

Job Name: **Land South of Westwells Road,
Corsham**

Job N°. **IMA-22-188**

Date: **August 2024**

Client: **Ark Data Centres Ltd**

Technical Note - Response to LHA Comments

1 Introduction

- 1.1 This technical note provides a response to the comments raised by Wiltshire Council (WC) acting in its role as the local highway authority (LHA) in relation to the application to redevelop land to the south of Westwells Road, Corsham to deliver an extension to the existing Spring Park data centre campus (ref: PL/24/05527).
- 1.2 For ease of reference the LHA response dated 24th July 2024 is included as Appendix TN-01 and within it the LHA requests further information on the following:
- Traffic surveys and transport assessment;
 - Access; and
 - Parking.

2 Traffic Surveys and Transport Assessment

- 2.1 In the LHA response it is queried whether the development site is a standalone application or an extension to Spring Park Data Centre campus and in reality it is in part both. To clarify this statement the existing operation of the Spring Park Data Centre campus needs to be understood.
- 2.2 The data centres at Spring Park are located in individual secure compounds and these data centres are rented out in full or part to individual clients, who are then allocated their own client space within the data centre buildings, which they then fit out to their own requirements. A number of Ark's own head office staff are based full time at the Spring Park campus along with security and maintenance staff.
- 2.3 There is no interaction between the existing data centre compounds, with the exception of Ark staff and for maintenance access. Clients can only gain access to their own allocated areas within the data centres and compounds. The Spring Park Data Centre campus as a whole is a secure site and access controlled by means of biometric security passes and pin pads.
- 2.4 Parking at the existing Spring Park campus is generally shared, although a limited number of spaces are provided within the P1 and SQ17 compounds, and apart from around 20 short-stay spaces are also subject to barriered access control. Visitors to the site park in these 20-minute short-stay spaces whilst an appropriate security check and induction is undertaken at the visitor reception centre, after which security passes are provided to allow visitors to park within the car park or enter the main campus.
- 2.5 As will be discussed further in the section on proposed parking provision, a separate car park will be provided at the proposed data centre application site and hence apart from visitors having to undertake the security check and induction at the main visitor reception there will be little or no interaction between the data centre application site and the existing Spring Park Data Centre campus, and so it will be an extension to Spring Park Data Centre campus but it will operate as a largely standalone site.

- 2.6 In the LHA response the use of traffic survey data from 2019 and older, and the comparison to a consented residential development scheme on the site within the Transport Assessment is queried.
- 2.7 At the time of the initial preparation of the transport assessment relating to the proposed data centre application, and at the time of the pre-application discussions with WC, the planning permission for the residential scheme was extant and could have been implemented and so represented the approved baseline traffic conditions on the local highway network.
- 2.8 Therefore, the comparison of the predicted development trips likely to be generated by the proposed data centre with those for the consented residential scheme was done to demonstrate that the proposed development would not generate any more vehicle trips on the local highway than had already been assessed and approved as being acceptable by the LHA.
- 2.9 The residential planning permission expired only shortly before the submission of the planning application and the comparison of the development trips associated with the data centre application with those already approved as being acceptable in terms of the impact of the operation of the local highway network is still considered to be of merit.
- 2.10 As the proposed development is not predicted to generate any more trips in the peak hour than that already approved as being acceptable on the local highway network, the age of the traffic data was considered to be less of an issue, particularly as TEMPRO traffic growth factors had been applied to the surveyed flows and committed development traffic added to produce the baseline assessment flows.
- 2.11 It should also be appreciated that at the time of the initial preparation of the transport assessment the aftereffects of COVID19 pandemic still having an effect on traffic flows due to changes in working patterns.
- 2.12 As indicated above local traffic growth factors obtained from TEMPRO were applied to the background traffic surveys for the period 2019-2028, as summarised below, and committed development flows were added to produce 2028 baseline flows.
- 2019-2028 AM Peak 1.0756
 - 2019-2028 PM Peak 1.0771
- 2.13 For comparison, in relation to traffic growth on the local highway network since 2019, traffic data from the Department of Transport traffic count site to the north of the site on the A4 Bath Road (count point id 36130), summarised in Table 1, indicates that two-way AADT traffic flows have fallen by around 7% between 2019 to 2023.

