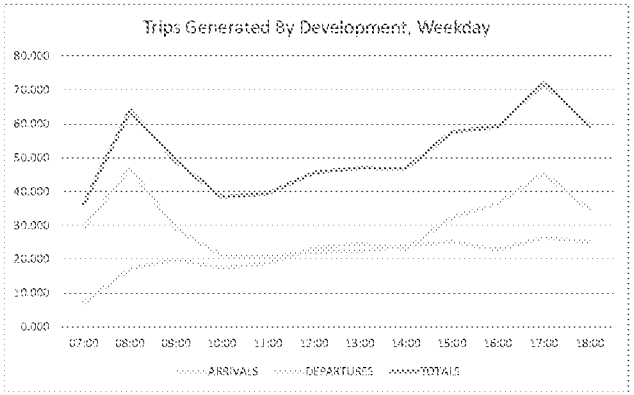


Resi A - Houses, Privately Owned Resi B - Affordable/Local Authority Houses Resi D - Affordable/Local Authority Flats Resi K - Mixed Private (Flats and Houses) Resi M - Mixed Private/Affordable Housing

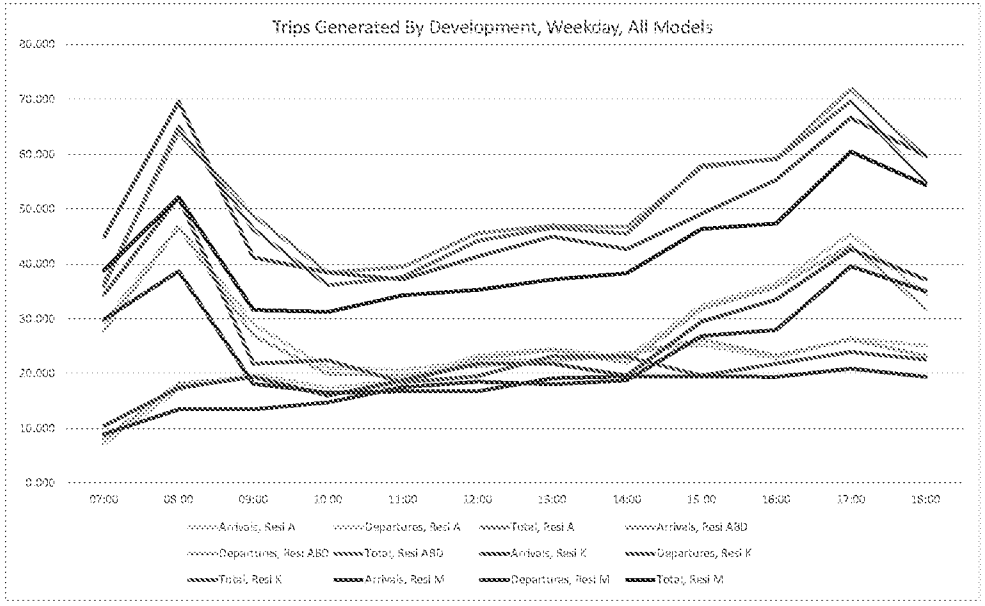
Time Range			Resi A			Resi ABD			Resi K			Resi M			MAX		
			Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
07:00	-	08:00	7.182	29.358	36.54	9.064	27.864	36.928	12.438	34.362	46.8	1.666	10.464	12.13	12.438	34.362	46.8
08:00	-	09:00	17.136	46.872	64.008	18.192	46.836	65.028	17.748	51.156	68.904	5.166	18.792	23.958	18.192	51.156	68.904
09:00	-	10:00	19.908	28.98	48.888	19.368	26.94	46.308	19.908	31.746	51.654	6.966	11.466	18.432	19.908	28.98	48.888
10:00	-	11:00	17.388	21.042	38.43	16.152	19.944	36.096	18.006	27.426	45.432	10.764	11.484	22.248	17.388	21.042	38.43
11:00	-	12:00	18.774	20.664	39.438	18	19.62	37.62	18.774	21.96	40.734	10.764	11.484	22.248	18.774	20.664	39.438
12:00	-	13:00	23.31	22.302	45.612	22.776	21.42	44.196	21.798	19.5	41.298	7.182	6.966	14.148	23.31	22.302	45.612
13:00	-	14:00	24.57	22.428	46.998	24.312	22.272	46.584	21.798	21.294	43.092	10.764	10.764	21.528	24.57	22.428	46.998
14:00	-	15:00	22.932	23.814	46.746	21.96	23.568	45.528	19.908	19.878	39.786	10.764	10.764	21.528	22.932	23.814	46.746
15:00	-	16:00	32.382	25.2	57.582	31.812	26.16	57.972	21.798	19.908	41.706	6.966	6.966	13.932	32.382	26.16	57.972
16:00	-	17:00	36.414	22.806	59.22	35.76	23.304	59.064	21.798	21.798	43.596	7.182	7.182	14.364	36.414	23.304	59.22
17:00	-	18:00	45.486	26.46	71.946	43.44	26.232	69.672	21.798	21.798	43.596	10.764	10.764	21.528	45.486	26.46	71.946
18:00	-	19:00	34.398	25.074	59.472	31.788	23.244	55.032	21.798	21.798	43.596	10.764	10.764	21.528	34.398	25.074	59.472
19:00	-	20:00															
20:00	-	21:00															
21:00	-	22:00															
22:00	-	23:00															
23:00	-	24:00															

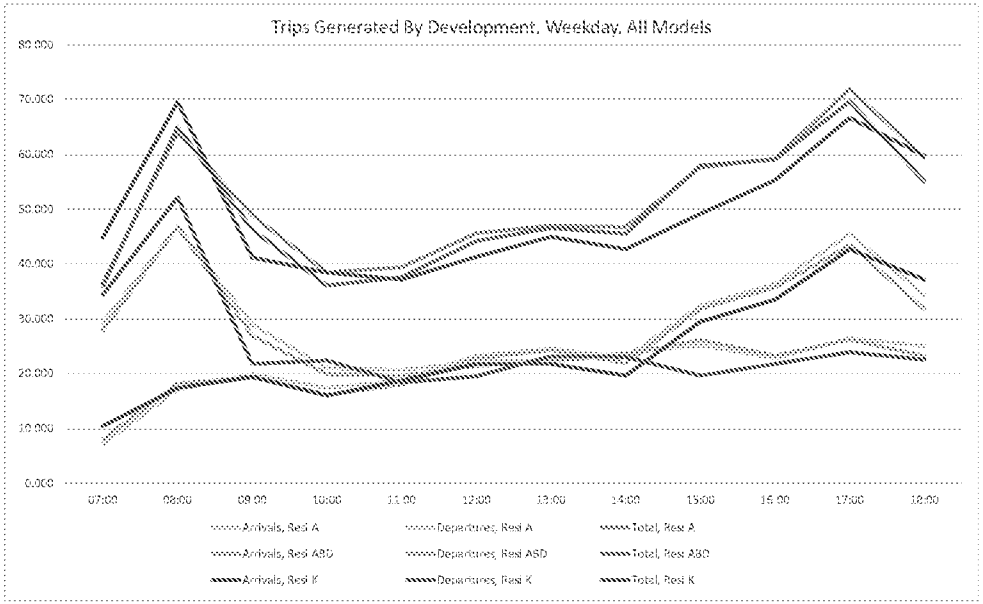
Resi A (Houses, Privately Owned) Weekday TRICS Analysis

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (*128)	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (*128)	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (*128)
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	25	105	0.057	7.182	25	105	0.233	29.358	25	105	0.290	36.540
08:00 - 09:00	25	105	0.136	17.136	25	105	0.372	46.872	25	105	0.508	64.008
09:00 - 10:00	25	105	0.158	19.908	25	105	0.230	28.980	25	105	0.388	48.888
10:00 - 11:00	25	105	0.138	17.388	25	105	0.167	21.042	25	105	0.305	38.430
11:00 - 12:00	25	105	0.149	18.774	25	105	0.164	20.664	25	105	0.313	39.438
12:00 - 13:00	25	105	0.185	23.310	25	105	0.177	22.302	25	105	0.362	45.612
13:00 - 14:00	25	105	0.195	24.570	25	105	0.178	22.428	25	105	0.373	46.998
14:00 - 15:00	25	105	0.182	22.932	25	105	0.189	23.814	25	105	0.371	46.746
15:00 - 16:00	25	105	0.257	32.382	25	105	0.200	25.200	25	105	0.457	57.582
16:00 - 17:00	25	105	0.289	36.414	25	105	0.181	22.806	25	105	0.470	59.220
17:00 - 18:00	25	105	0.361	45.486	25	105	0.210	26.460	25	105	0.571	71.946
18:00 - 19:00	25	105	0.273	34.398	25	105	0.199	25.074	25	105	0.472	59.472
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.380	299.880			2.500	315.000			4.880	614.880



