

Old Wood Energy Park

Land west of Wysall, Nottinghamshire

Transport Statement

Date: January 2024 | Pegasus Ref: P21-2533



Land off Wysall Road and Bradmore Road, Wysall, Nottinghamshire Old Wood Energy Park

Transport Statement

For

Exagen Development Ltd.





Document Control Sheet

Land off Wysall Road and Bradmore Road, Wysall, Nottinghamshire Old Wood Energy Park Exagen Development Ltd.

This document has been issued and amended as follows:

Date	Issue	Prepared by	Approved by
27/11/2023	1 st draft	AN	JNR





Contents

	Introduction	
2.0	Existing Conditions	
3.0	Proposed Development	7
4.0	Traffic Impact and Mitigation1	2
5.0	Summary and Conclusion	3
Figu	ires	
Figure	e 1.1: Site Location	1
Figure	e 2.1: Location Highway Network	4
Figure	e 2.2: Location of Public Right of Way	5
Figure	e 2.3: Public Rights of Way Crossing Points	6
Figure	e 2.3: Construction Access Route	9

Appendices

- B Nottinghamshire County Council Pre Application Response
- C Swept Path Analysis Access 16.5m HGV Northern Parcel
- D Swept Path Analysis Access 16.5m HGV Southern Parcel
- E Swept Path Analysis Turning Manoeuvre
- F Swept Path Analysis Internal Passing Bay
- G Bradmore Road Construction Vehicle Passing Review
- H Proposed passing bays on Bradmore Road
- I ATC Data Northern Parcel
- J Visibility Splay Calculation Northern Parcel
- K Visibility Splay Northern Parcel
- L Visibility Splay Southern Parcel



1.0 Introduction

- 1.1 Motion has prepared this Transport Statement on behalf of Exagen Development Ltd, as part of a planning application to construct and operate a temporary Solar Farm with an export capacity of approximately 40 MW (AC) and a co-located Battery Energy Storage System (BESS) with a capacity of 85 MW, along with associated infrastructure (Old Wood Energy Park; the Development). The Development is located on land to the west of Wysall, Nottinghamshire (the Site).
- 1.2 The Site is split into two parcels (referred to as the northern and southern parcel throughout this report) located on land north of Wysall Road (southern parcel, which includes part of the solar farm, the substation and the BESS) and land west of Bradmore Road (northern parcel, which includes the rest of the solar farm). The two parcels of land will be connected via underground cable located in Bradmore Road/Main Street/Costock Road/Wysall Road. This underground cable will have a length of approximately 3,350m. The Development is located within the administrative boundary of Rushcliffe Borough Council (RBC) who act as the Planning Authority with Nottinghamshire County Council (NCC) acting as the Highway Authority. The Site's location is shown below in Figure 1.1.



Figure 1.1: Site Location

1.3 The Site currently comprises 12 fields totalling circa 100.92 hectares, with the Site Layout Plan included at Appendix A.

Pre Application Consultation with Nottinghamshire County Council

1.4 Pre-Application advise was sought from NCC to determine the highway authorities view on the proposed access to each of the parcels and the construction access routes. The advice received has been incorporated into the design of the Development and has led to the additional information requested being supplied within this report. A copy of the pre application advice received can be viewed at Appendix B.



Transport Planning Policy and Guidance

National Planning Policy Framework

- 1.5 The requirement to prepare a Transport Statement is set out in the National Planning Policy Framework, 2023, published by the Department for Communities and Local Government (NPPF). Paragraph 113 of NPPF¹ states:
 - "All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."
- 1.6 The criteria against which development should be assessed is set out in NPPF paragraph 110 that states:
 - 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;
 - c) the design of streets, parking areas, other transport elements and the content of associated standards reflects the current national guidance including the National Design Guide and the National Model Design Code; and
 - d) 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.
- 1.7 Paragraph 111 of the NPPF sets out the highway grounds on which development could be prevented or refused:
 - "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."
- 1.8 Detailed guidance on the scope and content required for Transport Statements is provided in the government's planning practice guidance. This Transport Statement is prepared in accordance with this quidance.

Scope of Report

- 1.9 This Transport Statement has been prepared in accordance with current best practice guidelines and demonstrates that:
 - ▶ The proposals accord with national and local policies relevant to transport;
 - ▶ Safe and suitable access to the application site can be achieved; and,
 - ▶ The level of traffic associated with the proposals will not lead to severe impact to the existing operation and free flow of traffic on the adjoining highway network.
- 1.10 Following this introduction, this Transport Statement is split into 5 sections as follows:
 - Section 2 details existing conditions;

¹ National Planning Policy Framework, September 2023



- ▶ Section 3 provides an overview of the proposed development and details the proposed access, construction access route and trip generation;
- Section 4 assesses the traffic impact of the proposed development; and
- ▶ Section 5 summarises the key findings and conclusions of this report.



