



Windroos Nursery, Littlehampton

Reserved Matters Transport Assessment

July 2016
Stuart Lyons (Haulage) Ltd

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ASSOCIATES
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DELIVERING SUSTAINABLE TRANSPORT PLANNING AND ENGINEERING SOLUTIONS

**RESIDENTIAL DEVELOPMENT
WINDROOS NURSERY
LITTLEHAMPTON**

RESERVED MATTERS TRANSPORT ASSESSMENT

CONTROLLED DOCUMENT

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**RESIDENTIAL DEVELOPMENT
WINDROOS NURSERY
LITTLEHAMPTON**

RESERVED MATTERS TRANSPORT ASSESSMENT

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1. INTRODUCTION

- 1.1 This Reserved Matters Transport Assessment (RMTA) has been prepared by Paul Basham Associates on behalf of Stuart Lyons (Haulage) Ltd in association with their planning consent for up to 91 dwellings at Windroos Nursery, Littlehampton. This RMTA supports the detailed Reserved matters planning application, comprising of 85 dwellings (71 private, 14 affordable).
- 1.2 The outline application (LU/229/10) sought detailed consent for access. Therefore with elements such as access, traffic impact and accessibility of the site already approved, this RMTA will focus on the implications of the detailed site layout prepared for this application. Clearly the reduction of 6 dwellings from the maximum given outline consent will mean a reduced development impact on the local road network.
- 1.3 This RMTA will therefore cover the following elements:
- Confirm the proposed accommodation schedule and associated parking provision relative to West Sussex County Council (WSCC) standards
 - Assess the allocation and distribution of parking through the proposed layout
 - Review of the internal road alignments and junctions
 - Review of refuse servicing requirements including tracking drawings
 - Review of emergency vehicles servicing including tracking drawings
 - Identify any pre-application highways conditions/ S106 requirements that would therefore need to come forward with the development.

2. PROPOSED DEVELOPMENT

2.1 The outline planning consent was for up to 91 dwellings, whereas this RM application seeks 85 dwellings (71 private, 14 affordable). The proposed accommodation schedule is summarised within **Table 1**, and site layout attached as **Appendix A**.

	Units	Numbers
Private	2 Bedroom House	23
	3 Bedroom House	40
	4 Bedroom House	8
Affordable	2 Bedroom Flat	12
	2 Bedroom House	2
TOTAL		85

Table 1: Proposed Accommodation Schedule

Car Parking Provision

2.2 WSCCs parking standards calculator identify parking standards for the district based upon dwelling size and whether the parking is allocated to particular properties or unallocated, and are outlined within **Table 2** for reference.

Type/Size of Dwelling	Car Parking per Dwelling					TOTAL
	Number of Units	Allocated Spaces per unit	Individual/ on plot allocation	Unallocated for residents	Unallocated for visitors	TOTAL Parking Demand
Affordable 2 Bedroom Flat	12	0	0	9	2	12
Affordable 2 Bedroom House	2	2	4	0	0	4
Private 2 Bedroom House	15	1	15	5	3	23
Private 2 Bedroom House	8	2	16	0	2	18
Private 3 Bedroom House	2	1	2	1	0	4
Private 3 Bedroom House	38	2	76	4	8	88
Private 4 Bedroom House	4	2	8	1	1	9
Private 4 Bedroom House	4	3	12	0	1	13
TOTAL	85	N/A	133	21	17	171

Table 2: WSCC Residential Car Parking Calculator

- 2.3 Parking will be provided in line with the above recommended allocations per unit and will include a proportion of unallocated units. The proposed site layout (Appendix A) highlights the allocation of parking spaces to particular properties, as well as those set aside as unallocated/visitor.
- 2.4 The proposed car parking strategy for the site uses a combination of garages, driveways, parking courts and laybys. A total of 178 car parking spaces are proposed, of which 25 would be unallocated for residents and 17 would be visitor parking. Whilst the number of spaces is marginally above that outlined in **Table 2** (7 spaces), the additional 7 spaces are unallocated bays so as to better accommodate overspill/visitor demand and will ensure that all parking demand will remain on site.

