

TRANSPORT ASSESSMENT

Lysander

Oldlands Farm, Bognor Regis

September 2021

Transport Assessment

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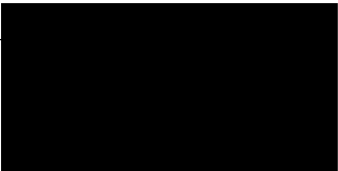
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1 Introduction

- 1.1 Vectos have been appointed by Lysander to provide transport advice in relation to the proposed development of a B8 Storage and Distribution Centre on land at Oldlands Farm, Bognor Regis. The site is located in the administrative boundary of Arun District Council (ADC) and West Sussex County Council (WSCC).
- 1.2 The site is currently undeveloped and is bound by the A259 to the north and west, the West Coastway Railway Line to the east and existing commercial uses to the south. The site forms Oldlands Farm Phase 2 which is part of Enterprise Bognor Regis (EBR).
- 1.3 Vehicular access is proposed to be taken from the existing internal site access road to the south of the site which connects to the roundabout with the A29 and A259 to the south west of the site.
- 1.4 The development proposals are for:
- “Erection of a warehouse (Use Class B8) with ancillary office, associated vehicle parking, van storage, plant, ancillary structures, lighting, landscaping and infrastructure works including earthworks to facilitate flood compensation area.”*
- 1.5 The future occupier proposes to use the site as a storage and distribution centre, where products are delivered via small vans to customers to the local area. A site layout plan is provided at **Appendix A**.
- 1.6 This Transport Assessment (TA) considers the potential transport effects of the development proposals. The report has been prepared with reference to guidance set out within the Adopted Arun Local Plan (July 2018).
- 1.7 This TA is supported by a Framework Travel Plan (FTP) which has been prepared as a standalone document. More information on the TP is set out in **Section 4** of this report.
- 1.8 The remainder of the report is structured as follows:
- **Section 2: Existing Situation** – A review of transport conditions at the site and surrounding area, existing pedestrian and cycle routes, public transport provision and the highway network.
 - **Section 3: Planning Policy** – A summary of key current planning policy at national and local level.
 - **Section 4: Development Proposals** – A description of the Proposed Development including an overview of the TP.
 - **Section 5: Trip Generation & Impact Assessment** – An assessment of anticipated net vehicular trip generation.
 - **Section 6: Summary & Conclusions** – A review of the key points described in this report.

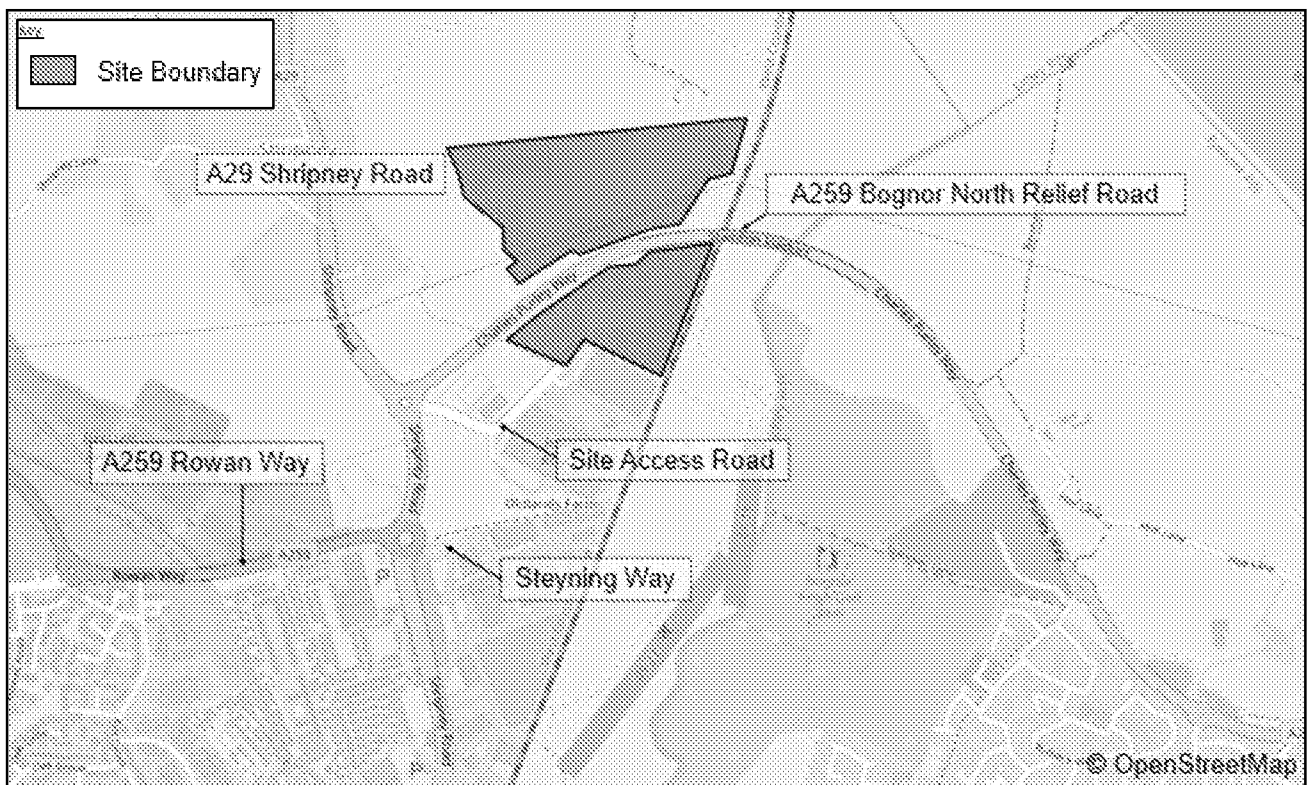
2 Existing Situation

- 2.1 This section of the report provides an overview of the current accessibility of the site in terms of sustainable travel, and a high-level review of the local highway network.

Site and Surroundings

- 2.2 The site is located within the administrative boundary of ADC and WSCC to the north of Bognor Regis. The site is currently undeveloped and is bound by the A259 to the north and west, the West Coastway Railway Line to the east and existing commercial uses to the south. The site forms Oldlands Farm Phase 2 which is part of EBR.
- 2.3 Vehicular access is proposed to be taken from the existing internal site access road to the south of the site which connects to the roundabout with the A29 and A259 to the south west of the site.
- 2.4 The indicative location of the site is illustrated in **Figure 2.1**.

Figure 2.1: Site Location



Planning History

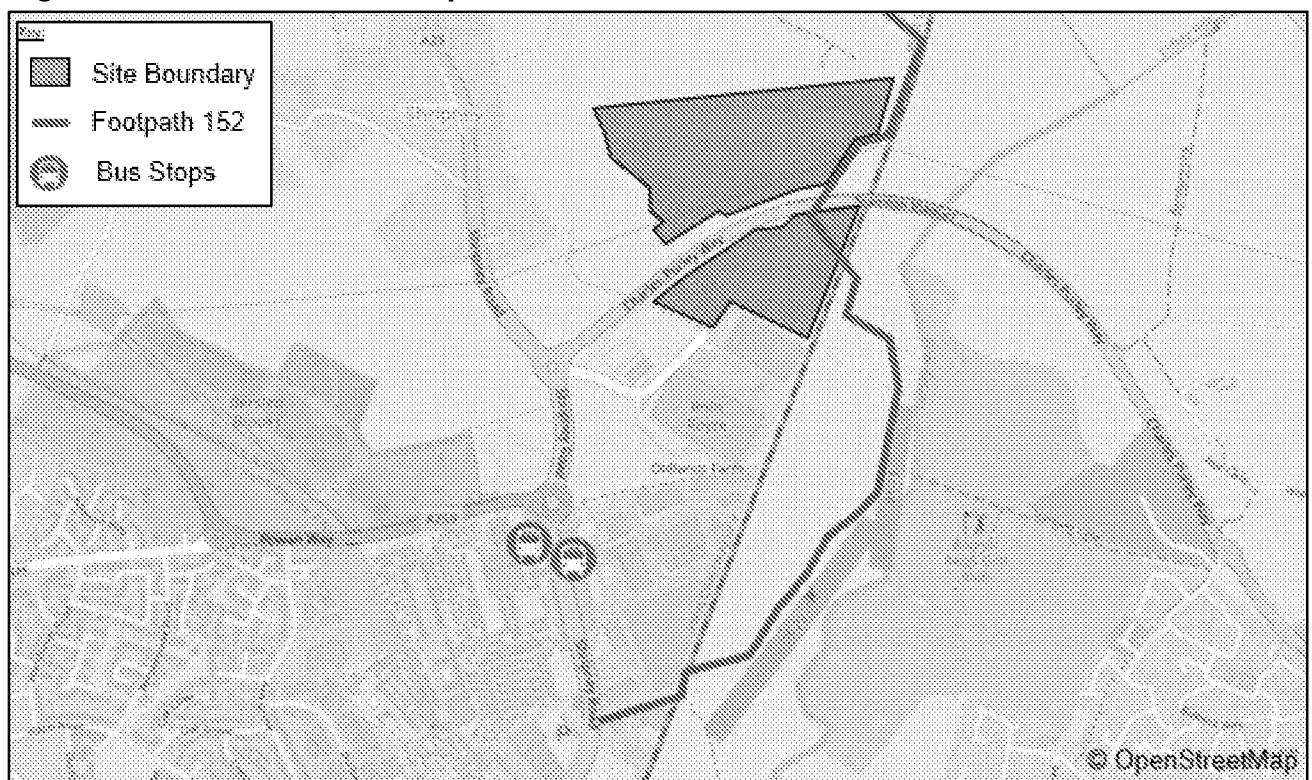
- 2.5 The site forms part of a wider plot where hybrid permission was granted in April 2016 (AL/58/15/OUT) that sought full planning permission for earth works to facilitate a flood compensation area and outline planning permission (with all matters reserved) for up to 20,453 sqm of B2 / B8 floor space.