2.0 Existing Conditions

Highway Network

2.1 Figure 2.1 below shows the local highway network surrounding the Site.

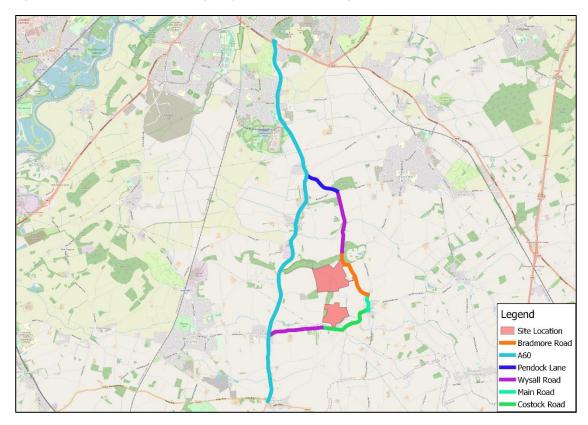


Figure 2.1 – Local Highway Network

- 2.2 The northern parcel fronts onto Bradmore Road. Bradmore Road is a single carriageway road, with the national speed limit applicable (60mph). Bradmore Road has no pedestrian infrastructure or street lighting in the vicinity of the Site. Bradmore Road connects to Main Road to the south east and to Wysall Road/ Pendock Lane to the north west which in turn connects to the A60.
- 2.3 The southern parcel fronts onto Wysall Road. Wysall Road is a single carriageway road with one lane in each direction. The national speed limit applies to Wysall Road (60mph). Wysall Road has no pedestrian infrastructure or street lighting in the vicinity of the Site. Wysall Road connects to the A60 to the west and to the east Wysall Road becomes Costock Road, Main Street, Keyworth Road and finally Wyasll Lane.

Road Safety

Recorded Personal Injury Collision Data

- 2.4 Personal Injury Collision (PIC) data was obtained from CrashMap for the adjoining highway network for the most recent five-year period available, 1st January 2018 to 31st December 2022. No PIC's were identified within the vicinity of either of the site accesses (northern or southern parcels).
- 2.5 The recent collision history does not suggest a highway safety deficiency and it is therefore concluded that there is no evidence of an existing road safety concern in the vicinity of the Site.



Public Rights of Way (PROW)

2.6 There are no Public Rights of Way (PROW) within the southern parcel. There are two public rights of way within the northern parcel. The PROW's will remain operational through the construction period and will have signs at either end to advise users of the construction works. During both the construction and operational phase, the PROW will be fenced off to ensure users safety. A qualified Banksman will walk alongside construction vehicles through the Site, when a PROW crossing is reached, the qualified banksman will check there are no PROW users then open the gate to allow the construction vehicle to continue. The location of the PROW in relation to the Site can be viewed below in Figure 2.2.

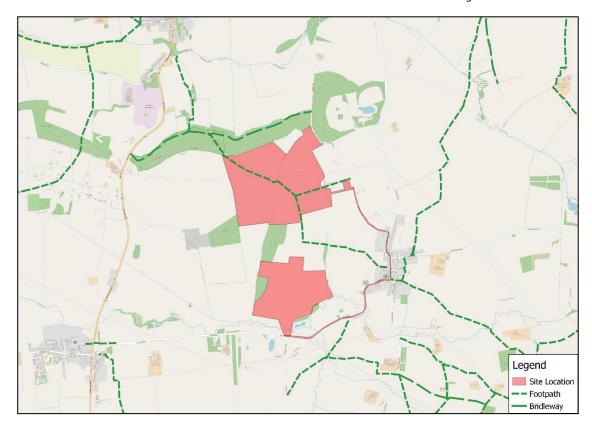


Figure 2.2: Location of Public Right of Way

2.7 There are 2 locations where the internal access track crosses a PROW in the northern parcel. The location of these crossing points can be seen below in Figure 2.3:





Figure 2.3 - PROW Crossing Points

Planned Development and Infrastructure

- 2.8 The following developments / development proposals have been identified in the area surrounding the application site:
 - ▶ An EIA screening request has been submitted to RBC for the development of 49.9mw solar array and associated infrastructure on land surrounding Wysall Lane (to the south of the southern parcel).
 - Planning Permission has been granted on the 16th February 2023 (Ref: 22/00303/FUL) for the Construction of a solar farm and battery stations together with all associated works, equipment and necessary infrastructure, together with the formation of a new vehicular access onto Bunny Hill (A60).
- 2.9 The Contractor will make reasonable endeavours to coordinate deliveries with these construction sites, this is to minimise the cumulative impact of construction traffic. The developments would not impact the delivery of construction materials to the northern parcel.
- 2.10 No planned transport schemes or infrastructure have been identified in the local area to the Site which need to be taken into consideration in the TS.