Cycle Parking Provision

- 2.5 WSCC Guidance on Parking in New Residential Development (2010) identifies cycle parking standards based on dwelling size, type and level of bicycle ownership. WSCC standards and the developments provisions are shown in **Table 3**.

	WSCC Standard	Number of Units	Development Demand
House – Up to 4 rooms	1	25	25
House – 5+ rooms	2	48	96
Flat – Up to 3 rooms	0.5	12	6
TOTAL	N/A	85	127

Table 3: WSCC Cycle Parking Standards

- 2.6 For every house provided with a garage, the dimensions of the garage are at least 3m x 6m to accommodate the cycle parking requirements. All other houses will be provided with a secure shed within the rear garden of the property, with direct access to the rear garden either via a side or rear gate. Flats would be provided with a communal cycle storage room, as shown on the site layout.

Access

- 2.7 Details of the access were agreed at the Outline stage in 2010, with the frontage of the site 'safeguarded' in relation to a potential road widening scheme on the A259. Whilst at the time of the outline consent, no timescale for the A259 improvement works had been identified, PBA are aware that WSCC are now progressing with some preliminary design works for dualling this section.
- 2.8 PBA met with WSCC highways development control prior to submission of this RM application to discuss progress of the A259 improvement designs and the associated approach to the access of this site. WSCC confirmed that with full detail of access approved at the outline stage, it is their obligation to ensure the proposed A259 works accommodate access to this development. PBA accept that a ghost-island right turn is not acceptable on a dual carriageway, and that WSCC will likely require a left in/left out site access arrangement. The proposed access could be adopted relatively simply to reflect this without impacting upon the housing layout.
- 2.9 On that basis this RM application retains a 6m wide bellmouth supported by 15.0m corner radii and 2m wide footway flanking either side of the spine road. The access will be supported with a right turn lane and a pedestrian refuge island support with tactile paving either side of the site access. WSCC will then need to alter/adapt this approved access accordingly to tie in with an A259 dualling designs.

3. INTERNAL ROADS AND LAYOUTS

- 3.1 The internal road layout has been informed by the indicative masterplan submitted and approved with the outline planning application.
- 3.2 The spine road measures 6m in width, which is in keeping with guidance in Manual for Streets (MfS) design guidance principles, with 4.8 being sufficient for a car and larger vehicle to pass and 4.1m being sufficient for two cars to pass. Side roads leading from the spine road measure 5.5 and 4.8m wide and are therefore sufficient for both the movement of vehicles and a certain amount of on-street visitor parking.
- 3.3 No detailed traffic calming features are proposed due to the road layout and alignment offering a natural traffic calming measure with turns and the square located in the centre of the site. This is deemed to calm the traffic enough and ensure speeds are kept to the proposed 20 mph limit.
- 3.4 Stuart Lyons (Haulage) Ltd would seek to have the majority of the internal highways adopted via a Section 38 agreement, with only smaller driveways retained as private roads. The proposed extent of highway adoption is demonstrated within **Appendix B**.
- 3.5 Whilst the primary pedestrian and cycle access is via the new site access onto the A259, a pedestrian footpath is proposed on the south eastern boundary of the site (by plots 20 and 22). This will create an attractive pedestrian network and environment.

Servicing and Emergency Access

- 3.6 Tracking for WSCC's large 9.8m refuse vehicle has been completed on the proposed site layout to ensure that each property is located within convenient distance from the vehicle route.
- 3.7 In keeping with MfS (paragraph 6.8.9) and Building Regulations guidance, no resident would be required to carry their bins greater than 30m to a collection point or kerb edge, and the refuse vehicle would be able to get within 25m of each property or collection point. Refuse vehicle tracking is demonstrated within **Appendix C**, with bin collection points identified on the site layout (**Appendix A**).