- 2.6 In December 2018, reserved matters consent was granted for a 4-unit industrial scheme (AL/44/18/RES) comprising 3 units totalling 7,032 sqm of B2 floor space and 1 unit totalling 10,610 sqm of B8 floor space.
- 2.7 Notwithstanding this, consent for the outline application lapsed in April 2019 and the reserved matters consent lapsed in December 2020. However, this demonstrates that the principle of development at the site has previously been accepted.

Accessibility by Non-Car Modes

- 2.8 A plan of key sustainable transport connections in proximity to the site can be viewed at **Figure 2.2**.

Figure 2.2: Sustainable Transport Connections

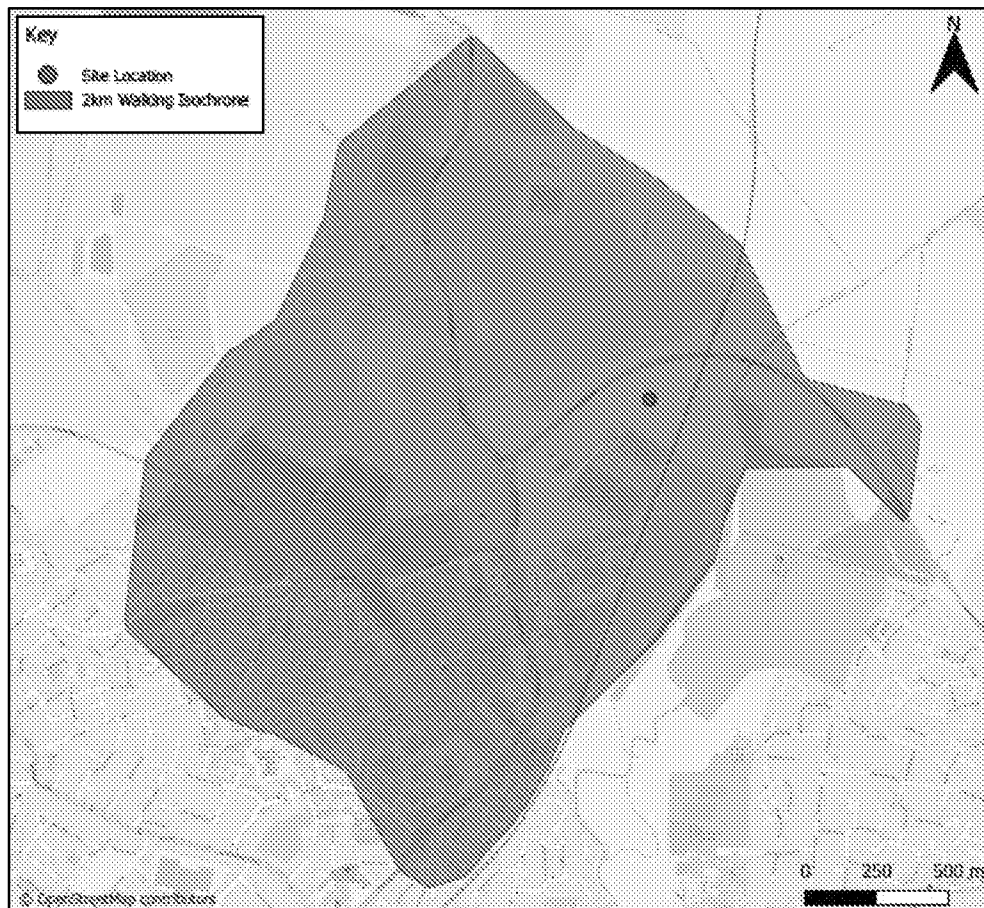


Walking and Cycling

- 2.9 Along the site access road which provides access to the site from the A29 / A259 roundabout, a shared footway / cycleway is provided along both sides of the road. In addition, dropped kerbs with tactile paving and streetlighting is provided along the road.
- 2.10 Beyond the Oldlands Farm site, a shared footway / cycleway is provided on the western side of A29 Shripney Road to the south of the site which can be accessed using the staggered crossing to the south of the A29 / A259 roundabout. Shared footways / cycleways continue to the south providing a connection to the nearby Bognor Regis Retail Park and onwards to the centre of Bognor Regis.

- 2.11 A footway is also provided on the A259 Rowan Way leading towards the residential area of North Bersted as well as on Steyning Way providing access to a mixed retail / commercial area to the south of the site.
- 2.12 On the A29 Shripney Road to the north of the site, a footway is provided that connects to Shripney. In addition, a shared footway / cycleway is provided on the southern side of the A259 providing a connection towards Flansham and Felpham which connects to National Cycle Network (NCN) Route 2.
- 2.13 A Public Right of Way (PRoW) (Footpath 152) runs through the north east of the site. As is discussed in **Section 4**, as part of this application, it is proposed that the PRoW be realigned through a formal diversion application.
- 2.14 With regard to walking distances, the Chartered Institution of Highways & Transportation (CIHT) published the 'Planning for Walking' document in April 2015 which states that *"Across Britain about 80 per cent of journeys shorter than 1 mile are made wholly on foot"*. As such, **Figure 2.3** shows a plan illustrating the 2km walking isochrone from the site.

Figure 2.3: 2km Walking Isochrone



- 2.15 **Figure 2.3** demonstrates that the nearby residential areas of Shripney and Bersted and the amenities provided at the Bognor Regis Retail Park are located within a 2km walking distance.

- 2.16 With regards to cycling distances, Department of Transport (DfT) guidance is outlined in ‘LTN 1/20 - Cycle Infrastructure Design’. This states *“Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people”*. As such, 5km and 8km cycling isochrones from the site are provided at **Figure 2.4** overleaf.

Figure 2.4: 5km and 8km Cycling Isochrones



- 2.17 **Figure 2.4** demonstrates that local residential areas including Felpham and Bognor Regis are within 5km. Additionally, Yapton and Barnham are accessible within an 8km cycle from the site.
- 2.18 In these locations, several services, including food and non-food retail outlets, can be accessed by cycling on a lunch break or as a combined trip on the way to and from work.

Public Transport

Bus Services

- 2.19 The nearest bus stops are located approximately 800m to the south of the site on Shripney Road. The stops are served by the 61, 62, 66A and 66C bus services providing access to destinations including Bognor Regis, Aldwick and Yapton. As outlined above, adequate footways are provided which allow access to these stops. A summary of the services provided is shown in **Table 2.1** overleaf.

Table 2.1: Bus Service Summary

Service	Route	Weekday Frequency
61	North Bersted – South Bersted – Bognor Regis – Aldwick (Circular)	2 per day
62	North Bersted – South Bersted – Bognor Regis – Aldwick – Nyetimber (Circular)	2 per day
66A	Bognor Regis - Yapton - Bognor Regis	3 per day
66C	Bognor Regis - Yapton - Bognor Regis	3 per day

Rail Services

- 2.20 The nearest rail services are available from Bognor Regis Railway Station which is located approximately 3km cycling distance from the site. The station is host to the services as summarised in **Table 2.2**.