3.0 Proposed Development

Development Description

- 3.1 The Development would consist of rows of solar panels known as strings. The panels are composed of photovoltaic cells and are designed to maximise the absorbance of the sun's rays and minimise solar reflection. Consequently, they are dark in appearance. Each string of panels would be mounted on a rack comprising poles, and between each string, there would be gaps to avoid inter-panel shading. The gaps would be between 3 m and 6 m depending on the topography and aspect. The panels are fixed facing south at an angle of between 10 to 35 degrees. The panels would be mounted at around 0.8 m from the ground at the lowest point rising to approximately 3.1 m at the highest point. There would also be a new substation and BESS located in the southern parcel.
- 3.2 The scale and nature of the associated infrastructure are as follows:
 - Strings or rows of solar panels (each panel approximately 1.2 m x 2.4 m) mounted on metal frames, likely to be screwed or driven into the ground to a depth of 1-2 m, depending on ground conditions;
 - Lower edge of panel typically 0.8 m from the ground;
 - Highest point of panel 3.1 m in height from the ground;
 - Inverters and transformers housed in GRP enclosures or containers, typically measuring 7 m x
 2.5 m x 3 m;
 - ► Gated and fenced battery storage containers and inverters, similar to 20ft shipping containers, typically 6 m x 2.5 m x 3 m;
 - ▶ Gated and fenced substation compound, including 132kV transformer, DNO and Client substation kiosks up to 7 m in height;
 - ► Two 33 kV transformers, auxiliary transformers and switchgear housing, one located in each of the northern and southern parcels. These are typically up to a height of 4 m.
 - ▶ 2.4 m high perimeter deer fence (wooden post and wire mesh) around the solar farm and 2.5 m palisade fencing around the substation and BESS compound;
 - CCTV cameras located on 3 m high wooden poles around the solar farm (facing inwards) and on 5 m high poles at the substation/ BESS compound;
 - Access tracks approximately 4 m wide (kept to a minimum across the Site) made of locally sourced permeable aggregate; and
 - Landscaping (details provided on the Landscape Mitigation Plan and set out in the Landscape and Visual Impact Assessment (LVIA))
- 3.3 The battery containers and inverter housing could be painted a sympathetic colour (i.e., a dark shade of green) to help blend into the landscape and this approach is to be agreed with the Council. The substation equipment would primarily be housed inside a brick building.
- 3.4 A buried cable will link the two site parcels, approximately 3,550m in length and will follow the public highway between the two access points.
- 3.5 The Development will connect into the electricity grid network via the existing 132 kV distribution line which crosses the southern part of the southern parcel.
- 3.6 The Site Layout Plan is included at Appendix A.



3.7 The solar panels, frames, battery containers, inverters and other site construction materials would be transported to the Site on articulated lorries up to 16.5m in length.

Northern Parcel Site Access

- 3.8 It is proposed to utilise a new vehicular access to access the northern parcel of the site, this proposed access is located circa 70 metres south of the existing access to Lodge Farm. The utilisation of this new access means that vehicular movements associated with the Development will remain segregated from the PROW which runs along the access road to Lodge Farm and does not conflict at all with access to the farm.
- 3.9 The proposed access has been designed to be able to accommodate the largest vehicle expected to access the site, a 16.5m articulated lorry. A swept path analysis showing the entry and egress of a 16.5m articulated lorry from the northern parcel's site access can be seen at Appendix C.

Southern Parcel Site Access

3.10 It is proposed to utilise an existing gated field access off Wysall Road for vehicular traffic to reach the southern parcel. This access will be widened to the east to accommodate the largest vehicle expected to access the site, a 16.5m articulated lorry. A swept path analysis showing the entry and egress of a 16.5m articulated lorry from the southern parcel's site access can be seen at Appendix D.

Internal Access Track and Turning Area

- 3.11 The Site will have an internal access track network to allow construction vehicles to reach all areas within the Site, this access track will measure a width of 4m and be formed of bound material for the first 10 metres from the edge of the highway to act to avoid the traffic of mud onto the local highway network. The access track will be wider at corners to ensure that HGVs can negotiate all corners. Additionally, wheel washing facilities will be provided at the Site access to further avoid the traffic of mud onto the local highway network.
- 3.12 A swept path analysis of a 16.5m articulated vehicle turning within each parcel has been undertaken to demonstrate that construction vehicles will not reverse out of the Site access onto the public highway. The turning area will be formed of aggregate. The swept path analysis of this manoeuvre can be seen at Appendix E.
- 3.13 Additionally, a passing bay will be provided for both parcels to allow vehicles up to 16.5m to pass each other. The swept path analysis demonstrating this can be seen at Appendix F.