Year	Eastbound	Westbound	Total
2019	5120	4735	9855
2023	4683	4494	9177
Difference	-9%	-5%	-7%

Table 1: Comparison of DfT AADT Traffic Flows

- 2.14 It should be appreciated that during the period between 2019 to 2023 a number of the committed residential development sites included within Transport Assessment have been built, either in part or fully.

- 2.15 It should also be appreciated that, as set out in the Transport Assessment, the predicted development trips, which were based on traffic surveys of the main Spring Park campus, were considered to be a likely overestimate of the level of traffic likely to be associated with the proposed data centre for a number of reasons:
- At the time of the 2019 surveys the P4 data centre was being constructed and the P3 data centre client area was being fitted out, which is typically the peak period for client trips to the site, so traffic flows to the site would have been unusually high compared to the day to day operation of the site;
 - The trip rates calculated from the 2019 traffic surveys within the Transport Assessment were based on the operational P1-P3 datacentre GFA but would have also included traffic associated with the SQ17 site; and
 - The 2019 traffic surveys included the trips associated with the Ark head office staff based at the main Spring Park site, which will not be based at the proposed data centre site.
- 2.16 The predicted level of development trips, even using the robust trips predictions, are still relatively low, with on average less than one vehicle movement per minute in the peak AM period.
- 2.17 It is therefore considered that, despite the age of the traffic survey data used, the assessment flows used in the Transport Assessment can be considered to provide a very robust assessment of the implications of the proposed development on the operation of the local highway network.

3 Access Arrangements

- 3.1 The LHA response indicates there are concerns relating to the junction of Rowan Lane with Westwells Road for the purposes of carrying movements associated with heavy goods vehicles (HGVs) and conflicts with that could arise with smaller vehicles and vulnerable road users.
- 3.2 It should be appreciated that there are two existing commercial buildings (Stephens Industries Ltd) and associated parking and storage, located on the northern side of Rowan Lane which have a combined GFA of circa 1,900m² are accessed from Rowan Lane, which already generate HGV movements on Rowan Lane. The 2019 traffic surveys recorded 8 HGV movements to Rowan Lane in the AM survey period (07:00-10:00), including 3 OGV2 movements, and 5 HGV movements from Rowan Lane including 1 OGV2 movement. In the PM survey period (15:30-18:30) 1 HGV movement from Rowan Lane was recorded.
- 3.3 These existing commercial units are on the site of an approved data centre application (ref: PL/2023/10233), known as P5 South, and will be demolished as part of that development. It was concluded within the assessment of that application that the development of the P5 South data centre, which would be serviced from the P5 North service yard accessed from the main site roundabout with Westwells Road, would lead to a reduction in the number of existing vehicle movements on Rowan Lane, particularly of HGV movements.
- 3.4 The majority of vehicle trips to the proposed data centre will be car trips made by clients and staff based at site and there will be a small number of deliveries made by HGV in relation to the operation of the data centre generators. Overall, the number of HGV movements on Rowan Lane will be reduced following the development of application site and the P5 South data centres.