Table 2.2: Bognor Regis Railway Station Service Summary

Destination	Weekday Frequency
London Victoria	2 per hour
Barnham	1 per hour
Littlehampton	1 per hour

Highway Network

- 2.21 The site is accessed using the internal site access road within the Oldlands Farm area and connects to the four-arm roundabout with the A29 / A259 to the south west of the site. The road is a two-way single lane carriageway with a 30mph speed limit. At present, the road also provides access to two Rolls Royce warehouses and a Lidl supermarket to the south of the site.
- 2.22 The A29 provides a connection north to the A27 via the Fontwell West roundabout and south into Bognor Regis. In proximity to the site, the road is a two-lane dual carriageway subject to a 40mph speed limit. To the north of the site, as the road runs through Shripney, the road comprises a two-way single lane carriageway. The A27 runs to the north of the site and forms part of the strategic road network and provides a connection to destinations along the south coast as well as linking to the M27 located west of the site.
- 2.23 Similarly, the A259 provides a connection to destinations along the south coast. To the north of the site, the road is a two-way single lane carriageway subject to a 40mph speed limit, providing connections to destinations to the east including Goring-by-Sea and Worthing. Westbound, via the North Bersted Bypass, connections are provided to Chichester and Havant. It is also possible to access the A27 via the Bognor Road roundabout using this route.

Summary

- 2.24 The site is well located to take advantage of the strategic highway network with its proximity to the A27, A29 and A259. In addition, the site is accessible by sustainable modes of transport, most notably by a number of shared footways / cycleways including on the A29 and A259. These routes provide onward connections to the nearby residential areas as well as local amenities.



3 Planning Policy

- 3.1 This section of the report considers the relevant land use and transport planning policies at both a national and local level in relation to the development proposals.

National Policy

National Planning Policy Framework (NPPF) (February 2019)

- 3.2 The National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government in February 2019. This replaces the previous version of the NPPF which was updated in July 2018 after it was originally published in March 2012.
- 3.3 The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced.
- 3.4 The three overarching objectives to achieve sustainable development outlined within the NPPF include:

an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

- 3.5 Chapter 9 covers the promotion of 'Sustainable Transport' and states in relation to parking standards:

"If setting local parking standards for residential and non-residential development, policies should take into account:

- a) the accessibility of the development;*
- b) the type, mix and use of development;*
- c) the availability of and opportunities for public transport;*
- d) local car ownership levels; and*

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.”

Considering Development Proposals

3.6 The NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

“a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”

3.7 Guidance is provided on the consideration of proposals. It is mentioned that *“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe”*.

3.8 Within the above context it is stated that all applications for developments should:

“a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations”

National Planning Practice Guidance (2014)

3.9 The National Planning Practice Guidance (NPPG), which is published by the Ministry of Housing, Communities and Local Government, supports the overarching aims of the NPPF. Highways and transportation matters are dealt with by the NPPG under the heading of *“Travel Plans, Transport Assessments and Statements”*.

- 3.10 The NPPG recommends, where possible, the following information be included in Transport Assessments:
- Information about the proposed development and site layout;
 - Information about the surrounding area including highway network and transport provision;
 - The planning context of the development proposals;
 - Trip generation for the proposed development and an assessment of the impact of the local highway network; and
 - Description of any measures to mitigate any residual impacts of the proposed development.
- 3.11 The NPPG recommends, where possible, the following information be included in Travel Plans:
- Benchmark travel data and existing travel habits;
 - Information about the proposed development and expected trip generation;
 - Identify specific outcomes, targets and measures with monitoring and management arrangements; and
 - Consider proposals that reduce the need to travel to the proposed development.

Local Policy

Adopted Arun Local Plan (July 2018)

- 3.12 At a local level, policy requirements are informed by the Adopted Arun Local Plan (July 2018).
- 3.13 Policy EMP SP3: Strategic Employment Land Allocations identifies sites for new employment-led development. Oldlands Farm is allocated as one of these areas and as such, the development of the site as proposed would align with this policy. This is further supported by Policy EMP DM2: Enterprise Bognor Regis (EBR) which supports the development of B1/B2/B8 use development in the EBR area, which includes Oldlands Farm.
- 3.14 The details of this policy relating to transport include:
- “Suitable upgrading and provision of access and/or junctions to the A29/A259 and Rowan Way as appropriate;...*
- ...A suitable Transport Assessment and Travel Plan demonstrating how the impacts of development can be mitigated and to improve a modal shift towards an increase in sustainable transport.”*
- 3.15 With regard to transport, the Local Plan’s strategic objective is to:
- “Reduce the need to travel and promote sustainable forms of transport.”*

- 3.16 Policy T SP1: Transport and Development states the Council will work to ensure development provides access to the highway network whilst also promoting the use of sustainable transport. As such, the Council will support development which:

“Is designed to reduce the need to travel by car by identifying opportunities to improve access to public transport services and passenger transport services whilst making provision for safe access to the highway network through improvements to the existing road network and the promotion of vehicles which use low-carbon energy;...

Incorporates appropriate levels of parking in line with West Sussex County Council guidance on parking provision and the forthcoming Arun Design Guide taking into consideration the impact of development upon on-street parking and;

Is supported by an effective and deliverable Transport Assessment which demonstrates that the transport effects of development on the local and strategic road network can be satisfactorily mitigated and a Travel Plan, which is effective and deliverable, and;

Explains how the development has been designed to:

- i. accommodate the efficient delivery of goods and supplies;*
- ii. give priority to pedestrian and cycle movements and have access to high quality public transport facilities;*
- iii. create safe and secure layouts for traffic, cyclists and pedestrians whilst avoiding street clutter;*
- iv. incorporate facilities for charging electric and plug-in hybrid vehicles (where charging facilities are to be omitted from the development, evidence of market demand and viability must be provided); and*
- v. consider the needs of people with disabilities by all modes of transport.”*

- 3.17 Policy T DM1: Sustainable Travel and Public Rights of Way states “New development must ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport and community transport services where a need has been identified. Access to alternative modes of transport including public transport services, the public right of way and cycle networks, must be available and accessible to all members of the community.

Proposals for all new development must:

Be located within easy access of established public transport service(s), existing pedestrian and cycle networks, the committed and aspirational cycle networks and the green infrastructure network which links the development with key destinations including places of work, education, leisure and town centres;...

Make provision for cycling and pedestrian facilities to meet the County Council Parking Standards, including cycle storage, convenient and secure cycle parking in association with retail and educational uses and sufficient secure parking and changing/showering facilities at places of work.”

Aldingbourne Neighbourhood Development Plan 2014-2034 (October 2016)

- 3.18 The Aldingbourne Neighbourhood Development Plan sets out a vision for the period up to 2034 with objectives on areas such transport, business and building design.
- 3.19 Policy GA1: Promoting Sustainable Movement states:
- “Development proposals that increase travel demand will be supported where they can demonstrate that:*
- they extend or improve walking and cycling routes by making land available for those purposes or by means of financial contributions through legal agreements or (when adopted for the District) the Community Infrastructure Levy;*
 - they are located in places accessible to public and community transport or can improve the accessibility of the site to public and community transport by contributing to the provision of enhanced services;*
 - they do not result in the loss of any existing footpaths or cycle paths.”*
- 3.20 Policy GA2: Footpath and Cycle Path Network notes *“Support will be given to proposals that improve and extend the existing footpath and cycle path network, allowing better access to the local amenities and services, to green spaces, to any new housing and to the open countryside. The loss of existing footpaths and cycle paths will be resisted.”*
- 3.21 Policy GA3: Parking and New Development states *“Proposals must provide adequate parking in accordance with the standards adopted at the time. Proposals that would result in a loss of parking spaces either on or off street will be resisted.”*
- 3.22 Policy EE9: Sustainable Commercial and Employment Buildings outlines the fact that *“All new commercial and employment development, where it would be appropriate, shall be designed to provide secure parking and storage of bicycles for customers and employees consistent with the relevant standards produced by WSCC.”*

Parking Standards

- 3.23 The relevant parking standards are set out within WSCC’s Guidance on Parking at New Developments (September 2020) and ADC’s Parking Standards SPD (January 2020). These documents set out the parking requirements for the development. Parking for non-residential uses needs to consider the site’s accessibility and the likely parking demand and as such the guidance included in the document should be used as a guide for developers and justified on a site-by-site basis. The relevant parking standards are included at **Table 3.1**.

Table 3.1: B8 Parking Standards

Car Parking (Guidance Only)	Cycling Parking (Guidance Only)	% of Parking Spaces with Active EV Charging Points
1 space per 100sqm	1 space per 500sqm for staff and 1 space per 1000sqm for visitors	2018 – 20% 2023 – 30% 2028 – 50% 2033 – 100% Passive provision for remaining spaces where appropriate

- 3.24 Regarding spaces for disabled people, it is stated that provision should be consistent with guidance in “Manual for Streets”, which is in the order of 5% provision of total parking spaces.

Summary

- 3.25 The proposed development is in accordance with the relevant national and local transport policies by providing accessibility to both sustainable transport connections as well as the strategic highway network. In addition, the site accords to land use policies at the site and it is therefore deemed that its development is in accordance to relevant land use policies.