Access Route

3.14 It is proposed that all HGV construction traffic will route to the Site via the routes illustrated on Figure 3.1.



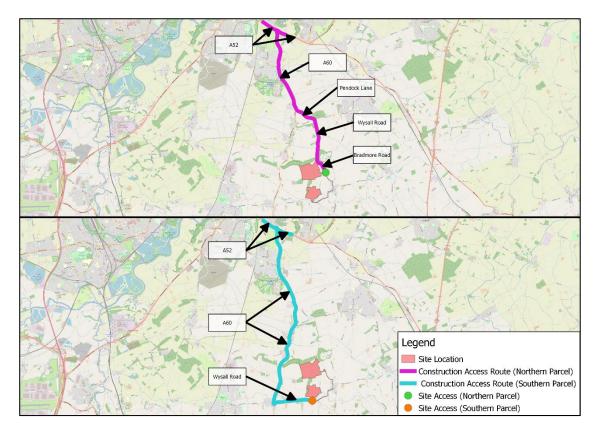


Figure 3.1 - Construction Access Route

- 3.15 The Construction Traffic will reach the northern parcel as follows:
 - Construction traffic will take the A60 South exit off the roundabout connecting with the A52, through Ruddington, Bradmore until the Loughborough Road and Pendock Lane junction is reached. Construction vehicles will turn left onto Pendock Lane which becomes Wysall Road and then Bradmore Road until the access is reached.
- 3.16 The Construction Traffic will reach the southern parcel as follows:
 - Construction traffic will take the A60 south exit off the roundabout connecting with the A52, through Ruddington, Bradmore and Bunny until the junction at Costock is reached. Construction vehicles will turn left onto Wysall Road and travel east towards Wysall until the southern parcels access is reached.
- 3.17 Construction vehicles will only be permitted to use the same route when egressing from the Site. Construction vehicles will not be permitted to travel through the village of Wysall.

Access Route Improvements

3.18 It was raised in the pre application advise received from NCC that the northern parcels construction access route would need suitable mitigation to ensure that HGV's can route to the Site. A review of where a 16.5m HGV and a car can pass along Pendock Lane/Wysall Road/Bradmore Road has been undertaken based on OS Mapping. This plan can be viewed at **Appendix G**. This review found that an HGV and a Car can pass on Pendock Lane, however there are sections of Wysall Road and Bradmore Road where an HGV and car cannot pass with the roads current width. It is proposed to install 4 passing places along the access route, the location and design of these passing places can be viewed at **Appendix H**. The proposed passing places will also allow an HGV to pass an HGV. The ATC placed on Bradmore Road recorded an average of 163 HGV movements per weekday, this constituted 21.9% of all traffic on



Bradmore Road. The proposed passing places will therefore constitute a significant highways improvement for exiting traffic on the proposed construction access route for the northern parcel.

Traffic Generation

Construction Traffic

3.19 The Development comprises three phases: construction, operation and decommissioning.

Decommissioning effects would be similar to construction and so are not considered separately.

Northern Parcel

3.20 Forecast HGV two-way traffic movements associated with the construction phase of the northern parcel is presented for the Development in Table 3.1.

Activity	Vehicle Size	Two-way Vehicle Movements		
Site Set Up and Ongoing Management (including fencing, water/waste deliveries, site huts etc)	Various sizes with around 70% being 8-10m rigids and the remaining 30% being 16.5m articulated vehicle	142		
Solar Panels	16.5m articulated vehicle	182		
Mounting Frames	16.5m articulated vehicle	120		
Aggregate (Access Track)	32 tonne tipper lorry	1060		
Aggregate (Inverter Bases)	32 tonne tipper lorry	40		
Inverters	16.5m articulated vehicle	34		
Total		1,578		

Table 3.1: Forecast Northern Parcel Two-way Traffic Movements

- 3.21 It is estimated that the construction period will be for a period of 24 weeks with deliveries occurring 5.5 days a week. It is estimated that across the 24 week construction period there will be 1,578 two-way HGV deliveries to Site, this equates to 12 two-way HGV movements per day.
- 3.22 It is anticipated that for initial site set up for the first 2-3 weeks of construction that two-way HGV deliveries will be higher than the average of 12 two-way HGV deliveries over the 24 week construction period.
- 3.23 No ATC data is available for Wysall Road to compare the proposed HGV trip generation of the southern parcel to the existing HGV traffic on Wysall Road.
- 3.24 It is estimated that up to 5 light vehicles will also attend the Site per day (10 two-way vehicle movements).

Southern Parcel

3.25 Forecast HGV two-way traffic movements associated with the construction phase of the northern parcel is presented for the Development in Table 3.2.



Activity	Vehicle Size	Two-way Vehicle Movements	
Site Set Up and Ongoing Management (including fencing, water/waste deliveries, site huts etc)	Various sizes with around 70% being 8-10m rigids and the remaining 30% being 16.5m articulated vehicle	142	
Solar Panels	16.5m articulated vehicle	88	
Mounting Frames	16.5m articulated vehicle	50	
Aggregate (Access Track)	32 tonne tipper lorry	1210	
Aggregate (Substation / Transformer / Inverter Bases)	32 tonne tipper lorry	800	
Substation / Transformer / Batteries / Inverters	16.5m articulated vehicle	224	
Total		2,514	