- 3.8 In keeping with access requirements for emergency service vehicles, the proposed layout incorporates space to accommodate turning movements for a fire tender (being smaller and more manoeuvrable than the 9.8m refuse vehicle). Each property would have fire tender access within 45m of the whole building, in line with Building Regulation requirements (also **Appendix C**).

Visibility Splays

- 3.9 Based on an internal road design speed of 20mph, the appropriate visibility splay from the side junctions onto the spine road is 2.4m x 25m based on MfS design guidance. These splays have been demonstrated for each junction onto the spine road within **Appendix D**. The 20mph design speed assists in creating an enhanced walking and cycling environment.

4. PLANNING CONDITIONS/ S106 OBLIGATIONS

- 4.1 As part of the decision notice (dated 28th September 2011) outlines the following highway conditions:

Condition 11: 'Prior to the commencement of development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Local Planning Authority), the following information shall be submitted to an approved, in writing, by the local planning authority:

- 1) A vehicle swept path analysis to support the movement framework for emergency vehicles and refuse vehicles, both within the internal layout and where appropriate in respect off-site highway proposals. Any issues identified within this analysis need to be addressed.*
- 2) A clear indication of the areas to be offered for highway adoption is required for the internal layout-prior to the commencement of development. Details of street furniture, materials, street lighting specifications etc should all be included to support site master planning process.*
- 3) Prior to any development a Construction Traffic Management Plan must be submitted and approved by the County Council.'*

Condition 12: 'The development hereby approved, shall not be commenced until such time as a Travel Plan has been submitted to and approved in writing by the Local Planning Authority. The Travel Plan once approved shall thereafter be implemented and monitored as agreed. The Travel Plan shall be completed in accordance with the latest guidance and good practice documentation as published by the Department for Transport or as advised by the Highway Authority'

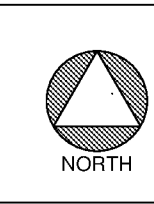
- 4.2 As part of this RM application Condition 11.1 relating to vehicle tracking has been covered in **Appendix C**, Condition 11.2 has been covered in **Appendix B** and Condition 11.3 relating to a Construction Traffic Management Plan will be dealt with at a later date.
- 4.3 With regards to Condition 12 for a Travel Plan, a Full Residential Travel Plan has been produced by PBA and has been submitted as part of the RM application. The Full Residential Travel Plan adds further detail to the approved Framework TP with regards to development schedules, anticipated phasing and a detailed Action Plan with associated costing's.

5. CONCLUSION AND RECOMMENDATIONS

- 5.1 This Reserved Matters Transport Assessment (RMTA) has been prepared by Paul Basham Associates on behalf of Stuart Lyons (Haulage) Ltd to support the Reserved Matters application for a residential unit of 85 units.
- 5.2 This RMTA reviews those outstanding highways details of development not already approved at the outline application stage, primarily relating to on-site road layouts, refuse servicing, emergency vehicle access and parking provisions.
- 5.3 The proposed road layout has been reviewed with respect to:
- Pedestrian permeability
 - Visibility splays
 - Tracking of service vehicles
 - Adoptable areas
- 5.4 Proposed car parking and cycle storage provision has been designed with consideration given to WSCC parking standards, ensuring appropriate, convenient and secure parking levels and locations are achieved.
- 5.5 This RM application will retain the access agreed in the outline stage in 2010 comprising a 6m wide bellmouth with corner radii of 15.0m and flanked by a 2m wide footway either side. Whilst it is understood that WSCC intend to dual the A259, and therefore a ghost island right turn lane would not be acceptable, the proposed access could be adapted relatively simply without impacting the housing layout and would feature a left in and left out only access arrangement.
- 5.6 PBA would therefore encourage WSCC highways to look favourably upon this application.

Appendix A





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CDM Regulations 2015 : Reg. 9

None of the below is deemed to relieve any contractor of his obligations under all applicable health and safety legislation.

In preparing the design shown on this and related drawings Paul Basham Associates has considered and, where reasonably practicable, eliminated foreseeable risks. Any further abnormal or unusual risks, which remain, are numbered below and identified thus **A** and should be given particular attention by all those carrying out construction or of future maintenance works.