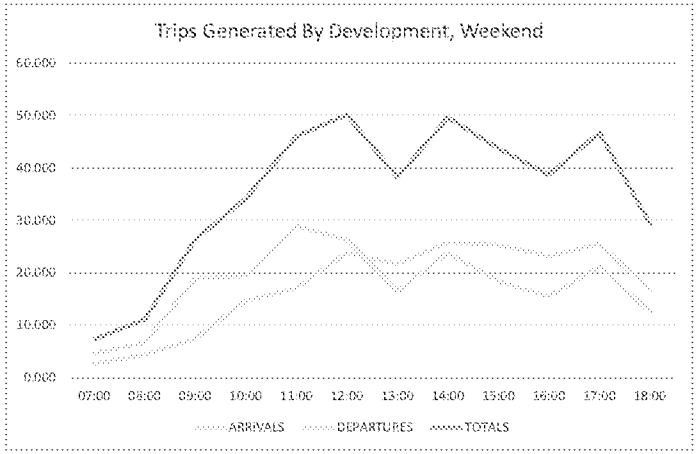
Resi A - Houses, Privately Owned
Resi B - Affordable/Local Authority Houses
Resi D - Affordable/Local Authority Flats
Resi K - Mixed Private (Flats and Houses)
Resi M - Mixed Private/Affordable Housing





Resi A (Houses, Privately Owned) Weekend TRICS Analysis

Time Range	ARRIVALS No. Days	Ave. DWELLS	Trip Rate	Traffic gen (*126)	DEPARTURES No. Days	Ave. DWELLS	Trip Rate	Traffic gen (*126)	TOTALS No. Days	Ave. DWELLS	Trip Rate	Traffic gen (*126)
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	5	102	0.021	2.646	5	102	0.037	4.662	5	102	0.058	7.308
08:00 - 09:00	5	102	0.035	4.410	5	102	0.053	6.678	5	102	0.088	11.088
09:00 - 10:00	5	102	0.059	7.434	5	102	0.150	18.900	5	102	0.209	26.334
10:00 - 11:00	5	102	0.117	14.742	5	102	0.154	19.404	5	102	0.271	34.146
11:00 - 12:00	5	102	0.135	17.010	5	102	0.230	28.980	5	102	0.365	45.990
12:00 - 13:00	5	102	0.189	23.814	5	102	0.209	26.334	5	102	0.398	50.148
13:00 - 14:00	5	102	0.172	21.672	5	102	0.131	16.506	5	102	0.303	38.178
14:00 - 15:00	5	102	0.205	25.830	5	102	0.189	23.814	5	102	0.394	49.644
15:00 - 16:00	5	102	0.201	25.326	5	102	0.146	18.396	5	102	0.347	43.722
16:00 - 17:00	5	102	0.184	23.184	5	102	0.123	15.498	5	102	0.307	38.682
17:00 - 18:00	5	102	0.203	25.578	5	102	0.168	21.168	5	102	0.371	46.746
18:00 - 19:00	5	102	0.133	16.758	5	102	0.100	12.600	5	102	0.233	29.358
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates			1.654	208.404			1.690	212.940			3.344	421.344



Mixed Models A, B and D (Houses, Privately Owned + Affordable/Local Authority Houses + Affordable/Local Authority Flats) Weekend TRICS Analysis

resi a - houses privately owned

108 units

Time Range	ARRIVALS No. Days	Ave. DWELLS	Trip Rate	Trips	DEPARTURES No. Days	Ave. DWELLS	Trip Rate	Trips	TOTALS No. Days	Ave. DWELLS	Trip Rate	Trips
00:00												
01:00												
02:00												
03:00												
04:00												
05:00												
06:00												
07:00	25	105	0.057	6.156	25	105	0.233	25.164	25	105	0.290	31.320
08:00	25	105	0.136	14.688	25	105	0.372	40.176	25	105	0.508	54.864
09:00	25	105	0.158	17.064	25	105	0.230	24.840	25	105	0.388	41.904
10:00	25	105	0.138	14.904	25	105	0.167	18.036	25	105	0.305	32.940
11:00	25	105	0.149	16.092	25	105	0.164	17.712	25	105	0.313	33.804
12:00	25	105	0.185	19.980	25	105	0.177	19.116	25	105	0.362	39.096
13:00	25	105	0.195	21.060	25	105	0.178	19.224	25	105	0.373	40.284
14:00	25	105	0.182	19.656	25	105	0.189	20.412	25	105	0.371	40.068
15:00	25	105	0.257	27.756	25	105	0.200	21.600	25	105	0.457	49.356
16:00	25	105	0.289	31.212	25	105	0.181	19.548	25	105	0.470	50.760
17:00	25	105	0.361	38.988	25	105	0.210	22.680	25	105	0.571	61.668
18:00	25	105	0.273	29.484	25	105	0.199	21.492	25	105	0.472	50.976
19:00												
20:00												
21:00												
22:00												
23:00												
Total			2.380	257.040			2.500	270.000			4.880	527.040

resi b - affordable/local authority houses

12 units

Time Range	ARRIVALS No. Days	Ave. DWELLS	Trip Rate	Trips	DEPARTURES No. Days	Ave. DWELLS	Trip Rate	Trips	TOTALS No. Days	Ave. DWELLS	Trip Rate	Trips
00:00												
01:00												
02:00												
03:00												
04:00												
05:00												
06:00												
07:00	3	20	0.117	1.404	3	20	0.100	1.200	3	20	0.217	2.604
08:00	3	20	0.167	2.004	3	20	0.367	4.404	3	20	0.534	6.408
09:00	3	20	0.150	1.800	3	20	0.133	1.596	3	20	0.283	3.396
10:00	3	20	0.083	0.996	3	20	0.117	1.404	3	20	0.200	2.400
11:00	3	20	0.117	1.404	3	20	0.117	1.404	3	20	0.234	2.808
12:00	3	20	0.150	1.800	3	20	0.150	1.800	3	20	0.300	3.600
13:00	3	20	0.167	2.004	3	20	0.150	1.800	3	20	0.317	3.804
14:00	3	20	0.150	1.800	3	20	0.200	2.400	3	20	0.350	4.200
15:00	3	20	0.317	3.804	3	20	0.317	3.804	3	20	0.634	7.608
16:00	3	20	0.150	1.800	3	20	0.250	3.000	3	20	0.400	4.800
17:00	3	20	0.267	3.204	3	20	0.233	2.796	3	20	0.500	6.000
18:00	3	20	0.150	1.800	3	20	0.083	0.996	3	20	0.233	2.796
19:00												
20:00												
21:00												
22:00												
23:00												
Total			1.985	23.820			2.217	26.604			4.202	50.424

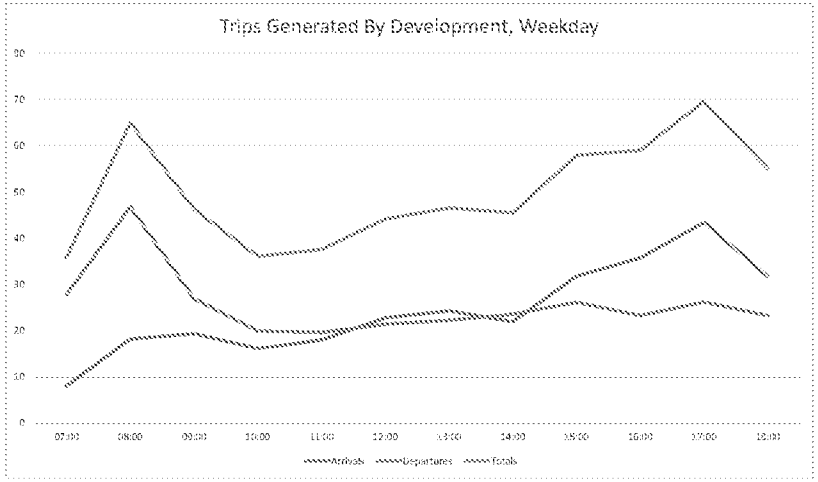
cumulative

	Arrivals	Departures	Totals
00:00	0	0	0
01:00	0	0	0
02:00	0	0	0
03:00	0	0	0
04:00	0	0	0
05:00	0	0	0
06:00	0	0	0
07:00	8.064	27.864	35.928
08:00	18.192	46.836	65.028
09:00	19.368	26.94	46.308
10:00	16.152	19.944	36.096
11:00	18	19.62	37.62
12:00	22.776	21.42	44.196
13:00	24.312	22.272	46.584
14:00	21.96	23.568	45.528
15:00	31.812	26.16	57.972
16:00	35.76	23.304	59.064
17:00	43.44	26.232	69.672
18:00	31.788	23.244	55.032
19:00	0	3.996	3.996
20:00	2.004	0	2.004
21:00	0	0	0
22:00	0	0	0
23:00	0	0	0
Total	283.628	311.400	595.028