Table 3.2: Forecast Southern Parcel Two-way Traffic Movements

- 3.26 As outlined in paragraph 3.21 it is estimated that the construction period will be for a period of 24 weeks with. It is estimated that across the 24 week construction period there will be 2,514 two-way HGV deliveries to Site, this equates to 19 two-way HGV movements per day.
- 3.27 It is anticipated that for initial site set up for the first 2-3 weeks of construction that two-way HGV deliveries will be higher than the average of 19 two-way HGV deliveries over the 24 week construction period.
- 3.28 A 7-day ATC counter was placed along Bradmore Road between the 20th May to the 26th May 2023 which recorded the number of vehicles and Heavy Goods Vehicles. On average there were a combined 741 two-way vehicle movements per weekday, of which 163 were HGVs. This is an average which excludes Saturday and Sunday as deliveries are not expected on Sunday and only for half of Saturday. As stated in paragraph 3.26, the southern parcel is likely to generate 19 two-way HGV movements per day, this constitutes a 2.6% increase in HGV movements compared to the existing frequency of HGVs or a 12% increase when compared to the total traffic flow on Bradmore Road.
- 3.29 It is estimated that up to 10 light vehicles will also attend the Site per day (20 two-way vehicle movements).

Operational Traffic

3.30 During the operational phase, traffic movements are expected to be minimal. Operational traffic would comprise one van accessing the Site twelve times per month i.e. twenty four two-way vehicle movements per month.

Abnormal Loads

3.31 An 11m long by 2.5m wide Liebherr mobile crane will be used throughout the construction of the site. This vehicle is classified as an abnormal load due to the type of vehicle not due to the width / length of the vehicle. and as such an abnormal load assessment will be undertaken. The CTMP submitted with this planning application expands on this and makes reference to the fact that only two abnormal loads are expected at site, one to deliver and one to remove the mobile crane.



4.0 Traffic Impact and Mitigation

Highway Safety

4.1 The temporary increase in traffic volumes and especially the heavy vehicle component of the traffic volume could lead to adverse highway safety impacts however the proposal is for a 24 week construction period and as such is not likely to have a significant road safety impact.

Visibility

Northern Parcel Access

- 4.2 The national speed limit applies to the section of Bradmore Road that fronts the northern parcel's site access. A 60 miles per hour speed limit equates to a required visibility of 215 metres in each direction. Speed surveys have been conducted between the 20th May 2023 to 26th May 2023 along Bradmore Road in the form of an Automatic Traffic Counter (ATC) survey.
- 4.3 A 7 day 85th percentile speed of 43.5 miles per hour northbound and a 7 day 85th percentile speed of 44.8 miles per hour southbound. During the course of the ATC, no wet weather was experienced, therefore no wet weather adjustment has been applied, in line with DMRB guidance. This equates to 118m northbound and 123m southbound of visibility. The ATC results are shown at Appendix I and the visibility splay distance calculation is shown at Appendix J.
- 4.4 The Site can achieve visibility in both directions from the proposed site access off Bradmore Road. A drawing demonstrating the visibility splays from the Site access is included at Appendix K.

Southern Parcel Access

4.5 The national speed limit applies to the section of Wysall Road that fronts the southern parcels site access. A 60 miles per hour speed limit equates to a required visibility of 215 metres in each direction. The Site can achieve visibility in both directions from the proposed site access off Wysall Road. A drawing demonstrating the visibility splays from the Site access is included at Appendix L.

Construction Traffic Management Plan

- 4.6 Notwithstanding the de minimis change in highway capacity which is expected to arise from the construction phase of the Development, it is proposed to provide a Construction Traffic Management Plan (CTMP) to reduce or avoid this potential disturbance arising from heavy goods vehicles during the construction period. This CTMP will be submitted with the planning application and should be read in conjuncture with this TS.
- 4.7 The CTMP will detail the proposed cable route between the two site parcels and how the construction works will be managed.

Residual impacts

- 4.8 On completion of the 24 week construction period, construction traffic would cease. There would therefore be no residual traffic related impacts arising from the temporary construction phase of the Development.
- 4.9 During the operational phase, traffic movements are expected to amount to twenty four vehicle movements per month. Traffic volumes of this magnitude would be imperceptible on a daily basis. No residual traffic related impacts arising from the operational phase of the Development.