4 Development Proposals

4.1 The development proposals are for:

“Erection of a warehouse (Use Class B8) with ancillary office, associated vehicle parking, van storage, plant, ancillary structures, lighting, landscaping and infrastructure works including earthworks to facilitate flood compensation area.”

4.2 The site forms Oldlands Farm Phase 2 which is part of EBR and is currently undeveloped. The proposals seek to provide a B8 Storage and Distribution Centre with a floor area of 11,412 sqm (GIA). The proposals make provision for 193 staff car parking spaces including 9 disabled spaces alongside electric vehicle charging provision. In addition, 20 motorcycle spaces will be provided as well as 40 cycle parking spaces in the form of cycle shelters. For operational requirements, 6 HGV loading bays and 512 van storage spaces will be provided.

4.3 A site layout plan is provided at **Appendix A**.

Future Operation of the Site

4.4 The future occupier proposes to use the site as a storage and distribution centre, where products are delivered via small vans to customers to the local area.

Proposed Access Arrangements

4.5 Vehicular access is proposed to be taken from the existing internal site access road to the south of the site which connects to the roundabout with the A29 and A259 to the south west of the site. This will be extended from the current spur into the site.

4.6 This access will segregate cars and HGVs once within the site to minimise vehicle conflicts when manoeuvring within the car park and loading areas.

Parking Arrangements

Vehicle Parking

4.7 As provided in **Section 3** of this report, car parking requirements are set out in documentation by both WSCC and ADC. For B8 use, this sets a requirement for 1 space per 100 sqm. However, as stated within the SPD, parking for non-residential uses needs to consider the site's accessibility and the likely parking demand. As such the guidance included in the document should be used as a guide for developers and justified on a site-by-site basis.

4.8 By applying this standard to the proposed development, this ratio would suggest a provision of 114 car parking spaces. A total of 193 car parking spaces are proposed for staff inclusive of 9 disabled bays with the provision of active vehicle charging facilities. These are situated within the south west corner of the site and are accessed using the vehicular access from the internal site access road.

4.9 Although it is acknowledged that the proposed provision is above the recommended standards, it is noted that this level is guidance only with provision justified on a site-by-site basis. Given the

operational characteristics of the site, during the shift changeover, there will be double the anticipated number of workers on site as workers starting their shifts arrive prior to staff leaving site. As such, the proposed level of car parking provision is deemed appropriate.

- 4.10 Disabled parking should be provided at 5% of the total parking provision. Therefore, the provision of 9 disabled parking spaces is deemed appropriate. In addition, 20 motorcycle spaces will be provided.

Cycle Parking

- 4.11 With regard to cycle parking, the development should provide 23 staff cycle parking spaces and 11 visitor cycle parking spaces. As above, this is guidance only, with provision justified on a site-by-site basis. As such, due to the nature of the proposed development, it is not expected that a significant number of visitors will visit the site.
- 4.12 However, to maximise the encouragement of sustainable travel, the provision of 40 cycle parking spaces in the form of four dedicated cycle shelters is deemed appropriate.

Servicing

- 4.13 As described previously, 6 HGV loading bays and 512 van storage spaces will be provided at the proposed development. Swept path analysis has been undertaken to ensure all vehicles can access the site safely. This is shown at **Appendix B**.

Footpath Diversion

- 4.14 As seen in **Figure 2.2**, Footpath 152 runs through the north east corner of the site. The development proposals seek to use the current alignment if this footpath to deliver an element of the operational van storage area.
- 4.15 It is therefore proposed that the footpath is diverted to allow the implementation of this development. Currently, the proposals seek to divert this PRow to the north as illustrated on the site plan provided in **Appendix A**. This will retain the use of the PRow and provide a route away from the perimeter of the site, thereby enhancing the desirability of this route.
- 4.16 As necessary, a PRow diversion application will be completed under a Section 257 agreement with initial engagement with ADC currently being undertaken to discuss the preferred alignment and acceptability of this route.

Framework Travel Plan

- 4.17 An FTP has been prepared and is to be submitted alongside this Transport Assessment to support the planning application.
- 4.18 The FTP will encourage travel to and from the site by sustainable modes. The primary objective of the FTP will be to set out a long-term strategy to facilitate and encourage modes of travel to the site other than by private car.

- 4.19 The FTP will include a number of initiatives and measures which will be implemented. These will be a mixture of hard and soft measures. Hard measures will include the provision of facilities such as safe and secure cycle parking, whilst soft measures include initiatives such as providing information on public transport services.

Summary

- 4.20 The proposals seek to provide a B8 Storage and Distribution Centre with a floor area of 11,412 sqm (GIA). Alongside this, 193 staff car parking spaces including 9 disabled spaces will be provided, as well as 20 motorcycle spaces and 40 cycle parking spaces in the form of cycle shelters.
- 4.21 Vehicular access is proposed to be taken from the existing internal site access road to the south of the site which connects to the roundabout with the A29 and A259 to the south west of the site.

5 Trip Generation and Traffic Impact

- 5.1 This section of the report considers the level of vehicular traffic and its impact that is anticipated to be generated by the proposed development.

Consented Use

- 5.2 Although lapsed in April 2019, outline permission was granted for up to 17,453 sqm of B2 General Industrial floorspace. The agreed trip rates as set out in the 2015 TA Addendum submitted to support the outline planning application for the site (AL/58/15/OUT) are set out in **Table 5.1** along with the permitted traffic generation based on B2 use only of 17,453 sqm.

Table 5.1: Outline Consented Trip Generation and Trip Rates

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
B2 Trip Rates	0.484	0.206	0.690	0.11	0.403	0.513
B8 Trip Rates	0.275	0.089	0.364	0.089	0.240	0.329
Total Vehicle Movements	84	36	120	19	70	90

- 5.3 As presented in **Table 5.1**, the consented use at the site had the potential to attract approximately 120 and 90 two-way vehicle movements during the AM and PM peak hours, respectively.
- 5.4 Whilst expired in December 2020, reserved matters consent was granted for a 4 unit industrial scheme (AL/44/18/RES) comprising 3 units totalling 7,032 sqm of B2 floor space and 1 unit totalling 10,610 sqm of B8 floor space. The decision notice states the description of development as:
- “Application for up to 20,453 sqm of B2 general industrial floorspace together with B8 warehousing & distribution floorspace (as amended by subsequent Variation of Conditions 11, 12 and 37).”*
- 5.5 The variation of Conditions 11, 12 and 37 was approved in September 2016 with the decision notice stating:
- “The development hereby permitted shall not exceed a total quantum of either 17,453, m² B2 floorspace (in accordance with B2 Illustrative Masterplan DLA.1643.L003.02) or a total quantum of 20,453m² (B2 and B8 floorspace combined) with no more than 13,506m² B8 floorspace (in accordance with B2/B8 Illustrative Masterplan DLA.1643.L003.03).”*
- 5.6 As a result, the consented trip generation was revised from the outline application based upon 17,453 sqm of B2 floorspace and 3,000 sqm of B8 floorspace as set out in **Table 5.2**.

Table 5.2: Reserved Matters Consented Trip Generation [and Trip Rates]

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
B2 Total Vehicle Movements	84 [0.484]	36 [0.206]	120 [0.690]	19 [0.11]	70 [0.403]	90 [0.513]
B8 Total Vehicle Movements	8 [0.275]	3 [0.089]	11 [0.364]	3 [0.089]	7 [0.240]	10 [0.329]
Total Vehicle Movements	93	39	131	22	78	99

- 5.7 The resulting approved trip generation equates to 131 two-way trips during the AM peak hour and 99 two-way trips during the PM peak hour.

Proposed Trip Generation

- 5.8 The proposed development comprises a B8 warehouse with a floor area of 11,412 sqm. Based upon the approved trip rates approved through the Reserved Matters application, the resulting trip generation is set out in **Table 5.3**.

Table 5.3: Proposed Trip Generation and [Approved Trip Rates]

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Total Vehicle Movements	31 [0.275]	10 [0.089]	42 [0.364]	10 [0.089]	27 [0.240]	38 [0.329]

- 5.9 The proposed trip generation comprises 42 two-way trips during the AM peak hour and 38 two-way trips during the PM peak hour. This is significantly lower than the previously consented trip generation for the site.
- 5.10 To provide a thorough assessment of the proposed site operation and potential trip generation, a sensitivity forecast of trip generation has been completed based upon feedback from a potential occupier of the site.
- 5.11 This proposed vehicle trip generation has been based on a prospective occupier's forecast traffic generation which takes into consideration the volume of parcels to be handled, the number of dock door and van storage spaces as well as the number of loading bays. These forecast traffic flows take into account the provision of van storage and the ability therefore for drivers to arrive by means other than vans and also recognises that all vans will return to the site at the end of their shift.
- 5.12 A summary of the forecast traffic during the AM and PM peak hours is provided in **Table 5.4**.