resi d - affordable/local authority flats

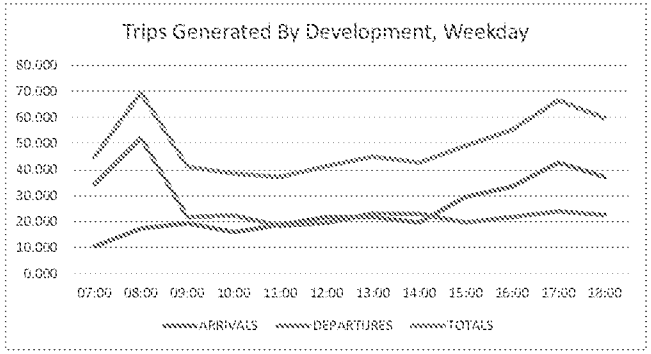
6 units

Time Range	ARRIVALS No. Days	Ave. DWELLS	Trip Rate	Trips	DEPARTURES No. Days	Ave. DWELLS	Trip Rate	Trips	TOTALS No. Days	Ave. DWELLS	Trip Rate	Trips
00:00												
01:00												
02:00												
03:00												
04:00												
05:00												
06:00												
07:00	4	12	0.042	0.504	4	12	0.125	1.500	4	12	0.167	2.004
08:00	4	12	0.125	1.500	4	12	0.188	2.256	4	12	0.313	3.756
09:00	4	12	0.042	0.504	4	12	0.042	0.504	4	12	0.084	1.008
10:00	4	12	0.021	0.252	4	12	0.042	0.504	4	12	0.063	0.756
11:00	4	12	0.042	0.504	4	12	0.042	0.504	4	12	0.084	1.008
12:00	4	12	0.083	0.996	4	12	0.042	0.504	4	12	0.125	1.500
13:00	4	12	0.104	1.248	4	12	0.104	1.248	4	12	0.208	2.496
14:00	4	12	0.042	0.504	4	12	0.063	0.756	4	12	0.104	1.248
15:00	4	12	0.021	0.252	4	12	0.063	0.756	4	12	0.083	0.996
16:00	4	12	0.229	2.748	4	12	0.063	0.756	4	12	0.291	3.492
17:00	4	12	0.104	1.248	4	12	0.063	0.756	4	12	0.166	1.992
18:00	4	12	0.042	0.504	4	12	0.063	0.756	4	12	0.104	1.248
19:00	1	6	0.000	0.000	1	6	0.333	3.996	1	6	0.333	3.996
20:00	1	6	0.167	2.004	1	6	0.000	0.000	1	6	0.167	2.004
21:00	1	6	0.000	0.000	1	6	0.000	0.000	1	6	0.000	0.000
22:00												
23:00												
Total			1.084	13.008			1.233	14.796			2.317	27.804



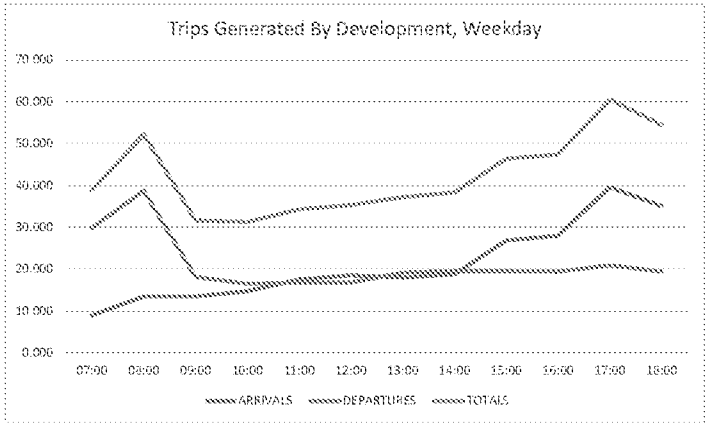
Resi K (Mixed Private, Flats and Houses) Weekday TRICS Analysis

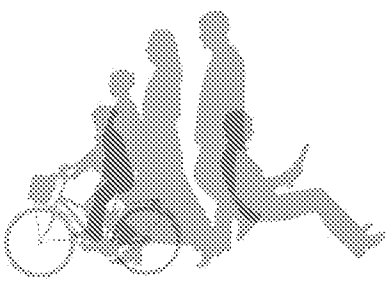
Time Range			ARRIVALS				DEPARTURES				TOTALS			
			No. Days	Ave. DWELLS	Trip Rate	Traffic gen (* 126)	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (* 126)	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (* 126)
00:00	-	01:00												
01:00	-	02:00												
02:00	-	03:00												
03:00	-	04:00												
04:00	-	05:00												
05:00	-	06:00												
06:00	-	07:00												
07:00	-	08:00	12	90	0.083	10.458	12	90	0.273	34.398	12	90	0.356	44.856
08:00	-	09:00	12	90	0.138	17.388	12	90	0.414	52.164	12	90	0.552	69.552
09:00	-	10:00	12	90	0.154	19.404	12	90	0.173	21.798	12	90	0.327	41.202
10:00	-	11:00	12	90	0.127	16.002	12	90	0.178	22.428	12	90	0.305	38.430
11:00	-	12:00	12	90	0.149	18.774	12	90	0.146	18.396	12	90	0.295	37.170
12:00	-	13:00	12	90	0.173	21.798	12	90	0.155	19.530	12	90	0.328	41.328
13:00	-	14:00	12	90	0.173	21.798	12	90	0.184	23.184	12	90	0.357	44.982
14:00	-	15:00	12	90	0.156	19.656	12	90	0.183	23.058	12	90	0.339	42.714
15:00	-	16:00	12	90	0.234	29.484	12	90	0.156	19.656	12	90	0.390	49.140
16:00	-	17:00	12	90	0.266	33.516	12	90	0.173	21.798	12	90	0.439	55.314
17:00	-	18:00	12	90	0.339	42.714	12	90	0.190	23.940	12	90	0.529	66.654
18:00	-	19:00	12	90	0.295	37.170	12	90	0.179	22.554	12	90	0.474	59.724
19:00	-	20:00												
20:00	-	21:00												
21:00	-	22:00												
22:00	-	23:00												
23:00	-	24:00												
Total					2.287	288.162			2.404	302.904			4.691	591.066



Resi M (Mixed Private/Affordable Houses) Weekday TRICS Analysis

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (* 126)	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (* 126)	No. Days	Ave. DWELLS	Trip Rate	Traffic gen (* 126)
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	117	0.071	8.946	16	117	0.237	29.862	16	117	0.308	38.808
08:00 - 09:00	16	117	0.107	13.482	16	117	0.307	38.682	16	117	0.414	52.164
09:00 - 10:00	16	117	0.107	13.482	16	117	0.144	18.144	16	117	0.251	31.626
10:00 - 11:00	16	117	0.117	14.742	16	117	0.131	16.506	16	117	0.248	31.248
11:00 - 12:00	16	117	0.139	17.514	16	117	0.133	16.758	16	117	0.272	34.272
12:00 - 13:00	16	117	0.147	18.522	16	117	0.133	16.758	16	117	0.280	35.280
13:00 - 14:00	16	117	0.143	18.018	16	117	0.152	19.152	16	117	0.295	37.170
14:00 - 15:00	16	117	0.149	18.774	16	117	0.155	19.530	16	117	0.304	38.304
15:00 - 16:00	16	117	0.213	26.838	16	117	0.155	19.530	16	117	0.368	46.368
16:00 - 17:00	16	117	0.222	27.972	16	117	0.154	19.404	16	117	0.376	47.376
17:00 - 18:00	16	117	0.314	39.564	16	117	0.166	20.916	16	117	0.480	60.480
18:00 - 19:00	16	117	0.278	35.028	16	117	0.154	19.404	16	117	0.432	54.432
19:00 - 20:00	1	76	0.105		1	76	0.132		1	76	0.237	
20:00 - 21:00	1	76	0.132		1	76	0.079		1	76	0.211	
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total			2.244	252.882			2.232	254.646			4.476	507.528