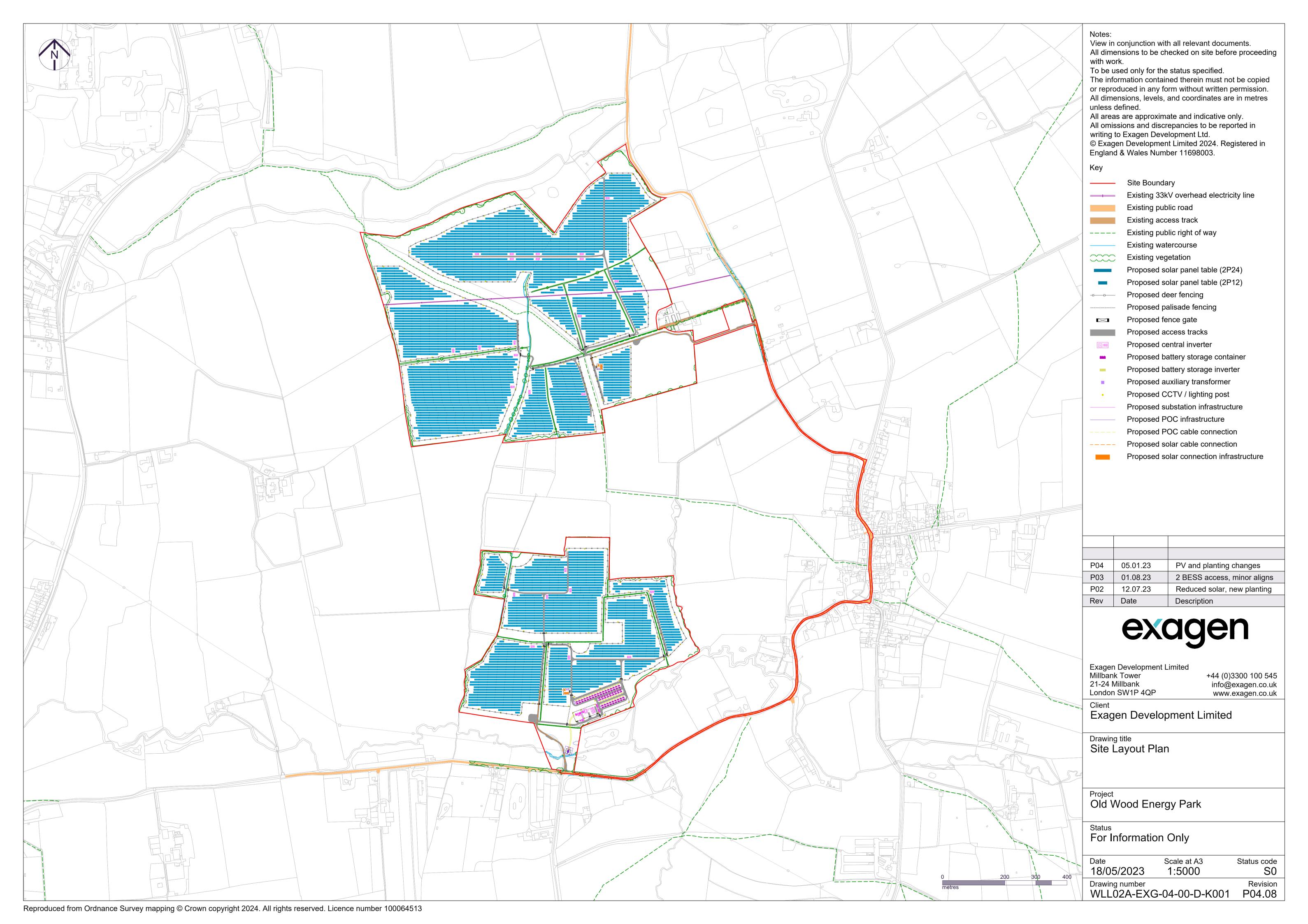
5.0 Summary and Conclusion

- 5.1 Motion has prepared this Transport Statement on behalf of Exagen Development Ltd, as part of a planning application to construct and operate a temporary Solar Farm with an export capacity of approximately 40 MW (AC) and Battery Energy Storage System (BESS) with a capacity of 85 MW along with associated infrastructure (Old Wood Energy Park).
- 5.2 HGV construction traffic will route to the Site's northern parcel via the A60 South exit off the roundabout connecting with the A52, through Ruddington, Bradmore until the Loughborough Road and Pendock Lane junction is reached. Construction vehicles will turn left onto Pendock Lane which becomes Wysall Road and then Bradmore Road until the northern parcel's access is reached. HGV construction traffic will route to the Site's southern parcel via the A60 south exit off the roundabout connecting with the A52, through Ruddington, Bradmore and Bunny until the junction at Costock is reached. Construction vehicles will turn left onto Wysall Road and travel east towards Wysall until the southern parcel's access is reached.
- 5.3 Both site accesses can achieve the required level of visibility. The proposed passing places on Bradmore Road for the northern parcel will allow oncoming HGV's to pass one another and serve as an improvement to the existing situation post construction.
- 5.4 The construction phase of the Development would lead to a temporary increase in traffic on the road network surrounding the Site. This would be for a temporary 24-week period during which on average it is expected that the Development would lead to an increase in traffic movements of 31 two-way HGV movements per day (northern + southern parcel). Changes of this magnitude would have a minimal impact on highway capacity.
- 5.5 The southern parcel would have an increase of 9 two-way daily HGV movements or a 12% increase in HGV movements for a temporary 24 week period on Bradmore Road / Wysall Road will not substantially disturb other users.
- 5.6 During the operational phase of the Development, there would be a minimal increase in traffic volumes associated with operational traffic (one van) expected to access the Site twelve times per month (twenty four two-way movements).
- 5.7 There are no residual traffic impacts identified.
- In conclusion, the Site is at a location which can be safely accessed by construction and operational vehicles and at which the temporary traffic impacts during construction would be minimal. In short:
 - ▶ The Development accords with national and local policies relevant to transport;
 - > Safe and suitable access to the Site can be achieved by all modes; and,
 - The level of traffic associated with the Development will not lead to severe impact to the existing operation and free flow of traffic on the adjoining highway network.
- 5.9 In accordance with paragraph 111 of NPPF, there are therefore no transport or highway reasons why planning permission should be prevented or refused.