Table 5.4: Proposed Trip Generation (Sensitivity)

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Total Vehicle Movements	59	169	228	168	79	247

- 5.13 **Table 5.4** shows that the proposed development is predicted to generate approximately 228 and 247 two-way trips during the AM and PM peak hours, respectively.

Trip Generation Net Change

- 5.14 A summary of the net change in vehicle trips when comparing the proposed use to the previously consented use at the site is provided in **Table 5.5** below.

Table 5.5: Trip Generation Net Change

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Proposed Development (Approved Trip Rates)	-62	-29	-89	-12	-50	-61
Proposed Trip Generation (Sensitivity)	-34	+130	+97	+146	+2	+148

- 5.15 **Table 5.5** demonstrates that the proposed development is forecast to result in an overall reduction in traffic when based upon the formerly approved trip rates, but an overall increase of 97 and 148 two-way vehicle trips during the AM and PM peak hours, respectively, based on occupier specific data.

Previously Consented Trip Distribution

- 5.16 Trip distribution associated with the previously consented scheme at the site has been undertaken using the distribution provided in the 2015 TA Addendum submitted to support the hybrid planning application for the site (AL/58/15/OUT). The distribution and resultant trips are provided in **Table 5.6**.

Table 5.6: Consented Trip Distribution

Link	% Distribution	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		Arr	Dep	Two-way	Arr	Dep	Two-way
Site Access	100%	93	39	131	22	78	99
A29 North	27%	25	10	35	6	21	27
A259 BNRR West	55%	51	21	72	12	43	55
A29 South	4%	4	2	5	1	3	4
A259 West	14%	13	5	18	3	11	14
A29 / A259 / Site Access Roundabout	100%	93	39	131	22	78	99
A29 / A259 / Steyning Way Roundabout	18%	17	7	24	4	14	18

Proposed Trip Distribution

- 5.17 To calculate the trip distribution associated with the proposed development, two trip distribution exercises have been undertaken. The distribution associated with employee travel to the site has been undertaken using Census Method of Travel to Work Data, whilst the operational distribution has been calculated by using a gravity model based on the population of likely nearby delivery locations. **Table 5.7** sets out the two distributions and resultant trips.

Table 5.7: Proposed Trip Distribution

Link	% Employee Distribution	% Operational Distribution	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
			Arr	Dep	Two-way	Arr	Dep	Two-way
Site Access	100%	100%	59	169	228	168	79	247
A29 North	36%	14%	21	24	45	24	29	53
A259 BNRR West	31%	37%	18	63	81	63	25	87
A29 South	17%	17%	10	29	39	29	14	42
A259 West	15%	31%	9	53	62	52	12	64
A29 / A259 / Site Access Roundabout	100%	100%	59	169	228	168	79	247
A29 / A259 / Steyning Way Roundabout	32%	48%	19	82	101	81	26	107

Trip Distribution Net Change

- 5.18 As the forecast trip generation associated with the site based upon the previously consented scheme forecasts a reduction in traffic generation, a summary of the net change in vehicle trips on the key links and at key junctions has only been completed to compare the previously consented scheme with the Sensitivity scenario presented above. This is provided in **Table 5.8**.

Table 5.8: Trip Distribution Net Change

Link / Junction	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arr	Dep	Two-way	Arr	Dep	Two-way
Site Access	-34	+130	+97	+146	+2	+148
A29 North	-4	+14	+10	+18	+8	+26
A259 BNRR East	-33	+42	+9	+51	-18	+33
A29 South	+6	+27	+34	+28	+11	+38
A259 West	-4	+47	+43	+49	+1	+50
A29 / A259 / Site Access Roundabout	-34	+130	+97	+146	+2	+148
A29 / A259 / Steyning Way Roundabout	+3	+75	+77	+77	+12	+89

- 5.19 Based on the information presented in **Table 5.8**, there will be an increase of 97 and 148 two-way vehicle movements during the AM and PM peak hours, respectively, travelling through the A29 / A259 / Site Access roundabout.
- 5.20 During the AM and PM peak hours, there will be an increase of 77 and 89 two-way vehicle movements, respectively, travelling through the A29 / A259 / Steyning Way roundabout.
- 5.21 Further consideration of this increase is provided in **Section 6**.

6 Capacity Analysis

- 6.1 When reviewing the development proposals against those previously consented as a like for like scheme, it is apparent that the forecast trip generation falls well below that which was consented in 2018. The Sensitivity scenario does however forecast an uplift in two-way trips during both AM and PM peak hours.
- 6.2 Due to the Covid-19 pandemic throughout 2020 and 2021, it has not been possible to undertake traffic surveys in proximity to the proposed site to review the potential effects of the changes in traffic generation associated with the Sensitivity scenario outlined in **Section 5**.
- 6.3 The junction capacity analysis provided within the Transport Assessment Addendum to the April 2016 outline consent identified that both the A29 / A259 / Site Access roundabout and the A29 / A259 / Steyning Road roundabout were forecast to reach capacity during the 2031 future year with development scenarios.
- 6.4 At the A29 / A259 / Site Access roundabout, the forecast 2031 with development flows associated with the 2018 Reserved Matters permission forecast a minimum of 4,101 and 4,186 vehicles during the AM and PM peak hours. A review of the Sensitivity trip generation identifies an increase during the AM peak hour at this junction of 97 vehicles, and an increase of 148 vehicles during the PM peak hour. This equates to an uplift of just 2.4% during the AM peak hour and 3.5% during the PM peak hour. This would be indiscernible in traffic terms and is well within what would be expected through daily variations in traffic flows. The impact at this junction is therefore not severe.
- 6.5 At the A29 / A259 / Steyning Road roundabout, the forecast 2031 with development flows identified a minimum of 4,011 and 4,496 vehicles passing through the junction during the AM and PM peak hours, respectively. The forecast Sensitivity development trip generation identifies an increase of 77 vehicles during the AM peak hour and 89 vehicles during the PM peak hour. These increases result in a 1.9% uplift in traffic volume during the AM peak hour and a 2% uplift during the PM peak hour. This is well within what would be considered to represent a daily fluctuation in traffic flows and would be considered negligible in impact terms and not severe.
- 6.6 The single greatest impact during the AM or PM peak hours from the Sensitivity trip generation is on the A259 West which is forecast to have an increase of 43 vehicles during the AM peak hour and 50 vehicles during the PM peak hour. This link has a minimum forecast flow in 2031 of 2,307 vehicles during the AM peak hour and 2,792 vehicles during the PM peak hour. The increase forecast by the Sensitivity trip generation therefore equates to 1.9% during the AM peak hour and 1.8% during the PM peak hour. Once again, these represent a negligible impact.
- 6.7 Based upon the data included within both the 2016 Outline permission and the 2018 Reserved Matters, and the decision to grant planning permission for the previously proposed developments based upon their forecast impacts on the surrounding highway network, it is demonstrated that the proposals would have no discernible impact on the surrounding highway network over and above that permitted in 2018.

7 Summary and Conclusions

- 7.1 Vectos have been appointed by Lysander to provide transport advice in relation to the proposed development of a B8 Storage and Distribution Centre on land at Oldlands Farm, Bognor Regis. The site is located in the administrative boundary of ADC and WSCC.
- 7.2 The site is currently undeveloped and is bound by the A259 to the north and west, the West Coastway Railway Line to the east and existing commercial uses to the south. The site forms Oldlands Farm Phase 2 which is part of EBR.
- 7.3 The future occupier proposes to use the site as a storage and distribution centre, where products are delivered via small vans to customers to the local area.
- 7.4 Vehicular access is proposed to be taken from the existing internal site access road to the south of the site which connects to the roundabout with the A29 and A259 to the south west of the site.
- 7.5 The proposals include the provision of 11,412 sqm (GIA) floor space with 193 staff car parking spaces including 9 disabled spaces. In addition, 20 motorcycle spaces as well as 40 cycle parking spaces will be provided.
- 7.6 The site is well located to take advantage of the strategic highway network with its proximity to the A27, A29 and A259. In addition, the site is accessible by sustainable modes of transport, most notably by a number of shared footways / cycleways including on the A29 and A259 providing onward connections to the nearby residential areas as well as local amenities.
- 7.7 To accommodate the development on site, Footpath 152 is required to be diverted which will be undertaken through a Section 257 agreement.
- 7.8 The proposed development is likely to result in an overall increase of 97 and 148 two-way vehicle trips in the AM and PM peak hours, respectively. When distributed across the local highway network, it can be seen that the greatest increase in vehicle movements will be experienced at the A29 / A259 / Site Access roundabout with an increase of 97 and 148 two-way vehicle movements during the AM and PM peak hours, respectively. This is demonstrated to represent a negligible uplift, one that would be experienced in daily variations in traffic flow and is therefore not severe.
- 7.9 As such, it is considered that the proposed development will not have an adverse impact upon the operation of the surrounding highway network.