- 1. Abnormal or unusual risks
- 2.
- 3.

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KEY:

- PROPOSED CARRIAGEWAY
- PROPOSED FOOTWAY
- PROPOSED VERGE
- EXTENT OF S38 ADOPTION

A	UPDATED ARCHITECTS LAYOUT	25.05.16	BH	JB
P1	PRELIMINARY ISSUE	28.10.15	SCW	SCW
Rev	Description	Date	By	Check



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Client
PRIVATE CLIENT

Project Name
**WINDROOS NURSERY,
LITTLEHAMPTON**

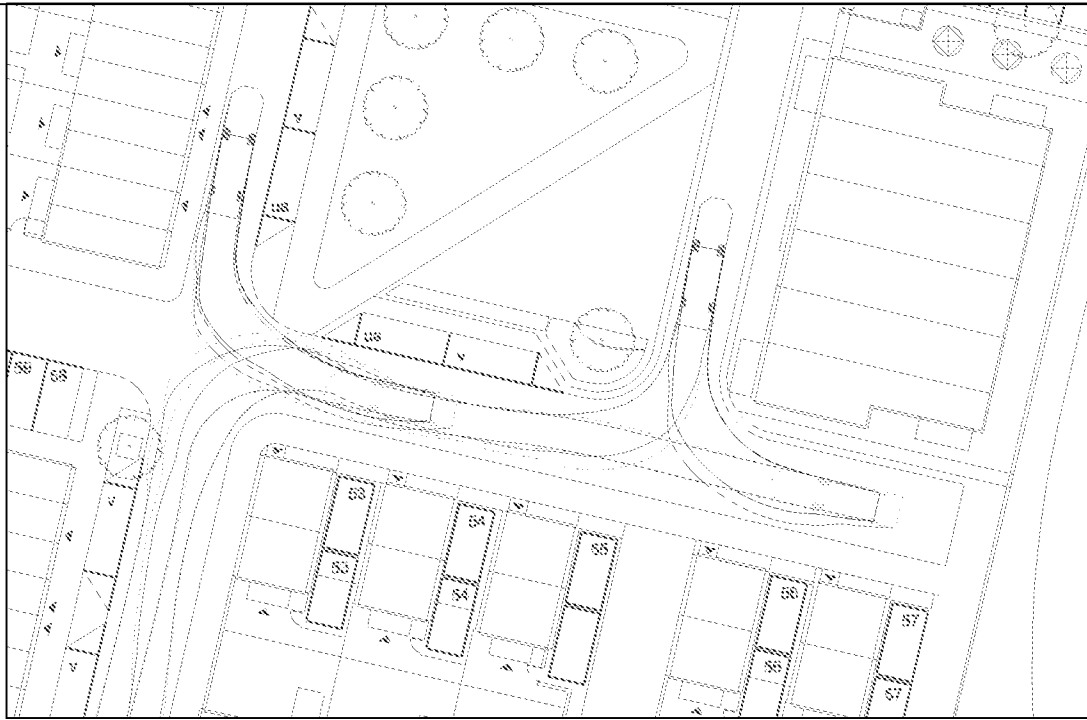
Title
**PRELIMINARY
S38 GENERAL ARRANGEMENT**