- 3.5 Rowan Lane is a private road owned by Ark in the vicinity of the site and is a PRoW (CORM 139) but currently no footways or pedestrian facilities are provided between the site access and Westwells Road. To the southwest of the proposed site access there is an existing 1.2m wide white lined pedestrian route along the southern side of Rowan Lane which continues to the Wadswick Green retirement village.
- 3.6 Plan IMA-22-188-009 rev A shows the proposed pedestrian improvement on Rowan Lane, which is an extension of the existing white lined pedestrian route to the junction with Westwells Road, and has been updated to show the carriageway widths on Rowan Lane, the proposed pedestrian connection from Westwells Road and the diverted routes of PRoW which currently cross the site.
- 3.7 The proposed pedestrian connection to the application site from Westwells Road which connects to the diverted PRoW route running around the eastern side of the proposed data centre compound to the proposed footway at the site access from Rowan Lane, provides an alternative traffic free pedestrian route from Westwells Road to Rowan Lane to the west of the site access.
- 3.8 Between the proposed site access and the junction with Westwells Road, Rowan Lane is currently typically 6.1m wide and with the proposed provision of the 1.2m white lined pedestrian route the carriageway width would be reduced to 4.9m. Manual for Streets indicates that a 4.8m road width is sufficient for a car and large vehicle to pass, albeit on straight section of road and at slow speeds.
- 3.9 Plan IMA-22-188-010 shows the swept vehicle path of a 16.5m articulated vehicle which is the largest vehicle expected to regularly visit the site, and shows that an articulated vehicle can turn in and out of Westwells Road, without having to cross the proposed pedestrian white line route.
- 3.10 As also shown on Plan IMA-22-188-010 there are clear sightlines from the proposed site access along Rowan Lane to the junction the Westwells Road, and that the existing access to the commercial units and the proposed emergency vehicle exit from the P5 South data centre onto Rowan Lane provide opportunities for vehicles to pass more easily.
- 3.11 However, the relatively low levels of traffic generated by the proposed development, particularly in combination with the reduction in vehicle movements as a result of the proposed P5 South development, and the low levels on background traffic flows on Rowan Lane mean that the likelihood of two vehicles having to pass one another are low and the most likely scenario would be two cars passing each other.

4 Parking

- 4.1 In the LHA response it is queried if the proposed level of parking will be sufficient based on the predicted number of arrivals and departures in the AM peak period. For the reasons set out in Section 2 above and in the Transport Assessment itself, the predicted number of development trips based on survey data from the main Spring Park site is considered to be an overestimate but was used to ensure a robust assessment of the implications of the development on the operation of the local highway network.
- 4.2 Ark operates data centre sites at a number of locations across the south of England, with two of the largest being at Spring Park itself and Cody Park, Farnborough and it is the operational experience gained from running data centre sites for 15 years that has informed the proposed level of parking.

4.3 At the existing Spring Park and Cody Park sites parking has typically been provided at a standard of 1 space per 30m² of “Office Area”, with the calculations historically based on the following definitions to reflect the usage and operational layout of the data centre buildings:

- “Office” areas for calculating parking numbers is limited to Client Rooms and offices spaces (Security Office/NOC etc). It specifically excludes meeting rooms, circulation, welfare, plant rooms, cleaner cupboards, fibre intake rooms etc.
- MMR areas are included in Data Halls/Data Room Areas (IT Areas).
- Parking areas are divided into:
 - “General Parking” - available for general use during working hours and tend to be used for the full working shift - (Main Car Park and SQ17 Car Park).
 - “Disabled Parking” - available for general use during working hours and tend to be used for the full working shift.
 - “EV Parking” - Typically shared by more than one user during a shift as people share charging points, therefore not part of the general parking count.
 - “Overflow Parking” - can be used at peak times when customer fit outs clash etc. and require security clearance to happen. Short-stay parking spaces falls into this category as it is used for up to 20mins whilst visitors are processed by security for visitor access. Parking within data centre compounds are also included within this category.
- Parking density for planning purposes is therefore calculated as “Office Area/General + Disabled Parking”

4.4 Table 2 provides a summary of the existing parking provision at the Spring Park Data Centre campus and also of the proposed level of parking at the proposed data centre application site.

Location	General	Disabled	Overflow	EV	Total
SQ17 Car Park	59	2		2	63
SQ17 Compound			8		8
Main Car Park	101	4		17	122
Visitor Car Park			22		22
P1 Compound		2	34		36
Subtotal	160	8	64	19	251
P6	43	2		2	47

Table 2: Existing and Proposed Car Parking at Spring Park

4.5 The “Office Area” used for calculating the parking density at the main Spring Park Data Centre campus as defined above, and following the construction of the approved P5 North and South data centre application (ref: PL/2023/10233), is 5,202m² and for the application site it is 1,941m².

- 4.6 As shown in Table 3 the parking density at the main Spring Park Data Centre campus following the approved development of the P5 North and South data centres will be 1 space per 31m² of “Office Area” and for the proposed application site it will be slightly lower at 1 space per 43m² of “Office Area”.