APPENDIX C: Previous RSA Designer Response Reports

Stage 1 RSA - Road Safety Audit Response Report

1.1 This report results from receipt of a Stage 1 RSA Report, undertaken dated March 2017.

1.2 The Designer's Response to the 'Problems' highlighted are indicated in the table below:

Item	Problem	Recommendation	Designer's Response
2.1	**Location:** General **Summary:** Visibility splays Junction visibility splays have not been detailed consistently on the drawings submitted at this stage. A number of splays are shown to the channel line and others are shown to the centre line / offside lane. Forward visibility splays have not been detailed. Pedestrian inter-visibility splays have not been detailed on all of the general arrangement drawings provided. It will be important that adequate splays are provided, this should include junction, pedestrian inter-visibility and forward visibility splays.	Provide visibility splays in accordance with relevant design standards and ensure that the splays will be kept free from obstruction. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m. If planters are to be provided then these, together with any foliage which they contain, should also not extend beyond a vertical height of 0.6m.	The Design speed of the development is intended to be 30mph for the short adopted section of the Main Avenue and 20mph elsewhere. As a result, in accordance with LTN 1/07 Traffic Calming measures are proposed with a maximum of 70m spacing. In consideration of the above, visibility splays provided are indicated as 2.4m x 25m (20mph) and 2.4m x 43m (30mph), as set out in MfS. As recommend any vegetation within vis splays shall be 0.6m or less. A note added to General Arrangement drawings *"Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m."*

Item	Problem	Recommendation	Designer's Response
2.2	**Location:** Main Avenue (Please refer to reference point 2.2 in Appendix B) **Summary:** Possible injury to bus passengers as a result of vertical deflection. A raised table at this location is likely to be detrimental to bus passenger safety as vertical deflections will occur as passengers rise from seats and / or use the stairs within the bus, on approach to the bus stop.	Either: 1. Relocate bus stop away from raised table 2. Relocate raised table away from bus stop	Accepted. The traffic calming feature on approach to the bus stop has been removed.
2.3	**Location:** Uncontrolled crossing point east of bus stop (Please refer to reference point 2.3 in Appendix B) **Summary:** Crossing pedestrians masked by stationary bus If a bus is stationary within the bus stop then the crossing point sited to the east of it will be masked from drivers approaching from the west. This could result in pedestrians stepping out front of a moving vehicle, potentially resulting in injury. The Audit Team have considered the same issue with the crossing located to the west of the bus stop. However, it was agreed that this did not provide a safety risk as westbound drivers will already be slowing significantly for the raised table prior to the crossing point.	Relocate eastern crossing point away from the bus stop, ensure appropriate forward visibility splays to the pedestrian landing points can be achieved.	Accepted. Bus stop relocated. Visibility splays to pedestrian crossing locations indicated as recommended.

Item	Problem	Recommendation	Designer's Response
2.4	**Location:** General **Summary:** Junction markings within the internal residential development The priorities indicated are unnatural and would probably quickly be disregarded by residents and frequent users. The change in surface and raised junction tables would add an element of uncertainty that might reduce speeds and increase concentration to those unfamiliar with the development.	Omit junction markings on raised tables / block paving within the internal road network of the development site.	Accepted. It is considered that the giveway markings on the Main Avenue junctions should be retained as these provide priority to the Main Avenue traffic route. However, giveway markings on other junctions within the internal road network have been omitted as recommended.
2.5	**Location:** General **Summary:** Ramp warning triangles There are a number of ramps / raised tables provided within the internal residential layout. It will be important that approaching drivers / riders are able to identify these ramps on approach so that they can adjust the speed / riding position as appropriate to reduce the risk of losing control.	Provide white warning triangles (Diag 1062) on all speed reducing ramps.	Accepted. Triangular road markings to Diag 1062 shall be provided at all speed reducing ramps as recommended.

Prepared By:

Name: Adrian Barnley

Organisation: Mayer Brown Limited

Date: 27/10/2017 [Rev P2]

Stage 1 RSA - Road Safety Audit Addendum Response Report

1.1 This report results from receipt of a Stage 1 RSA Report, undertaken dated September 2017.

1.2 The Designer's Response to the 'Problems' highlighted are indicated in the table below:

Item	Problem	Recommendation	Designer's Response
3.1	**Location:** General **Summary:** Visibility splays Whilst some visibility splays have been formally identified on the drawings submitted, it will be important that all visibility splays remain free from obstruction. It is noted that some visibility splays extend across / through 3rd party land, cycle storage areas or parking bays (on 3rd party land). It will also be important to ensure that appropriate visibility splays are provided. It is noted that the visibility splays indicated on parts of Main Avenue are not suitable for a 30mph speed limit.	Provide visibility splays in accordance with relevant design standards and ensure that the splays will be kept free from obstruction. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m. If planters are to be provided then these, together with any foliage which they contain, should also not extend beyond a vertical height of 0.6m.	Visibility splays shall be indicated in accordance with design standards as recommended. Landscaping proposals shall be developed that ensure visibility splays are kept clear of obstructions as recommended.

Item	Problem	Recommendation	Designer's Response
3.2	**Location:** General **Summary:** Potential obstruction to service vehicle manoeuvres The swept path analysis provided to the Audit Team indicates that a large refuse vehicle is able to service the site without excessive reversing manoeuvres or encroachment on the footway. However, many of these manoeuvres will be obstructed if on-street parking were to occur within the development. This could result in excessive reversing manoeuvres or encroachment on to the footway(s).	If on-street parking does occur within the extent of the swept paths then West Sussex County Council should consider implementing a traffic management order prohibiting vehicles from waiting "at any time" within the extents of the swept paths.	The development shall be provided with designated parking as agreed with the LPA and HA and as outlined in the Transport Statement. The Transport Statement reports (Para 4.14) that there will be ample parking capacity within the site. If on-street parking does occur within the extent of the swept paths then PHTV will liaise with West Sussex County Council to consider implementing waiting restrictions to prohibit vehicles from waiting within the extents of the swept paths.

Prepared By:

Name: Adrian Barnley

Organisation: Mayer Brown Limited

Date: 27 October 2017 [Rev P3]

Signature



APPENDIX D: Previous Stage 1 Road Safety Audits

mayer brown

PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 - ROAD SAFETY AUDIT

MARCH 2017



the journey is the reward

ARUN DISTRICT COUNCIL LU/121/17/RES

PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 - ROAD SAFETY AUDIT

MARCH 2017

Project Code:	**S/PHLITTLE-INT.1.1.6a**
Prepared by:	**Martyn Parr**
Approved by:	**Ken Fry**
Issue Date:	**March 2017**
Status:	**FINAL**

Mayer Brown Limited, Lion House, Oriental Road, Woking, Surrey GU22 8AR
Telephone 01483 750508 Fax 01483 750437 wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

ARUN DISTRICT COUNCIL LU/121/17/RES

Persimmon Homes Thames Valley

North Littlehampton

Internal Works, Parcels B2, B4 & C1

Littlehampton, West Sussex

Stage 1 - Road Safety Audit

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3 Audit Team Statement.....6

Appendices

APPENDIX A: Site Location Plan

APPENDIX B: Reference Plans

APPENDIX C: Audit Brief

1 Introduction

1.1 This report results from a Stage 1 Road Safety Audit carried out following instructions from Mayer Brown Limited's Design Team based in Woking. The Road Safety Audit was carried out on 17th March 2017.

1.2 The Road Safety Audit Team membership was as follows:

Ken Fry	I Eng, FIHE, RegRSA (IHE), HE CoC Principal Consultant - Mayer Brown Limited (Certificate of Competency in Road Safety Audit gained in April 2015)
Martyn Parr	MSoRSA, RegRSA (IHE), MCIHT, HECoC Road Safety Manager – Mayer Brown Limited (Certificate of Competency in Road Safety Audit gained in February 2015)

1.3 The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief provided by Mr Oliver Nevett, included as Appendix C. The Audit Team has not been made aware of any departures from standard.

1.4 The Design Organization have advised that a site inspection is not required at this stage. It is understood that the works subject to this Road Safety Audit Report will not be subject to a Section 38 agreement. In addition, the works comprise a highway layout entirely within a development site, not an improvement scheme affected by existing traffic conditions, so this is considered to make no difference to the audit findings

1.5 The terms of reference of the Road Safety Audit are as described in HD 19/15, although in this case the members of the Audit Team have not carried out a site inspection. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

1.6 All comments and recommendations are referenced on a reduced-scale copy of plans 'A/PHLITTLE-INT.1/10-1 P2' and 'A/PHLITTLE-INT.1/10-2 P2' supplied with the Road Safety Audit Brief, given as Appendix B to this report.