Project Phase
PRELIMINARY

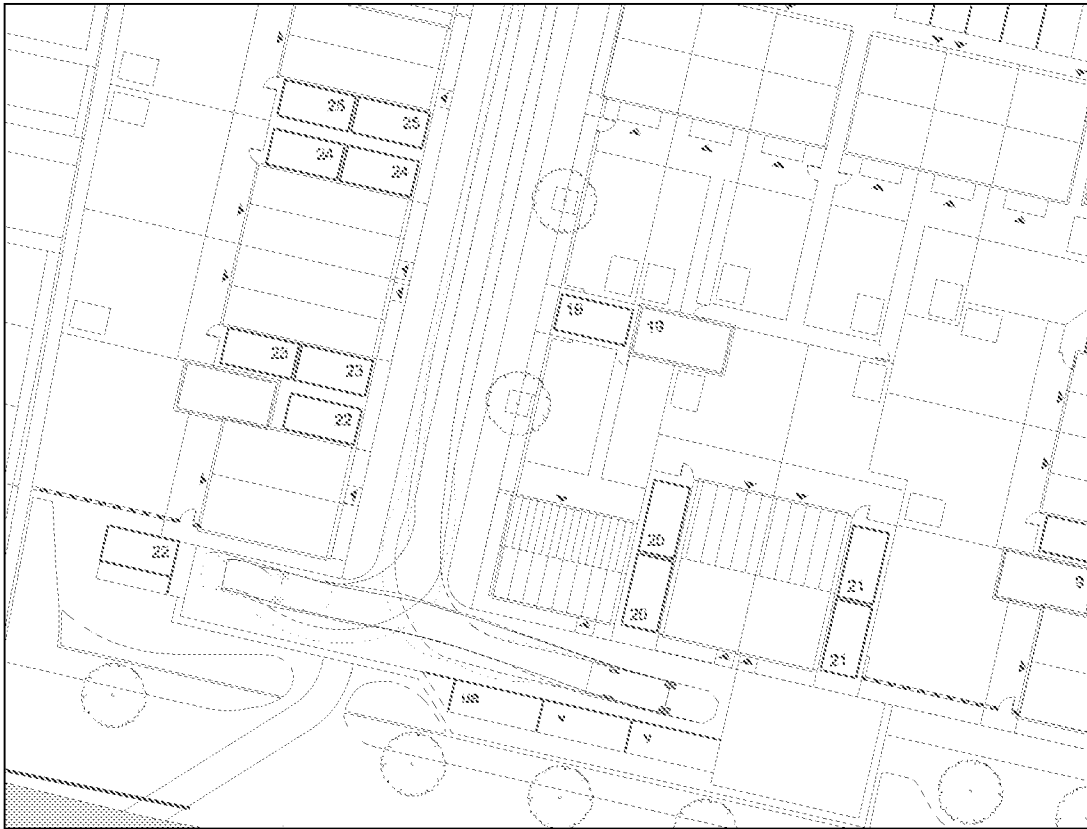
Checked By	Checked Date	Drawn By	Drawn Date
SCW	27.10.15	SCW	27.10.15
Client Drawing No	Scale		
-	1:500		(AT A1 SIZE)
PBA Drawing No	Revision		
063.5001.107	A		



MAIN SITE TRACK (SCALE 1:1000)



TRACK BY 53, 56, 57 62, 63 AND 74-85 (SCALE 1:500)

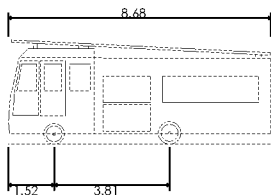


TRACK BY 19, 20 AND 22 (SCALE 1:500)

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- 6. IN ACCORDANCE WITH THE BUILDING REGULARION REQUIREMENT B5 (2000) FIRE SERVICE VEHICLES SHOULD BE ABLE TO GET WITHIN 45M OF DWELLINGS. THE MAXIMUM DISTANCES HAVE BEEN DEMONSTRATED IN THIS DRAWING TO DEMONSTRATE COMPLIANCE WITH THE REGULATIONS