Conclusion

- 7.10 Consequently, the proposed development:
- provides opportunities for sustainable transport modes to be taken up;
 - ensures safe and suitable access to the site can be achieved for all users; and
 - demonstrates there would be no significant or severe impacts from the development on the transport network or on highway safety.

- 7.11 It is therefore concluded that the proposed development at the site would not result in a severe or material impact in transport terms. As such, there are no transport reasons why the proposed development cannot come forward and be granted planning permission.



Appendix A





Site Location
1 : 2500

Scale for planning purposes only
ashton smith to be notified of discrepancies in figured dimensions
Contractors must check all dimensions from site
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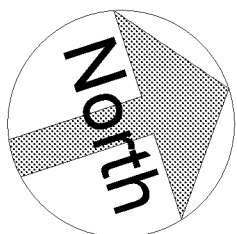


LOCATION PLAN:

NOTES:



VISUAL SCALE 1:2500



P1	13/05/2021	Red Line Boundary Updated
P2	14/05/2021	Red Line Boundary Updated to match Eirring drawing C005 (P6)
P3	18/05/2021	Red Line Boundary updated following receipt of DWG from Eirring

REV	DATE	DESCRIPTION

DE	GC
DE	GC
DE	GC

DRAWN BY	CHECK BY

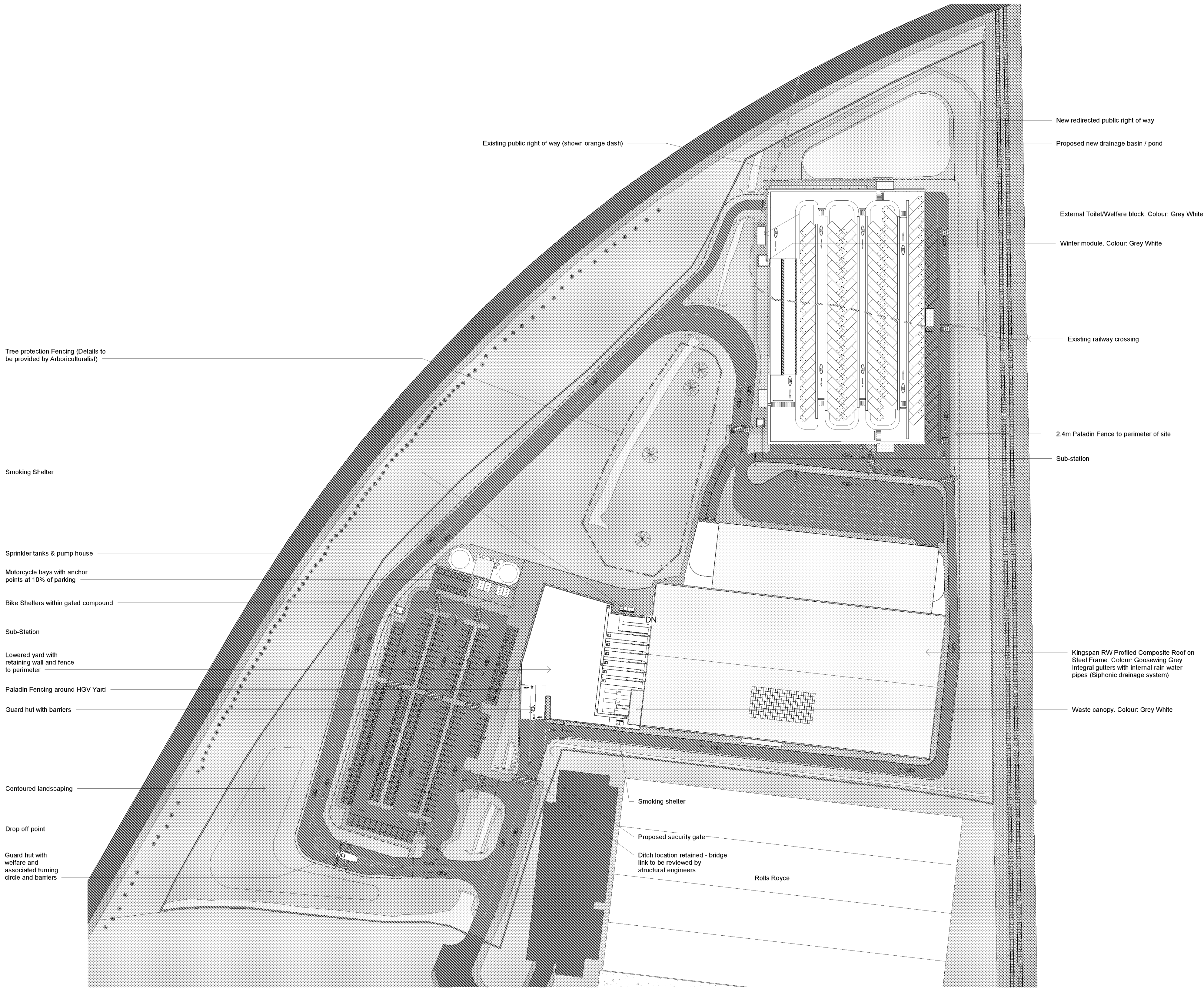
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Bognor Regis					
DRAWING TITLE					
Site Location Plan					
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				DE	GC
SHEET	SCALE	DATE	SUITABILITY	REVISION	
A1	1 : 2500	30/04/2021	S2	P3	
DRAWING NO.					
21023 - ASA - V0 - XX - DR - A - PL01 - (S2 - P3)					

CLIENT

LYSANDER

ashtonsmith
beyond design

Ashton Smith, Belvedere House, 2 Victoria Avenue, Harrogate, North Yorkshire, HG1 1EL
Tel: 01423 522882 Fax: 01423 565104
www.ashtonsmith.co.uk



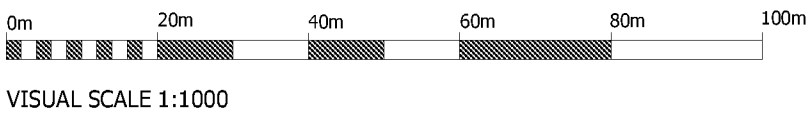
Proposed Site Plan
1 : 1000

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Contractors must check all dimensions from site
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LOCATION PLAN:

NOTES:



P0	03/09/2021	Existing Public Right of Way added
P6	07/09/2021	Amended following comments from Vectos
P7	17/05/2021	Updated following Planning Consultants comments
P1	21/05/2021	Pond relocated to North of site
P2	26/08/2021	Landscaping amended to avoid RPA following detailed design. Green wall to Van Storage added following planning officers comments
P3	27/05/2021	Updated following DWD comments and derogation review
P5	31/08/2021	Site Reference plans updated, canopy to warehouse amended

REV	DATE	DESCRIPTION
DE	GC	

DE	GC
DE	GC
DE	GC
DE	GC

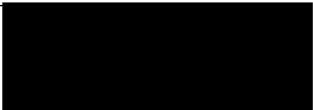
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Bognor Regis					
DRAWING TITLE					
Proposed Site Plan					
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SHEET	SCALE	DATE		SUITABILITY	REVISION
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DRAWING NO.					
21023 - ASA - V0 - XX - DR - A - PL03 - (S2 - P7)					