Appendix A

Site Layout





Appendix B

Nottinghamshire County Council Pre Application Response

formal Enquiry Form				
	The listed image carront be displayed. The file may have been moved, renamed, or detelled, verify that the list points to the correct file and location.			

TOWN AND COUNTRY PLANNING ACT

HIGHWAY REPORT ON PROPOSALS FOR DEVELOPMENT (PRE-PLANNING APPLICATION ADVICE)

Date received 24/07/2023 DISTRICT: Rushcliffe by D.C. 24/07/2023 OFFICER:

D.C. No. 23/preapp/wysall PROPOSAL: Development of renewable energy park LOCATION:

Land off Wysall Road and Bradmore Road,

Wysall, Nottinghamshire **APPLICANT:**

Ir

Highways pre-application advice has been requested in relation to the development of a renewable energy park including ground mounted solar farm and battery energy storage system and substation on land off Wysall Road and Bradmore Road, Wysall. The development is split between two parcels of land. A Transport Pre-Application Note has been provided for consideration (Motion, 30/06/2023).

Northern Access

It is stated that the northern development plot has two potential access arrangements, and the advice of the Highway Authority is sought as to the preferred access.

The first potential access is via the existing farm access off Bradmore Road that leads to Lodge Farm. The existing farm access will be widened to accommodate the movement of 16.5m articulated vehicles. Swept path analysis has been provided and visibility splays have been confirmed commensurate with measured vehicle speeds. The required visibility splays will need to be clear of obstructions above 0.26m, and any impact on existing vegetation should be clearly detailed. Sufficient passing provision will also be required at the access to ensure vehicles are not forced to wait or reverse out into the carriageway. It is noted that this access also forms a Public Footpath, and as such the impact on this should be discussed with the Public Rights of Way team (countryside.access@nottscc.gov.uk).

The alternative access arrangement is via a proposed new access off Bradmore Road to the south of the existing farm access. It is stated that this proposed access would have the advantage of having a straight geometry, and therefore avoids the need for 90 degree turns within the site. It would appear that the provision of the required visibility splay to the north of the access would require removal of existing vegetation. It would need to be confirmed that the required splays are actually achievable, with no obstruction above 0.26m. Any impact on existing vegetation should be clearly detailed. Sufficient passing provision will also be required at the access to ensure vehicles are not forced to wait or reverse out into the carriageway.

The above points would need to be addressed to confirm a suitable access arrangement. Further consideration will also be required with regard to the construction vehicle access route, as detailed below.

Southern Access

The southern development plot is to be accessed via an existing field access off Wysall Road, which is proposed to be widened to accommodate 16.5m articulated vehicles. Visibility splays have been confirmed commensurate with the speed limit, and it is stated that vegetation within the highway boundary will be trimmed back. Again, it must be ensured that the required splays are achievable down to a height of 0.26m.

Construction Vehicle Access Route

Construction vehicle access routes are detailed for both the northern and southern parcels of land. It is acknowledged within the Pre-Application Note that Bradmore Road is not wide enough to allow two HGVs to pass one another. It is stated that HGV deliveries will be managed to avoid conflicting HGV vehicle movements generated by the proposal, which will be managed through a booking system. It is also proposed to install passing places along Bradmore Road to allow HGVs to pass in the event that they do meet. No further details on possible locations of passing places have been provided, and it is stated that this is to be addressed further within the Transport Statement, but the Highway Authorities advice on the approach is requested.

No details have been provided on the anticipated length of construction phase, or the number of construction vehicle movements expected, and as such it is difficult to assess what the likely impact will be. As noted within the Transport Note, Bradmore Road is insufficient in width to allow HGVs to pass, and furthermore, it is noted that there are banked verges adjacent to the carriageway for a considerable length of the road which will further restrict passing opportunities. It is also noted that there is poor forward visibility at certain points along the route, restricting the view of oncoming traffic, which raises further concerns. The route is not considered suitable to accommodate a significant increase in HGV movements, and it is unclear where passing places could be provided to overcome the concerns. This would need to be addressed further by the applicant, or alternative access routes considered.

Pre and post condition surveys of any agreed access routes are likely to be required, with a commitment to reinstate any damage caused as a result of the construction traffic.