ARUN DISTRICT COUNCIL LU/121/17/RES

1.7 The proposals comprise the demolition of existing buildings and structures, and redevelopment to provide residential, business, neighbourhood centre and community uses, green infrastructure, new highway infrastructure and improvements to existing local highway network.

1.8 The Main Avenue through the scheme is proposed to be a tree lined avenue with visibility splays kept clear of landscaping. The entire scheme is intended to be subject to a 20mph speed limit with regular traffic calming features and off street parking. A bus route is proposed through parts of the works subject to this Audit Report.

ARUN DISTRICT COUNCIL LU/121/17/RES

2 Items Raised at the Stage 1 Road Safety Audit

General

2.1 **Problem**

Location: General

Summary: Visibility splays

Junction visibility splays have not been detailed consistently on the drawings submitted at this stage. A number of splays are shown to the channel line and others are shown to the centre line / offside lane. Forward visibility splays have not been detailed. Pedestrian inter-visibility splays have not been detailed on all of the general arrangement drawings provided.

It will be important that adequate splays are provided, this should include junction, pedestrian inter-visibility and forward visibility splays.

Recommendation

Provide visibility splays in accordance with relevant design standards and ensure that the splays will be kept free from obstruction. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m. If planters are to be provided then these, together with any foliage which they contain, should also not extend beyond a vertical height of 0.6m.

2.2 **Problem**

Location: Main Avenue (Please refer to reference point 2.2 in Appendix B)

Summary: Possible injury to bus passengers as a result of vertical deflection

A raised table at this location is likely to be detrimental to bus passenger safety as vertical deflections will occur as passengers rise from seats and / or use the stairs within the bus, on approach to the bus stop.

Recommendation

Either:

1. Relocate bus stop away from raised table
2. Relocate raised table away from bus stop

ARUN DISTRICT COUNCIL LU/121/17/RES

2.3 **Problem**

Location: Uncontrolled crossing point east of bus stop (Please refer to reference point 2.3 in Appendix B)

Summary: Crossing pedestrians masked by stationary bus

If a bus is stationary within the bus stop then the crossing point sited to the east of it will be masked from drivers approaching from the west. This could result in pedestrians stepping out front of a moving vehicle, potentially resulting in injury.

The Audit Team have considered the same issue with the crossing located to the west of the bus stop. However, it was agreed that this did not provide a safety risk as westbound drivers will already be slowing significantly for the raised table prior to the crossing point.

Recommendation

Relocate eastern crossing point away from the bus stop, ensure appropriate forward visibility splays to the pedestrian landing points can be achieved.

Road Markings

2.4 **Problem**

Location: General

Summary: Junction markings within the internal residential development

The priorities indicated are unnatural and would probably quickly be disregarded by residents and frequent users. The change in surface and raised junction tables would add an element of uncertainty that might reduce speeds and increase concentration to those unfamiliar with the development.

Recommendation

Omit junction markings on raised tables / block paving within the internal road network of the development site.

2.5 **Problem**

Location: General

Summary: Ramp warning triangles

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There are a number of ramps / raised tables provided within the internal residential layout. It will be important that approaching drivers / riders are able to identify these ramps on approach so that they can adjust the speed / riding position as appropriate to reduce the risk of losing control.

Recommendation

Provide white warning triangles (Diag 1062) on all speed reducing ramps.

ARUN DISTRICT COUNCIL LU/121/17/RES

3 Audit Team Statement

3.0 AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out as described in HD 19/15, with the exception that no site visit was carried out because this is a new development site containing no existing roads.

ROAD SAFETY AUDIT TEAM LEADER

Ken Fry - I Eng, FIHE, RegRSA (IHE), HECoC
Principal Engineer
Mayer Brown Limited
B15 Whitecross Business Centre
Whitecross Lane
Shanklin
Isle of Wight
PO37 7EJ

Signed K.W. Fry

Date 17/03/17

ROAD SAFETY AUDIT TEAM MEMBER

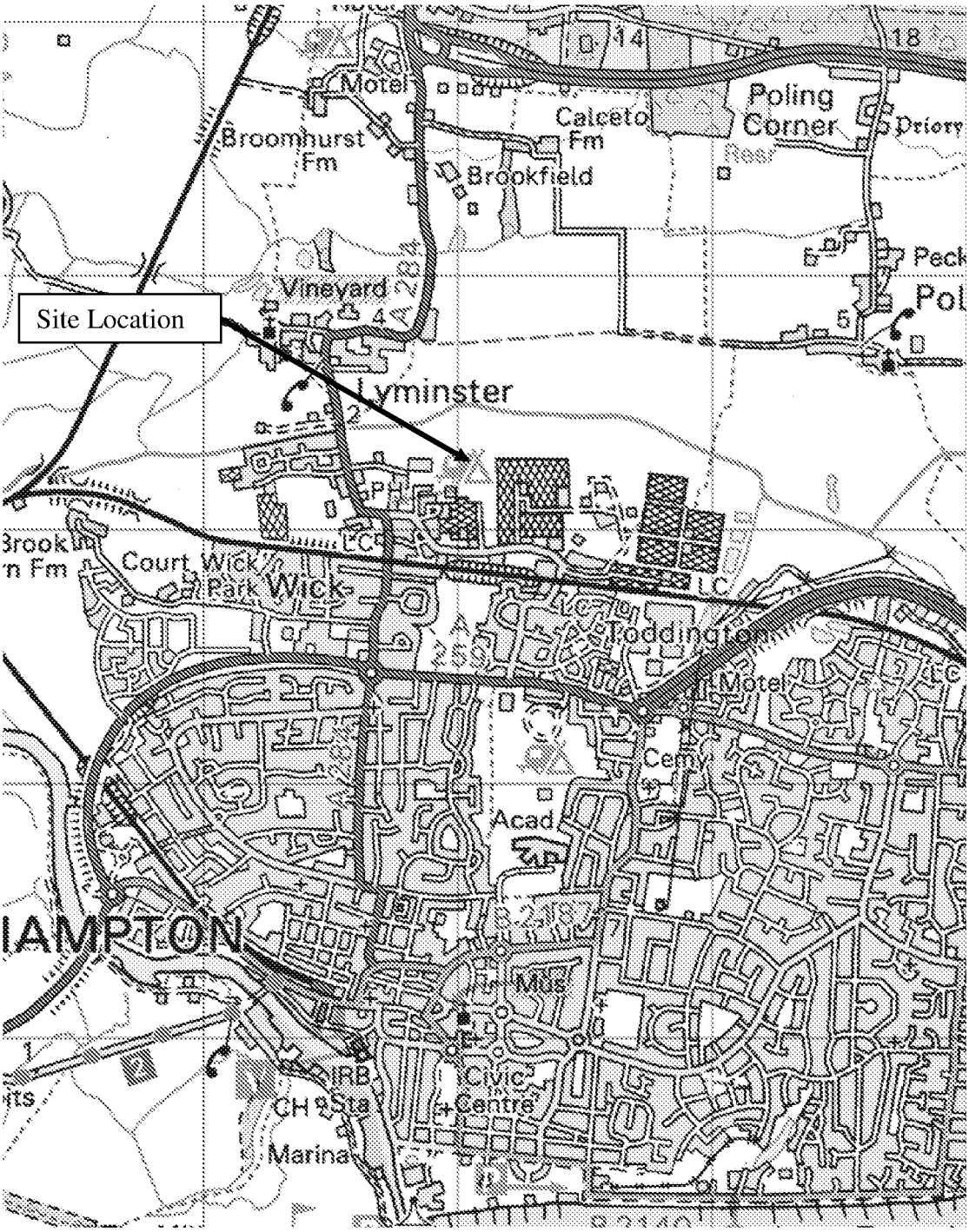
Martyn Parr - MSoRSA, RegRSA (IHE), MCIHT, HECoC
Road Safety Manager
Mayer Brown Limited
Lion House
Oriental Road
Woking
Surrey
GU22 8AR