	Office Area	Parking	Density
	m ²	No.	m ² /Parking Space
Spring Park	5,202	168	31
Proposed Data Centre	1,941	45	43

Table 3: Existing and Proposed Parking Densities

- 4.7 The slightly lower parking provision proposed for the data centre application site compared to that of the main Spring Park Data Centre campus is considered to be acceptable for the following reasons. Firstly, There will be no Ark staff working in proposed new facility, they are currently primarily located in P2 and P3 and there is no plan to change this.
- 4.8 Offices in the proposed facility will therefore be provided only for client use and over the last 15 years it has been Ark’s experience that customers have rarely used their allocated office space all the time. Allocated client offices tend to be fully utilised only when they are doing IT fit-outs or refreshes. It is only when a number of customers decide to carry out IT fitouts and refreshes simultaneously that pressure on parking spaces arise and hence the need for “overflow” parking. Parking for a full shift is not normally permitted in these “overflow” areas due to the security risks associated with parking close to data centre facilities.
- 4.9 Also the advent of hybrid working and remote access means less pressure on office space than has occurred in the past.
- 4.10 Ark is confident, based on its experience at both its site at Spring Park and at Cody Park that the proposed level of parking will be suitable and adequate for their specific car parking needs and requirements.

5 Summary

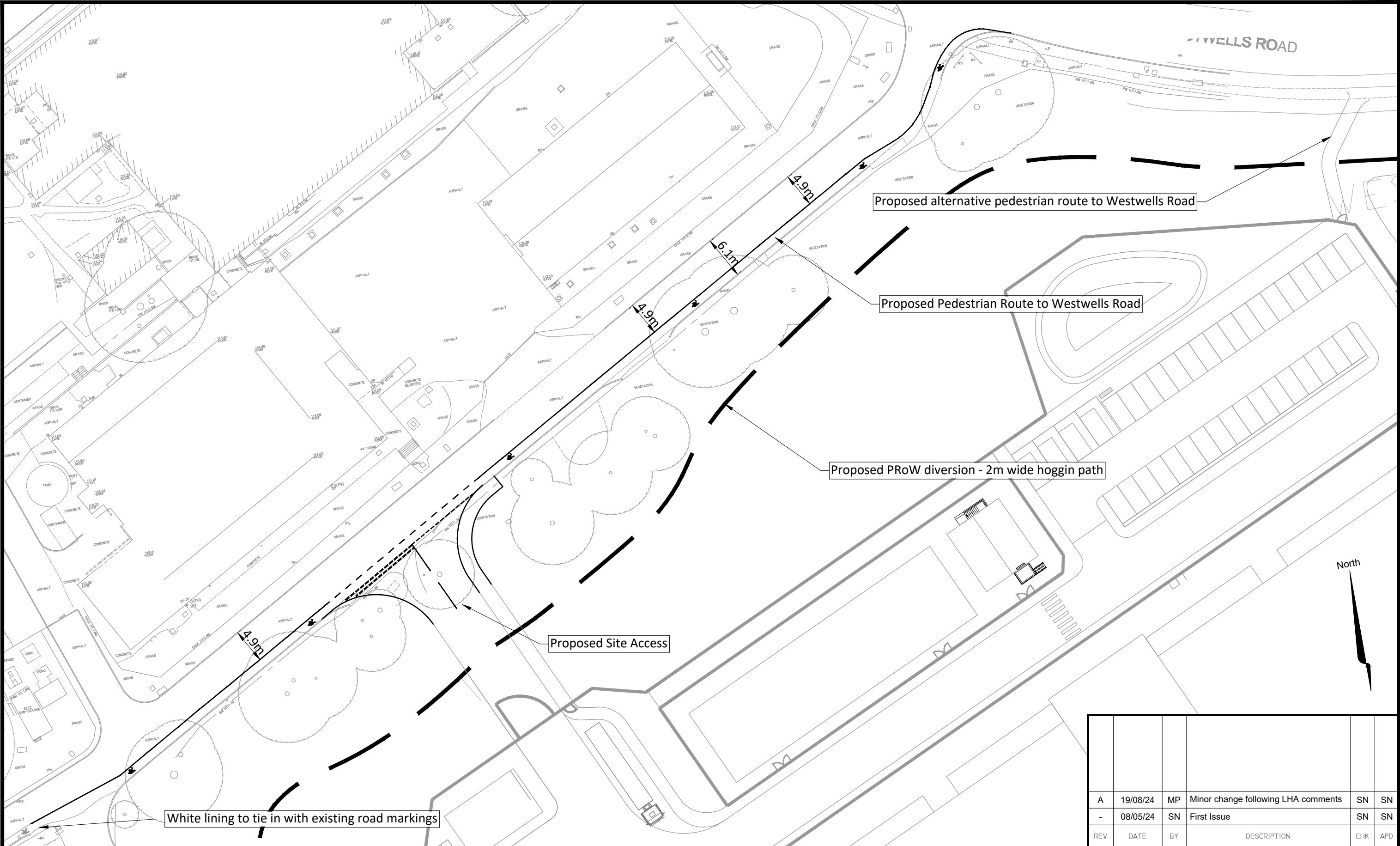
- 5.1 The key points of this technical note are summarised as follows:
- There will be little or no interaction between the data centre application site and the existing Spring Park Data Centre campus, and so whilst it will be an extension to Spring Park Data Centre campus it will operate as a largely standalone site;
 - Despite the age of the traffic survey data used, the assessment flows used in the Transport Assessment are considered to be robust, due the use of trip rates which are likely to overestimate the trips associated with development and the application of both background traffic growth and committed development to the surveyed flows;
 - The predicted level of development trips, even using the robust trips predictions, are still relatively low, with on average less than one vehicle movement per minute in the peak AM period;