CLIENT

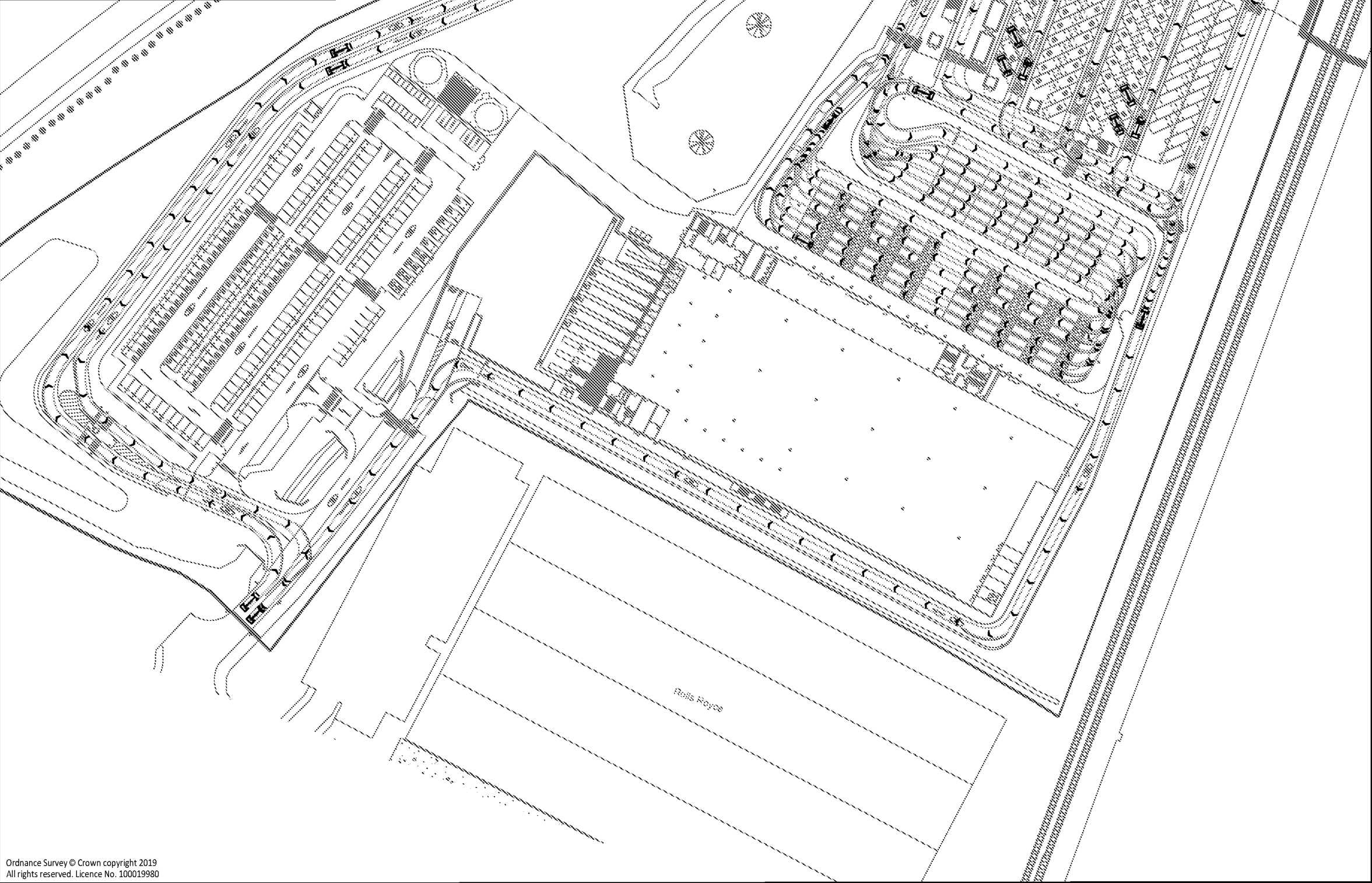
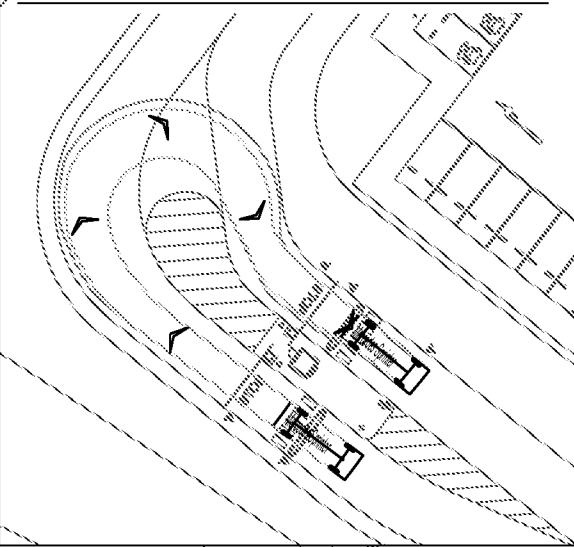
AshtonSmith
Beyond Design

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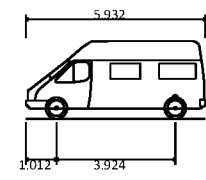
Appendix B



Inset A: Rejected Vehicle Manoeuvre



- Notes:
- 1. This is not a construction drawing and is intended for illustrative purposes only.
 - 2. White lining is indicative only.
 - 3. Based on ASA layout: 21023-ASA-V0-XX-DR-A-PL03-P7-Proposed Site Plan



Mercedes Sprinter	
Overall Length	5.932m
Overall Width	2.020m
Overall Body Height	2.567m
Min Body Ground Clearance	0.339m
Track Width	1.996m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.600m

C	Updated layout	PP	SB	07.09.2021
B	Updated layout & tracking to suit	PP	SB	03.09.2021
A	Updated layout & tracking to suit	PP	SB	17.08.2021
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Lysander

PROJECT:

Oldlands, Bognor Regis

DRAWING TITLE:

Swept Path Analysis
Servicing
Mercedes Sprinter

SCALES:

1:1250 / 1:500 at A3

DRAWN:	PP	CHECKED:	RS	DATE:	30.04.2021
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t: 020 7580 7373 e: enquiries@vectos.co.uk

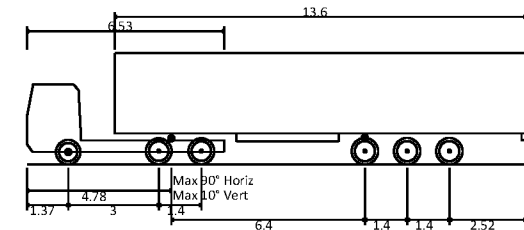
DRAWING NUMBER:	194663-137/AT/A01	REVISION:	C
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Inbound

Outbound

- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.
 3. Based on ASA layout: 21023-ASA-V0-XX-DR-A-PL03-P7-Proposed Site Plan



Max Legal Length (UK) Articulated Vehicle (16.5m)	16.500m
Overall Length	2.550m
Overall Width	3.681m
Overall Body Height	0.411m
Min Body Ground Clearance	2.500m
Max Track Width	6.00s
Lock to lock time	6.530m
Kerb to Kerb Turning Radius	

Buffer

A 500mm buffer has been shown around vehicles manoeuvring into loading bays in order to provide a margin of safety.

C	Updated layout	PP	SB	07.09.2021
B	Updated layout & tracking to suit	PP	SB	03.09.2021
A	Updated layout & tracking to suit	PP	SB	17.08.2021

REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:

Lysander

PROJECT:

Oldlands, Bognor Regis

DRAWING TITLE:

Swept Path Analysis
Service Yard
16.5m Articulated Vehicle

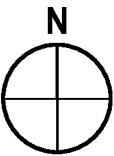
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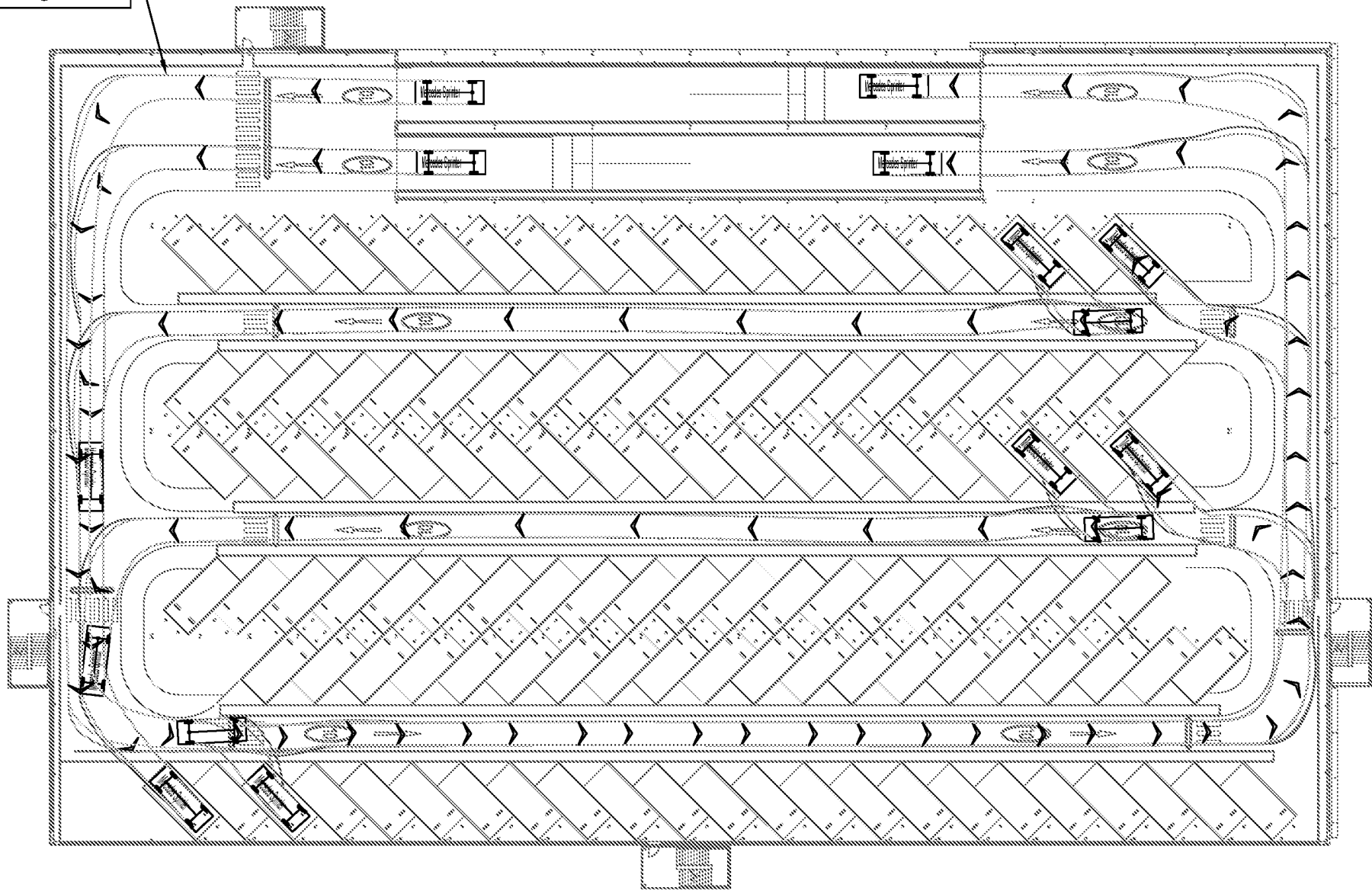
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DRAWING NUMBER: 194663-137/AT/A02 REVISION: C