Signed

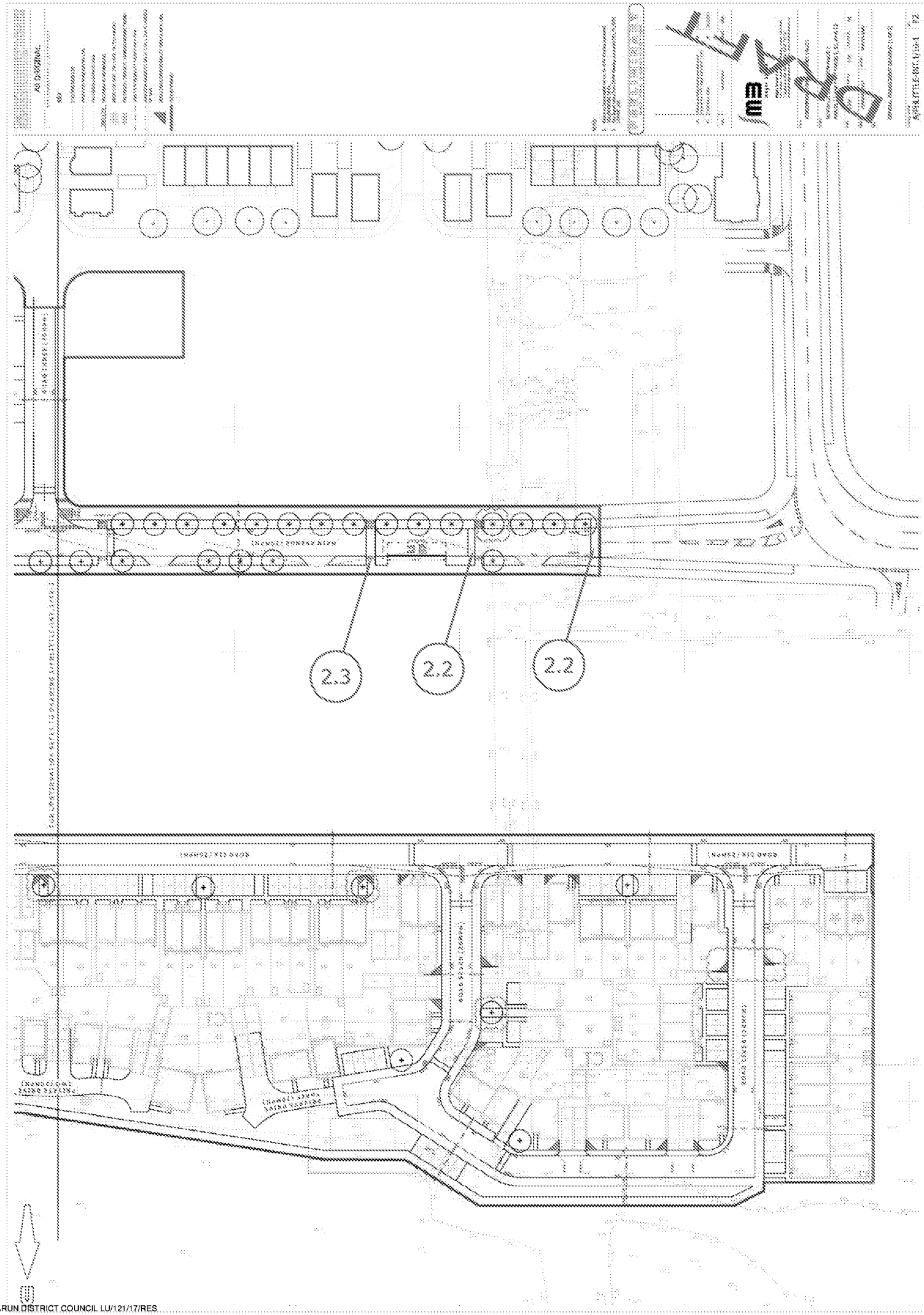
Date 17/03/17

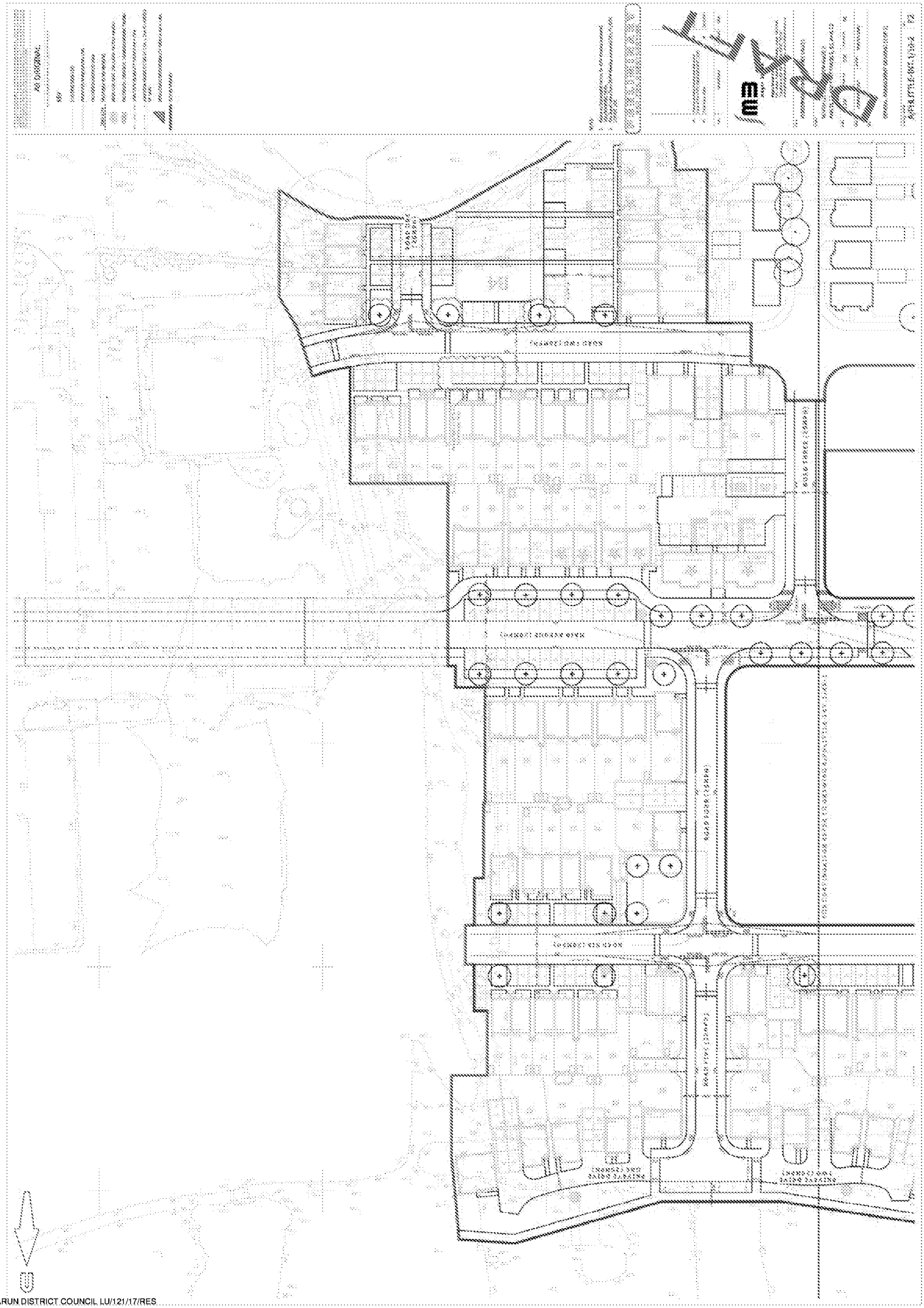
ARUN DISTRICT COUNCIL LU/121/17/RES

APPENDIX A: Site Location Plan


Site Location
Motel
Broomhurst Fm
Calceto Fm
Poling Corner
Brookfield
Vineyard
Lyminster
Court Wick
Park
Wick
Toddington
Motel
Cem
Acad
Mus
IRB
CH
Sta
Civic Centre
Marina
14
18
Priory
Rest
Peck
Pol
LC
PH

APPENDIX B: Reference Plans


2.3
2.2
2.2



ARUN DISTRICT COUNCIL LU/121/17/RES

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PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 - ROAD SAFETY AUDIT
ADDENDUM

SEPTEMBER 2017



the journey is the reward

ARUN DISTRICT COUNCIL LU/121/17/RES

PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON
INTERNAL WORKS, PARCELS B2, B4 & C1
LITTLEHAMPTON, WEST SUSSEX

STAGE 1 - ROAD SAFETY AUDIT
ADDENDUM

SEPTEMBER 2017

Project Code:	**S/PHLITTLE-INT.1.1Ad.6a**
Prepared by:	**Martyn Parr**
Approved by:	**Ken Fry**
Issue Date:	**September 2017**
Status:	**FINAL**

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Persimmon Homes Thames Valley
North Littlehampton
Internal Works, Parcels B2, B4 & C1
Littlehampton, West Sussex
Stage 1 - Road Safety Audit Addendum

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1 Introduction

1.1 A Stage 1 Road Safety Audit undertaken dated 17th March 2017 related to the internal development site highways arrangement.