- There are two existing commercial buildings that already generate HGV movements on Rowan Lane, which will be demolished as part of an already approved data centre application (P5 South);
- Following the development of application site and the P5 South data centres the overall number of HGV movements on Rowan Lane will be reduced;
- An alternative traffic free pedestrian route from Westwells Road to Rowan Lane to the west of the site access, will be provided through the site;
- With the proposed provision of a 1.2m white lined pedestrian route the carriageway width of Rowan Lane would be reduced to 4.9m, which is sufficient for a car and large vehicle to pass. The likelihood of two vehicles having to pass one another are low and the most likely scenario would be two cars passing each other; and
- The parking density for the proposed application site will be slightly lower than the standard at the main Spring Park Data Centre campus site but based on its experience Ark is confident that the proposed level of parking will be suitable and adequate for their specific car parking needs and requirements.

Attachments:

Plan IMA-22-188-009 rev A	Proposed Pedestrian Improvement
Plan IMA-22-188-010	Rowan Lane Swept Vehicle Path - 16.5m Articulated Vehicle
Appendix TN-01	LHA Comments dated 24 th July 2024

TN Plans



A	19/08/24	MP	Minor change following LHA comments	SN	SN
-	08/05/24	SN	First Issue	SN	SN
REV	DATE	BY	DESCRIPTION	CHK	APD
SCALE: (A3) 1:500			CHECKED: SN	APPROVED: SN	
CAD FILE: IMA-22-188-009.dwg			DESIGN/DRAWN: MP	DATE: August 2024	
PROJECT No: IMA-22-188			DRAWING No: 009		REV: A



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CLIENT:

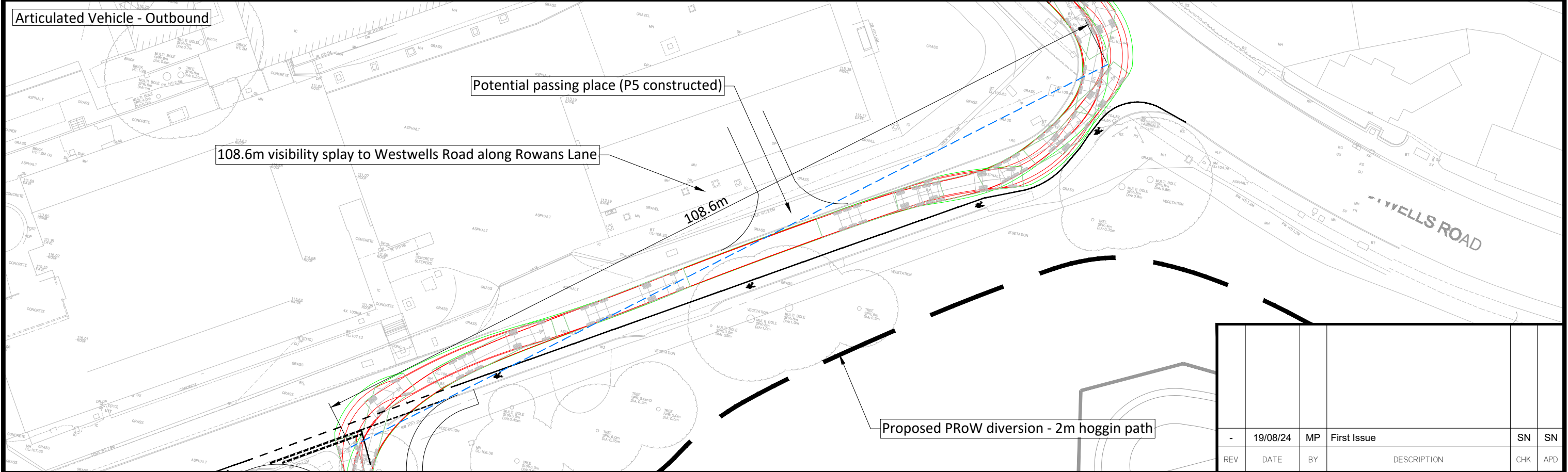
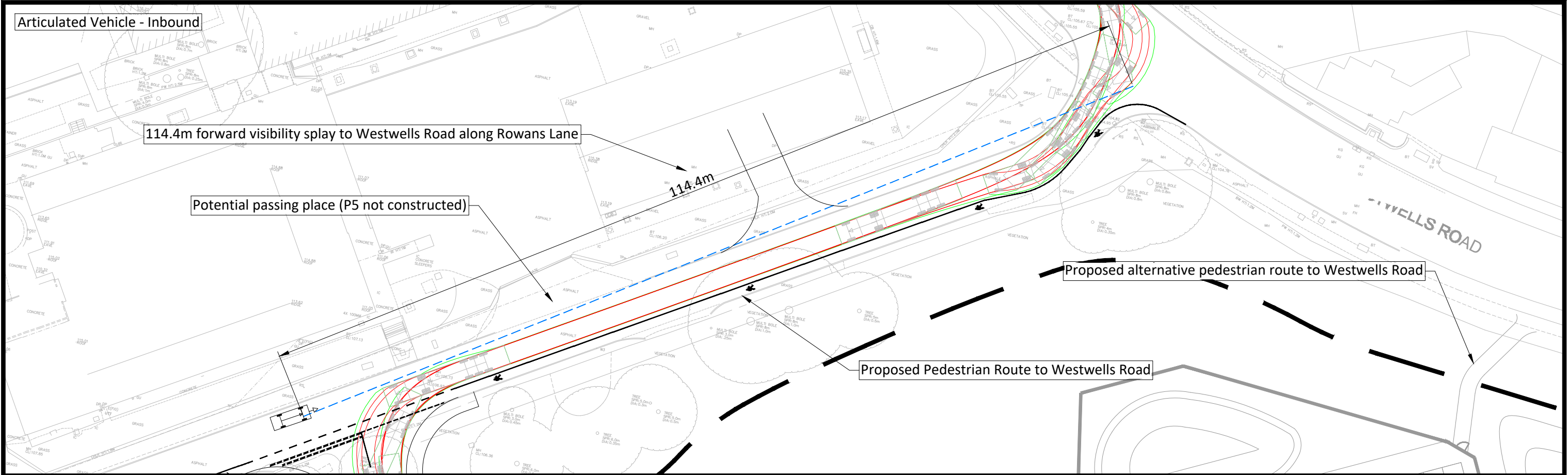
Ark Data Centres

PROJECT:

Proposed Expansion of
Spring Park Data Centre

TITLE:

Proposed Pedestrian Improvement
on Rowans Lane



 TRANSPORT PLANNING MONTREUX HOUSE, 18A JAMES STREET WEST BATH BA1 2BT t: 01225 444 011 www.ima-tp.com	CLIENT: Ark Data Centres	TITLE: Proposed Pedestrian Improvement on Rowans Lane - Swept Path Analysis	SCALE: (A3) 1:500	CHECKED: SN	APPROVED: SN
PROJECT: Proposed Expansion of Spring Park Data Centre		CAD FILE: IMA-22-188-010.dwg	DESIGN/DRAWN: MP	DATE: August 2024	
		PROJECT No: IMA-22-188	DRAWING No: 010	REV: -	

Appendix TN-1

MEMORANDUM

To: Development Management

From: Sustainable Transport

Ref: PL/24/05527

Ref: C/24/05527

Date: 24th July 2024

PL/24/05527 Redevelopment of site to deliver extension to existing Spring Park data centre campus consisting of (a) free standing data centre building (b) energy, power, and water infrastructure (c) site access and internal roads (d) site security arrangements (e) diverted Public Rights of Ways (f) hard and soft, green and blue, landscaping and (g) other ancillary and auxiliary forms of development - Land South of Westwells Road, Westwells Road, Neston, SN13 9GB

Submissions Reviewed

Design & Access Statement
Planning Statement
Transport Assessment inc. Travel Plan
Illustrative Masterplan

Relevant Planning & Guidance (Sustainable in Transport Terms)

National Planning Policy Framework – December 2023
Wiltshire Core Strategy
National Design Code
LTN1/20 – Cycle Infrastructure Design
Wiltshire Active Travel Design Standards
Wiltshire Active Travel Parking Standards
Manual for Streets
Wiltshire Design Guide
Wiltshire Highways Asset Management Plan – August 2019
Setting Local Speed Limits – March 2024

Relevant Planning Policy & Guidance

NPPF

The NPPF, as updated and published in December 2023, makes the position in relation to highways and transport as matters to be considered in the determination of planning applications.

Wiltshire Core Strategy – Adopted January 2015

The application site has no allocation in the WCS. In transport terms policies CP60 and CP61 have significance.

Core Policy 60 – Sustainable Transport

'The council will use its planning and transport powers to help reduce the need to travel particularly by private car, and support and encourage the sustainable, safe and efficient movement of people and goods within and through Wiltshire. This will be achieved by:

- i. planning developments in accessible locations*
- ii. promoting sustainable transport alternatives to the use of the private car*
- iii. maintaining and selectively improving the local transport network in accordance with its functional importance and in partnership with other transport planning bodies, service providers and the business community*
- iv. promoting appropriate demand management measures*
- v. influencing the routing of freight within and through the county*
- vi. assessing and, where necessary, mitigating the impact of developments on transport users, local communities and the environment.'*

Core Policy 61 – Transport and New Development

'New development should be located and designed to reduce the need to travel particularly by private car, and to encourage the use of sustainable transport alternatives. As part of a required transport assessment, the following must be demonstrated:

- i. That consideration has been given to the needs of all transport users, where relevant, according to the following hierarchy:*
 - a. Visually impaired and other disabled people*
 - b. Pedestrians*
 - c. Cyclists*
 - d. Public transport*
 - e. Goods vehicles*
 - f. Powered two-wheelers*
 - g. Private cars.*
- ii. That the proposal is capable of being served by safe access to the highway network.*
- iii. That fit for purpose and safe loading/unloading facilities can be provided where these are required as part of the normal functioning of the development.*

Where appropriate, contributions will be sought towards sustainable transport improvements, and travel plans will be required to encourage the use of sustainable transport alternatives and more sustainable freight movements.'

Planning History

The site has been subject to a significant planning history which has been covered in the Planning Statement and Transport Assessment.

It is noted that a confidential pre-application was sought in 2022 (ENQ/2022/01951) but that there was no highways advice provided at that time.

Transport Assessment

Overall, the approach taken by the submitted Transport Assessment is not understood in the context of this being a standalone application but framed as an extension to the Spring Park Data Centre in the Planning Statement.