FIRE TENDER VEHICLE PROFILE



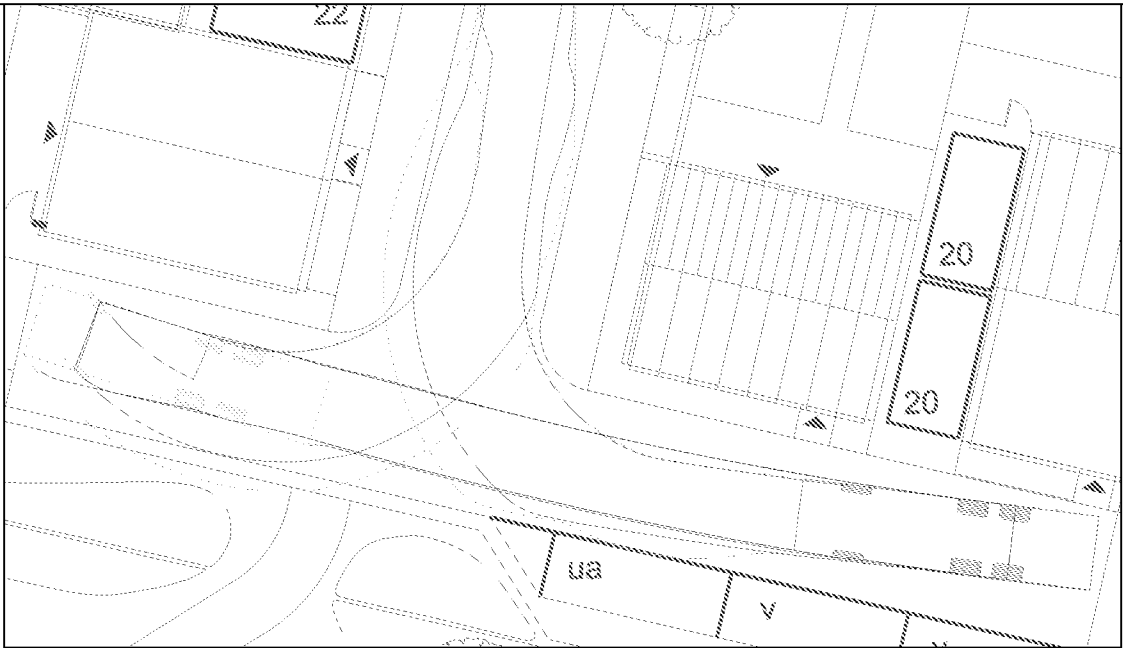
DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	7.910m



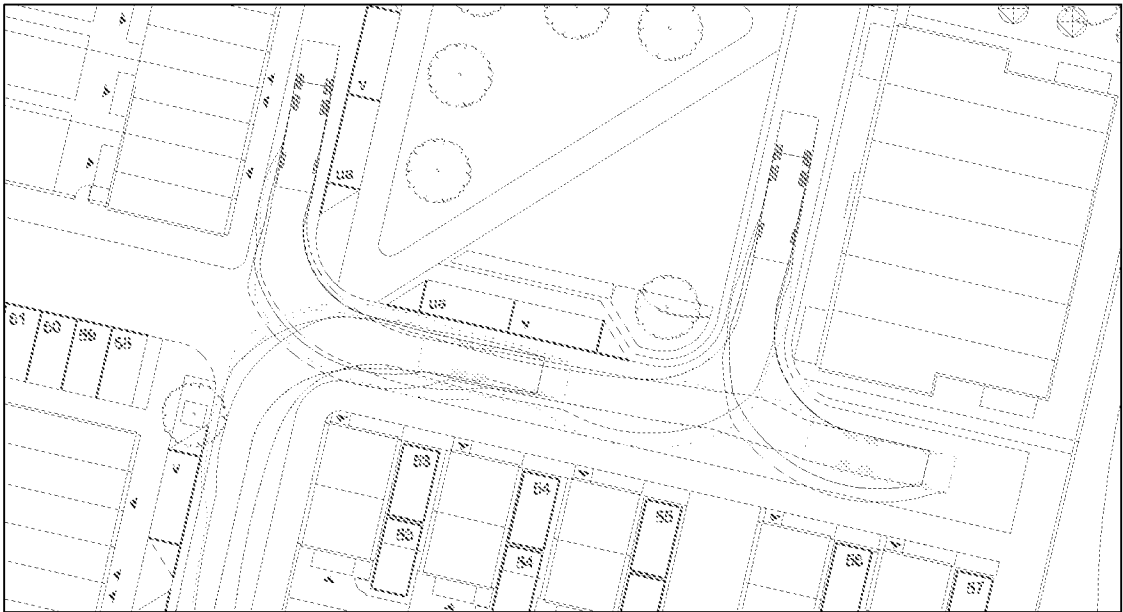
Project Name WINDROOS NURSEPPY LITTLEHAMPTON	Drawn By JL	Checked By AK	Checked Date 01.04.15	Scale 1:500	Revised Layout EK P4 21.07.16
Project Phase PRELIMINARY	Paul Basham Associates Ltd Lancaster Court 2 Barnes Wallis Road Fareham Hampshire PO15 5TU T: +44 (0) 1458 958154 E: info@paulbashamassociates.com W: www.paulbashamassociates.com	Drawn Date 01.04.15	Client Drawing No. N/A	P&A Drawing No. 063 0001.001	Revised Layout MS P3 01.06.16
FIRE TENDER TRACKING		Paul Basham ASSOCIATES		Revision P4	
				(AT A3 SIZE)	
				PRELIMINARY ISSUE AK P1 01.04.15	