1.2 The Audit Team has been provided with a detailed Audit Brief explaining the reason for alterations to the original layout.

1.3 This Addendum report results from a Stage 1 Road Safety Audit carried out on the amended Fitzalan Link Road proposals following discussions with West Sussex County Council (WSCC), at the request of WSCC the Highways Authority Project Sponsor. The Road Safety Audit Addendum was carried out in September 2017.

1.4 The Road Safety Audit Team membership was as follows:

Ken Fry	I Eng, FIHE, RegRSA (IHE), HECoC Principal Consultant - Mayer Brown Limited (Certificate of Competency in Road Safety Audit gained in April 2015)
Martyn Parr	MSoRSA, RegRSA (IHE), MCIHT, HECoC Road Safety Manager – Mayer Brown Limited (Certificate of Competency in Road Safety Audit gained in February 2015)

1.5 The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief provided by Mr Oliver Nevett, included as Appendix C. The Audit Team has not been made aware of any departures from standard.

1.6 The Design Organization have advised that a site inspection is not required at this stage. It is understood that the works subject to this Road Safety Audit Report will not be subject to a Section 38 agreement. In addition, the works comprise a highway layout entirely within a development site, not an improvement scheme affected by existing traffic conditions, so this is considered to make no difference to the audit findings.

1.7 The terms of reference of the Road Safety Audit are as described in HD 19/15, although in this case the members of the Audit Team have not carried out a site inspection. The Road Safety Audit Team has examined and reported only on the road safety implications

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of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

1.8 Reduced-scale copies of plans 'A/PHLITTLE-INT.1/10-1 P7' and 'A/PHLITTLE-INT.1/10-2 P7' supplied with the Road Safety Audit Brief, are given as **Appendix B** to this report.

1.9 The proposals comprise the demolition of existing buildings and structures, and redevelopment to provide residential, business, neighbourhood centre and community uses, green infrastructure, new highway infrastructure and improvements to existing local highway network.

1.10 The Main Avenue through the scheme is proposed to be a tree lined avenue with visibility splays kept clear of landscaping. Generally the scheme is intended to be subject to a 20mph speed limit with regular traffic calming features and off street parking. However, the speed limit in part of Main Avenue is now to be raised to 30mph.

1.11 A bus route is proposed through parts of the works subject to this Audit Report.

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2 Items Raised at the Previous Stage 1 Road Safety Audit

2.1 The road safety aspects of the internal site layout were the subject of comment in a Stage 1 Road Safety Audit Report undertaken in March 2017 (see **Appendix D**).

2.2 **Item 2.1*** raised during the Stage 1 Road Safety Audit remains a problem and is referred to again in this Road Safety Audit Report.

* **Item 2.1** has only been partly addressed and is therefore referred to again in this Stage 2 Audit but with an amended 'summary' as appropriate.

2.3 The authors of this report are satisfied that all other issues raised in the previous Stage 1 Road Safety Audit have been resolved.

2.4 One further issue has been identified in the Stage 2 Audit Report, these are detailed in Section 3 of this report.

2.5 To avoid any confusion, please note that the numbering contained within this Stage 1 Audit Addendum does not relate in any way to the numbering format used in the previous Stage 1 Audit. Therefore, the item numbers above only relate to the previous Stage 1 Road Safety Audit that is provided in **Appendix D**.

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3 Items Raised at the Stage 1 Road Safety Audit Addendum

General

3.1 **Problem**

Location: General

Summary: Visibility splays

Whilst some visibility splays have been formally identified on the drawings submitted, it will be important that all visibility splays remain free from obstruction. It is noted that some visibility splays extend across / through 3rd party land, cycle storage areas or parking bays (on 3rd party land).

It will also be important to ensure that appropriate visibility splays are provided. It is noted that the visibility splays indicated on parts of Main Avenue are not suitable for a 30mph speed limit.

Recommendation

Provide visibility splays in accordance with relevant design standards and ensure that the splays will be kept free from obstruction. Any vegetation within the splays should be maintained to ensure that it does not extend beyond a vertical height of 0.6m. If planters are to be provided then these, together with any foliage which they contain, should also not extend beyond a vertical height of 0.6m.

3.2 **Problem**

Location: General

Summary: Potential obstruction to service vehicle manoeuvres

The swept path analysis provided to the Audit Team indicates that a large refuse vehicle is able to service the site without excessive reversing manoeuvres or encroachment on the footway.

However, many of these manoeuvres will be obstructed if on-street parking were to occur within the development. This could result in excessive reversing manoeuvres or encroachment on to the footway(s).

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Recommendation

If on-street parking does occur within the extent of the swept paths then West Sussex County Council should consider implementing a traffic management order prohibiting vehicles from waiting "at any time" within the extents of the swept paths.

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4 Audit Team Statement

4.0 AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out as described in HD 19/15, with the exception that no site visit was carried out because this is a new development site containing no existing roads.

ROAD SAFETY AUDIT TEAM LEADER

Ken Fry - I Eng, FIHE, RegRSA (IHE), HECoC
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Shanklin
Isle of Wight
PO37 7EJ

Signed K.W. Fry

Date 01/09/17

ROAD SAFETY AUDIT TEAM MEMBER

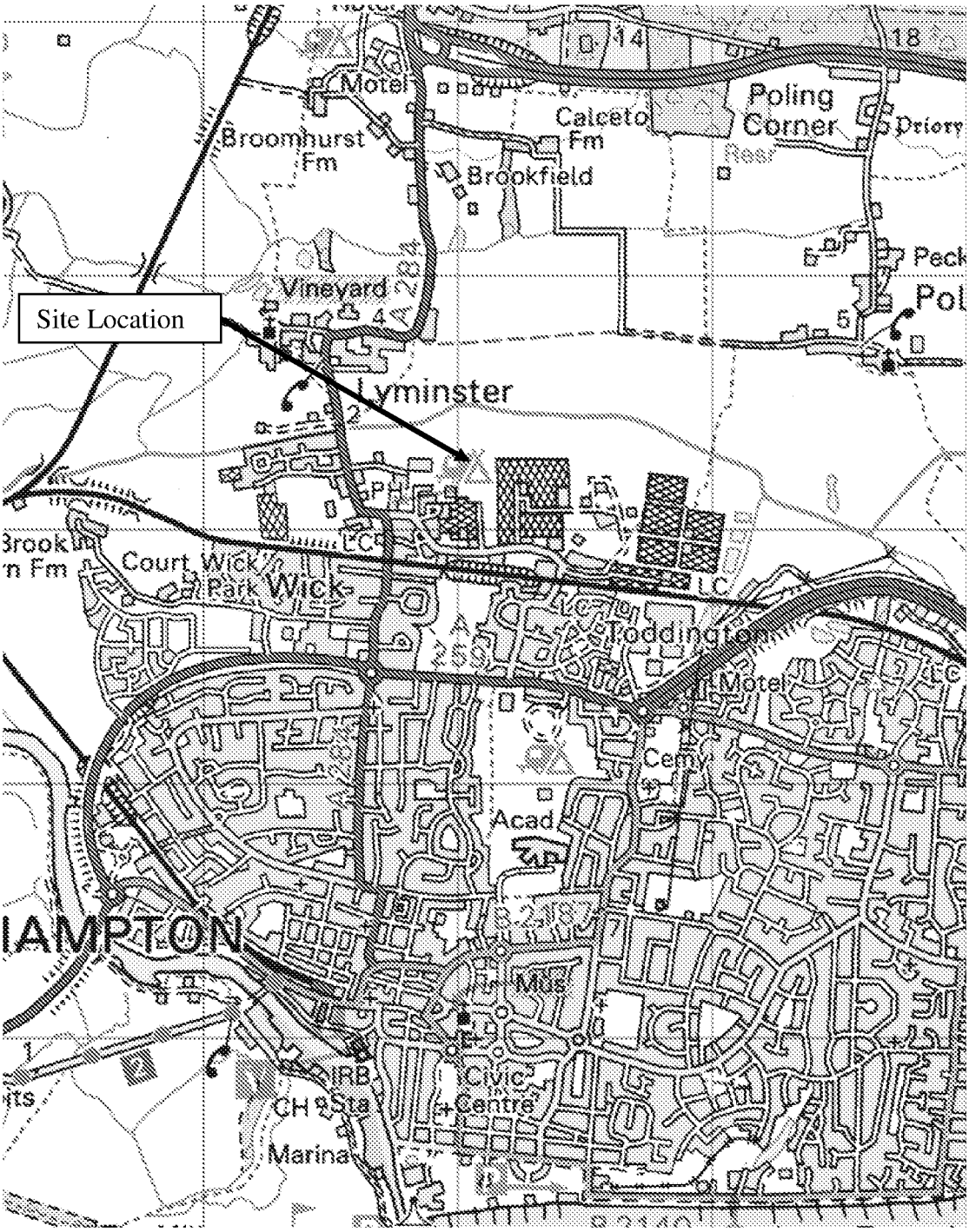
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Signed