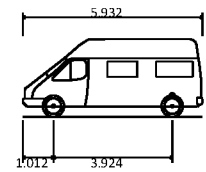


Vehicles circulating downwards
travel a long distance



First & Second Floor Deck

- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.
 3. Based on ASA layout: 21023-ASA-V2-XX-DR-A-PL11-P5-Proposed Van Deck Upper Levels Plans



Mercedes Sprinter	
Overall Length	5.932m
Overall Width	2.020m
Overall Body Height	2.567m
Min Body Ground Clearance	0.339m
Track Width	1.996m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.600m

A	Updated layout	PP	SB	07.09.2021
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REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:

Lysander

PROJECT:

Oldlands, Bognor Regis

DRAWING TITLE:

Swept Path Analysis
Servicing - 1st & 2nd Floor Deck
Mercedes Sprinter

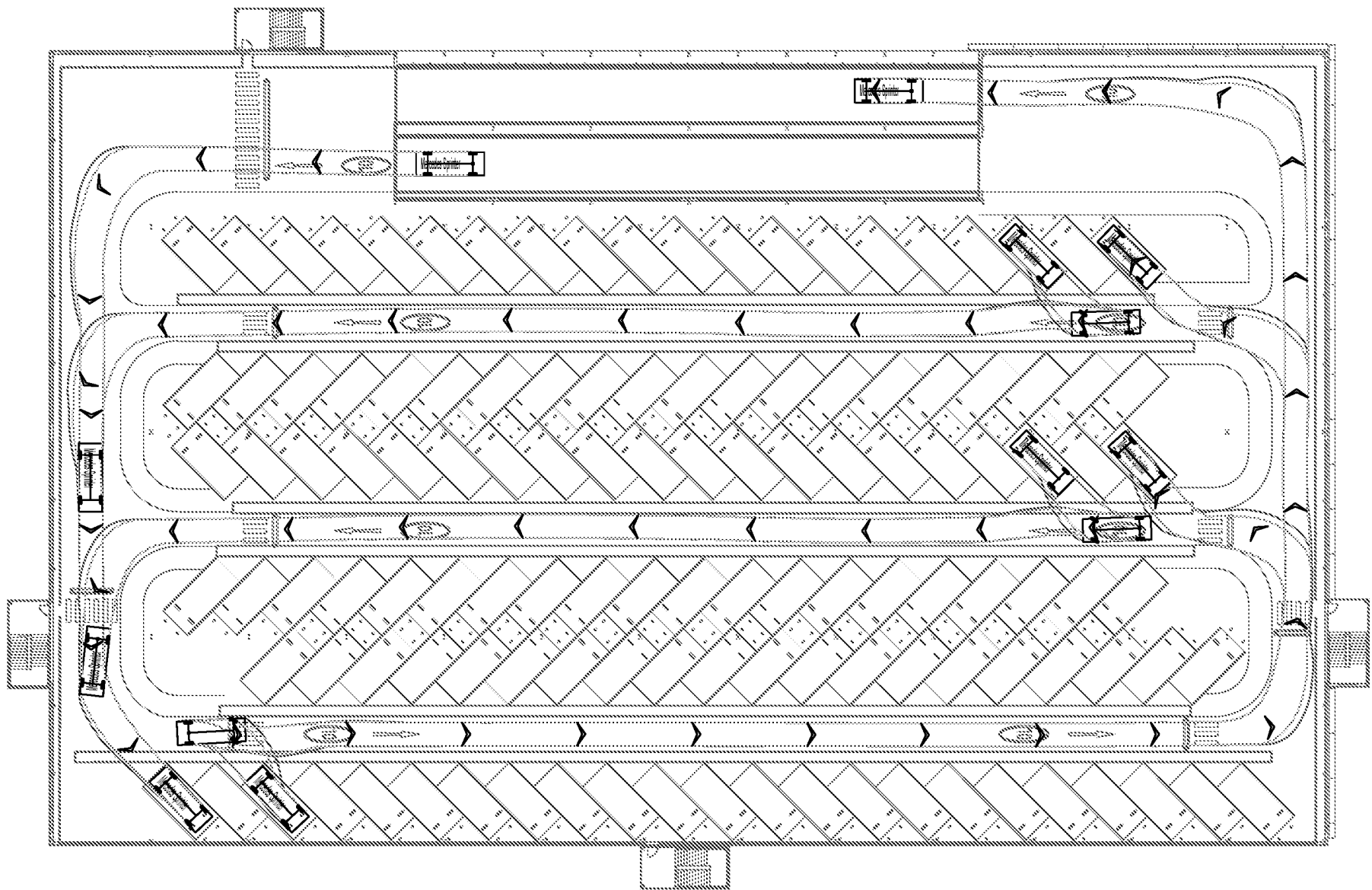
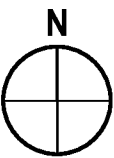
SCALES:
1:500 at A3

DRAWN:	PP	CHECKED:	RS	DATE:	03.09.2021
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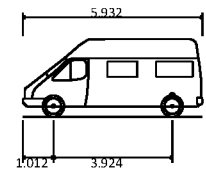
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t: 020 7580 7373 e: enquiries@vectos.co.uk

DRAWING NUMBER:	194663-137/AT/A03	REVISION:	A
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Third Floor Deck

- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. White lining is indicative only.
 3. Based on ASA layout: 21023-ASA-V2-XX-DR-A-PL11-P5-Proposed Van Deck Upper Levels Plans



Mercedes Sprinter	
Overall Length	5.932m
Overall Width	2.020m
Overall Body Height	2.567m
Min Body Ground Clearance	0.339m
Track Width	1.996m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.600m

A	Updated layout	PP	SB	07.09.2021
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:	Lysander		
PROJECT:	Oldlands, Bognor Regis		
DRAWING TITLE:	<u>Swept Path Analysis</u> Servicing - 3rd Floor Deck Mercedes Sprinter		
SCALES:	1:500 at A3		
DRAWN:	PP	CHECKED:	RS
		DATE:	03.09.2021

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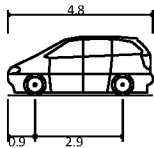
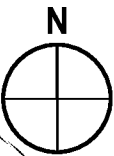
194663-137/AT/A04

REVISION:

A

Inset A: Drop Off Bay

Standard parking bay size is 4.8m long by 2.4m wide.
Standard aisle width is 6m wide.
All bays and aisles meet or exceed standards



Standard Design Vehicle (SDV)		
Overall Length	4.800m	
Overall Width	2.000m	
Overall Body Height	1.950m	
Min Body Ground Clearance	0.100m	
Track Width	2.000m	
Lock to lock time	4.00s	
Wall to Wall Turning Radius	6.000m	

C	Updated layout	PP	SB	07.09.2021
B	Updated layout	PP	SB	03.09.2021
A	Updated layout	PP	SB	17.08.2021

REV.	DETAILS	DRAWN	CHECKED	DATE
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CLIENT:
Lysander

PROJECT:
Oldlands, Bognor Regis

DRAWING TITLE:
Car Park Review

SCALES:
1:500 at A3

DRAWN:	PP	CHECKED:	RS	DATE:	30.04.2021
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DRAWING NUMBER:	194663-137/SK01	REVISION:	C
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