MAIN SITE TRACK (SCALE 1:1000)



TRACK BY 22, 19 AND 20 (SCALE 1:250)

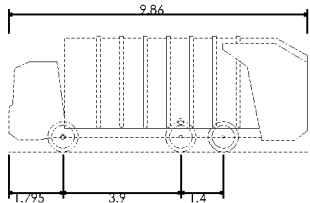


TRACK BY 53, 62, 63, 56, 57 AND 74-85 (SCALE 1:500)

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REFUSE VEHICLE PROFILE



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



REVISED LAYOUT	EK	P4	21.07.16
REVISED LAYOUT	MS	P3	01.06.16
PRELIMINARY ISSUE	MS	P2	28.10.15
PRELIMINARY ISSUE	AK	P1	01.04.15

Project Name WINDROOS NURSEPY LITTLEHAMPTON	TRK: REFUSE VEHICLE TRACKING	 Paul Basham Associates Ltd Lancaster Court 2 Barnes Wallis Road Fareham Hampshire PO15 5TU T: +44 (0) 1489 998154 E: info@paulbashamassociates.com W: www.paulbashamassociates.com	Checked By AK	Checked Date 01.04.16	Scale AS SHOWN	(AT A3 SIZE)	
Project Phase PRELIMINARY			Drawn By JL	Drawn Date 01.04.15	Client Drawing No. N/A	P&A Drawing No. 063 0001.002	Revision P4



VISIBILITY ADJACENT TO PLOTS 53, 63 AND 62

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6. THE PROPOSED SPEED LIMIT FOR THE DEVELOPMENT WILL 20MPH, AS SUCVH FORWARD VISIBILITY SPLAYS OF 25M ARE SHOWN.

7. WHERE PARKING IS SHOWN WITHIN THE VISIBILITY SPLAYS MANUAL FOR STREETS STATES THAT WHERE 'SPEEDS ARE LOW, SOME ENCROACHMENT MAY BE ACCEPTABLE' AND WHERE THIS IS NOT A PERMANENT OBSTACLE THIS HAS BEEN DEEMED ACCEPTABLE IN THIS INSTANCE..



VISIBILITY AROUND SQUARE



Project Name WINDROOS NURSERY LITTLEHAMPTON		Title INTERNAL VISIBILITY SPLAYS	 Paul Basham Associates Ltd Lancaster Court 2 Barnes Wallis Road Farnham Hampshire PO15 8TU T +44 (0) 1480 808154 E info@paulbashamassociates.com W www.paulbashamassociates.com	Checked By MS	Checked Date 27.10.15	Scale 1:500	(AT A3 SIZE)	
Project Phase PRELIMINARY				Drawn By JL	Drawn Date 27.10.15	Client Drawing No. N/A	P&A Drawing No. 063.0001.003	Revision P3

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PRELIMINARY ISSUE	MS	P1	27.10.15