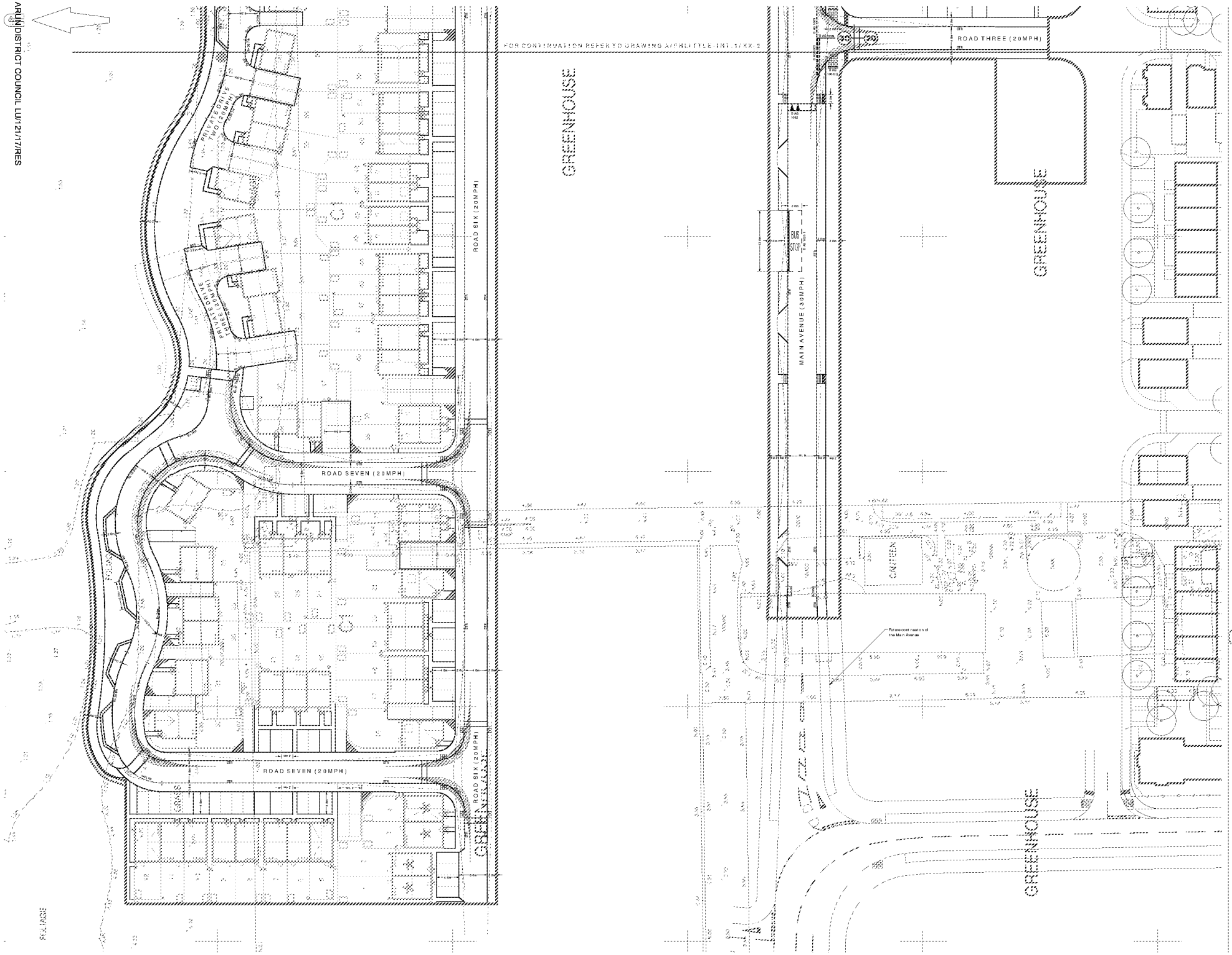
Date 01/09/17

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APPENDIX A: Site Location Plan


Site Location
Motel
Broomhurst Fm
Calceto Fm
Poling Corner
Brookfield
Vineyard
Lyminster
Court Wick
Park
Wick
Toddington
Motel
Cem
Acad
Mus
IRB
CH
Sta
Civic Centre
Marina
14
18
Priory
Rest
Peck
Pol
LC
PH

APPENDIX B: Reference Plans


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FOR CONTINUATION REFER TO DRAWING A/PHLITTLE-INT.1/XX-1
ROAD THREE (20MPH)
GREENHOUSE
PRIVATE DRIVE TWO (20MPH)
PRIVATE DRIVE ONE (20MPH)
ROAD SIX (20MPH)
ROAD SEVEN (20MPH)
MAIN AVENUE (30MPH)
BUS STOP
CANTEEN
Future continuation of the Main Avenue
KEY
EXISTING KERB LINE
PROPOSED KERB/EDGING LINE
PROPOSED DROPPED KERB
PROPOSED ROAD MARKING
PROPOSED BUFF COLOURED TACTILE PAVING
PROPOSED CORDUROY HAZARD WARNING PAVING
JUNCTION VISIBILITY SPLAY 2.4m x 25m
25m PEDESTRIAN VISIBILITY SPLAYS
25m CYCLE VISIBILITY SPLAYS
11m FORWARD VISIBILITY AROUND BEND
14m FORWARD VISIBILITY AROUND BEND
17m FORWARD VISIBILITY AROUND BEND
PEDESTRIAN INTERVISIBILITY SPLAY 2.4m x 2.4m
SITE BOUNDARY
NOTES
1. Based on topographic survey by WYG drawing numbered GQL/A044029/LAY01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV B.
PRELIMINARY
NOT FOR CONSTRUCTION
A0 ORIGINAL
mayer brown
Mayer Brown Limited
Tel/phone 01483 720 330 Fax 01483 720 477
PERSIMMON HOMES THAMES VALLEY
NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2
1:500
GJM
AE
FEBRUARY 2017
MASTER.DWG
GENERAL ARRANGEMENT DRAWING (1 OF 2)
A/PHLITTLE-INT.1/10-1
P7

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A0 ORIGINAL

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- DIAG 1234 — PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- JUNCTION VISIBILITY SPLAY 2.4m x 25m
- 25m PEDESTRIAN VISIBILITY SPLAYS
- 25m CYCLE VISIBILITY SPLAYS
- 11m FORWARD VISIBILITY AROUND BEND
- PEDESTRIAN INTERVISIBILITY SPLAY 2.4m x 2.4m
- SITE BOUNDARY

NOTES:

1. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
2. Site layout taken from PHTV drawing numbered 543_PL_SITE LAYOUT_REV B.

PRELIMINARY
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P7	Speed limit signs added and layout amended following updated site layout received from PHTV dated 22/08/2017 (CJN)	AB	30/08/2017
P6	Layout amended following updated site layout received from PHTV dated 09/08/2017 (CJN)	CJN	17/08/2017
P5	Layout updated following comments from WSCC dated 19/05/2017 (CJN)	AB	07/07/2017
P4	Tree locations added and drawing updated (CJN)	GF	24/03/2017
P3	Pedestrian/cycle visibility splays and signs added, bus stop relocated and road markings amended following comments from Stage 1 Road Safety Audit dated 17/03/2017 (CJN)	AS	20/03/2017
P2	Drawing updated following new site layout received from PHTV dated 13/03/2017 (CJN)	AS	17/03/2017
P1	Initial issue (CJN)	AB	28/02/2017

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client: PERSIMMON HOMES THAMES VALLEY

project: NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCELS, B2, B4 & C2

scale	1:250	drawn by	CJN	checked by	AB
date	FEBRUARY 2017	cad file	MASTER.DWG		

title: GENERAL ARRANGEMENT DRAWING (2 OF 2)

drawing number: A/PHLITTLE-INT.1/10-2 rev: P7