The site is either to be standalone and operate as a business to itself. In which case there would be no concerns relating to cumulative matters, including movements and parking. Or the proposal is a cumulative extension of the whole site in which case a holistic approach to the extension is required.

The reliance on surveys from 2019 and older for traffic flows is also not considered to be justified and in terms of the specific element proposed there appears to be a lack of focus on establishing the direct impacts of this proposal and from that the required mitigations to support an application of this nature.

There does not appear to be any good reason why surveys have not been undertaken to support this application. This matter will require clarification.

Background traffic movements for 2024 plus committed development should be based on up to date survey and data.

The comparison to a residential planning approval for the site is also not understood. There would appear to be no beneficial information to establish from the comparison and whilst there is some difference in overall trip numbers it is not difficult to be aware the commuter traffic to a location is the opposite direction of travel than a residential development which people would leave from to work.

Once 2024 surveys are completed and committed developments applied to recorded traffic flows at junctions that will be any may be impacted by this proposal agreed trip rates can be applied to the site and the impacts of the proposals as a level of intensification can be presented.

Parking

There is a concern related to parking numbers, given that the peak AM arrivals anticipate 47 vehicles arriving and 12 departing. There is an immediate concern arising in relation to parking accumulation with the proposed car park only having 47 spaces in total comprising 5 disabled parking spaces and 42 remaining parking spaces. Unless the car park is empty in the AM Peak then it would appear that the levels of parking proposed have not been appropriately addressed.

Rowan Lane

There are concerns relating to the junction of Rowan Lane with Westwells Road for the purposes of carrying movements associated with Heavy Goods Vehicles and conflicts that could arise with smaller private vehicles. The overall width and construction of Rowan Lane are a concern and do not appear to be sufficient for the carriage of larger vehicles. This does not appear to be addressed within the submission.

The swept path analysis presented shows HGV movements that take up the entire carriageway in near the Junction with Westwells Road and the site access that would create a conflict point with other more vulnerable road users.

Access

The proposed access point from the junction with Westwells Road to the site entrance need to be included as access for these proposals to ensure that the route is safe and suitable. There appears to be a lack of appropriate dedicated walking and cycling infrastructure on this route. The proposed white lined 1.2m wide pedestrian

lane, on carriageway would create direct conflicts for vulnerable road users and this is a matter that will need to be addressed to provide a more suitable facility.

Walking and Cycling

There is a concern in relation to walking and cycling and routes to access the site. A lack of dedicated facilities and routes for walking and cycling is a key concern, particularly supporting walking and cycling on Rowan Lane which appears to be sub-standard for HGV traffic size and numbers.

Travel Plan

It is noted that the submitted Travel Plan. The staffing levels associated with the Travel Plan indicated only 5 staff during the day and 2 at night. On the basis of the Travel Plan the presented information within the Transport Assessment appears to be at odds in terms of anticipated parking needs and movements.

The applicant should be able to demonstrate how effective the Travel Plan for the wider site has been and incorporate this in greater detail into this submission.

Highways Position

Insufficient Information

The applicant should address the following:

Updated traffic surveys and assessment of impacts of this proposal and clear understanding on if this application is for a standalone facility or if forms part of the wider business as a cumulative floor space and parking strategy.

Access – Demonstrate swept path and alterations to access junctions and routes for traffic. Provide infrastructure that removes conflict for most vulnerable road users. Improve technical specifications of Rowan Lane to be suitable for daily HGV passage.

Parking – Cumulative Parking Assessment and review against known Travel Plan and wider site context. There will be a need to establish straightforward positions on existing staffing levels and parking numbers associated with the wider site and demonstrate the overall need from the cumulative aspect.

Alternatively, the application can be viewed as a stand alone facility, however the travel plan has identified minimal staffing requirements that would not appear to support 47 parking spaces being required. This leads to concerns is overall parking on the wider site is insufficient and whether this reflects an under performance of Travel Plan objectives.

There is currently insufficient information to establish if the site will provide safe and suitable access and sufficient parking in this location.

Chris Mead
Sustainable Transport
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