These comments are based on the information proprejudice to any formal comments the Highway consulted on any subsequent planning applications.	vided and Authority	are n may	nade w make	ithout when
HDC ES 22/08/2023				
112 0 20 22, 00, 2020				

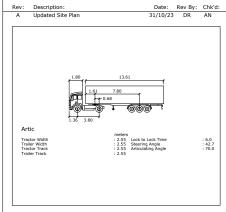


Appendix C

Swept Path Analysis – Access - 16.5m HGV – Northern Parcel









Appendix D

Swept Path Analysis – Access – 16.5m HGV – Southern Parcel



Date: Rev By: Chk'd:



T: 0118 467 4498

Guildford - London - Reading

www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Proposed access (S parcel)

Exagen Development Limited

Drawing Status:

Scale: 1:500 (@ A3) Date: 31/10/23

Drawn: AN Checked: MF

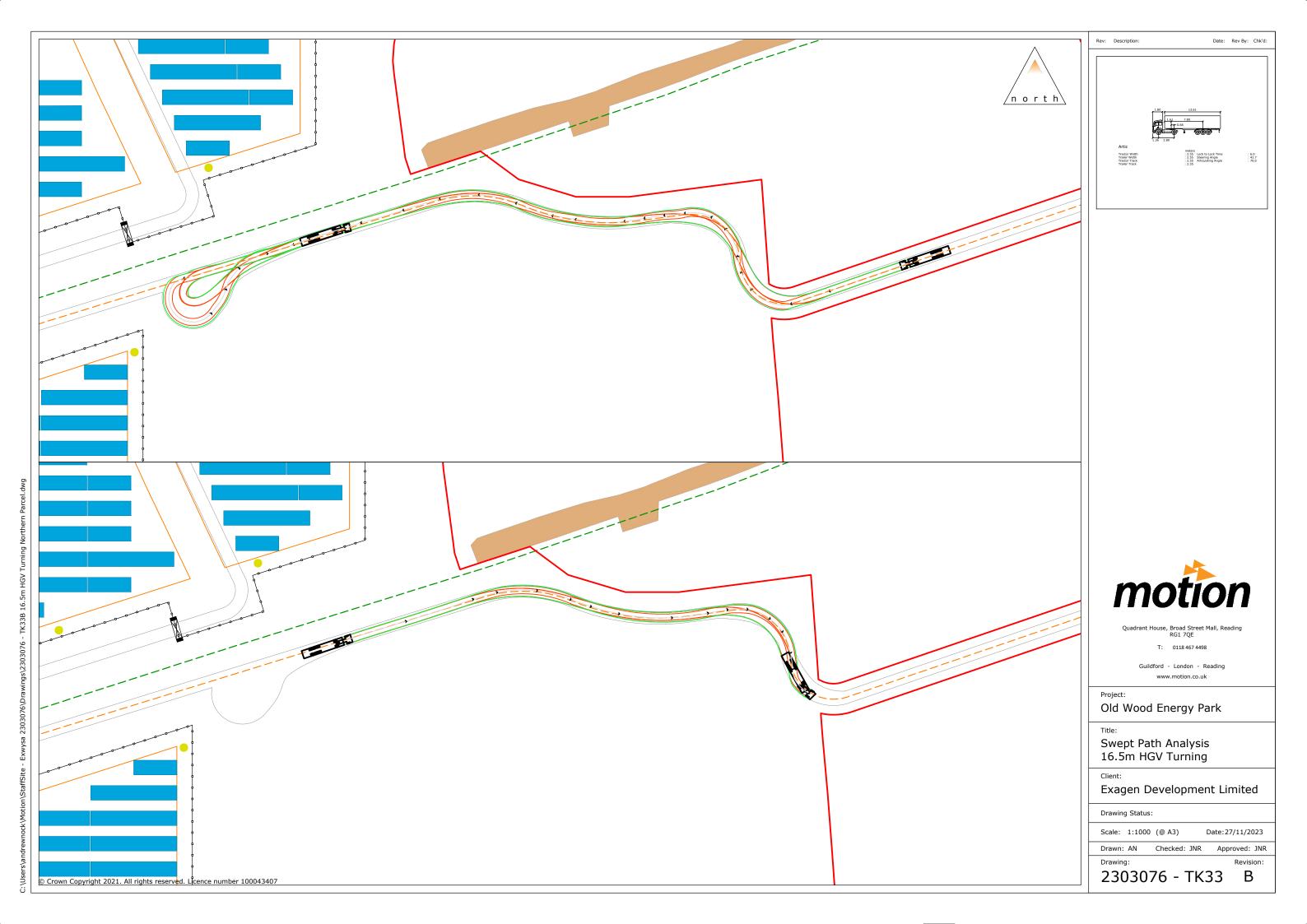
Approved: MF

2303076 - TK30

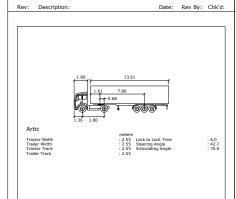


Appendix E

Swept Path Analysis – Turning Manoeuvre









T: 0118 467 4498

Guildford - London - Reading

Swept Path Analysis - 16.5m HGV Vehicle Turning on S Parcel

Exagen Development Limited

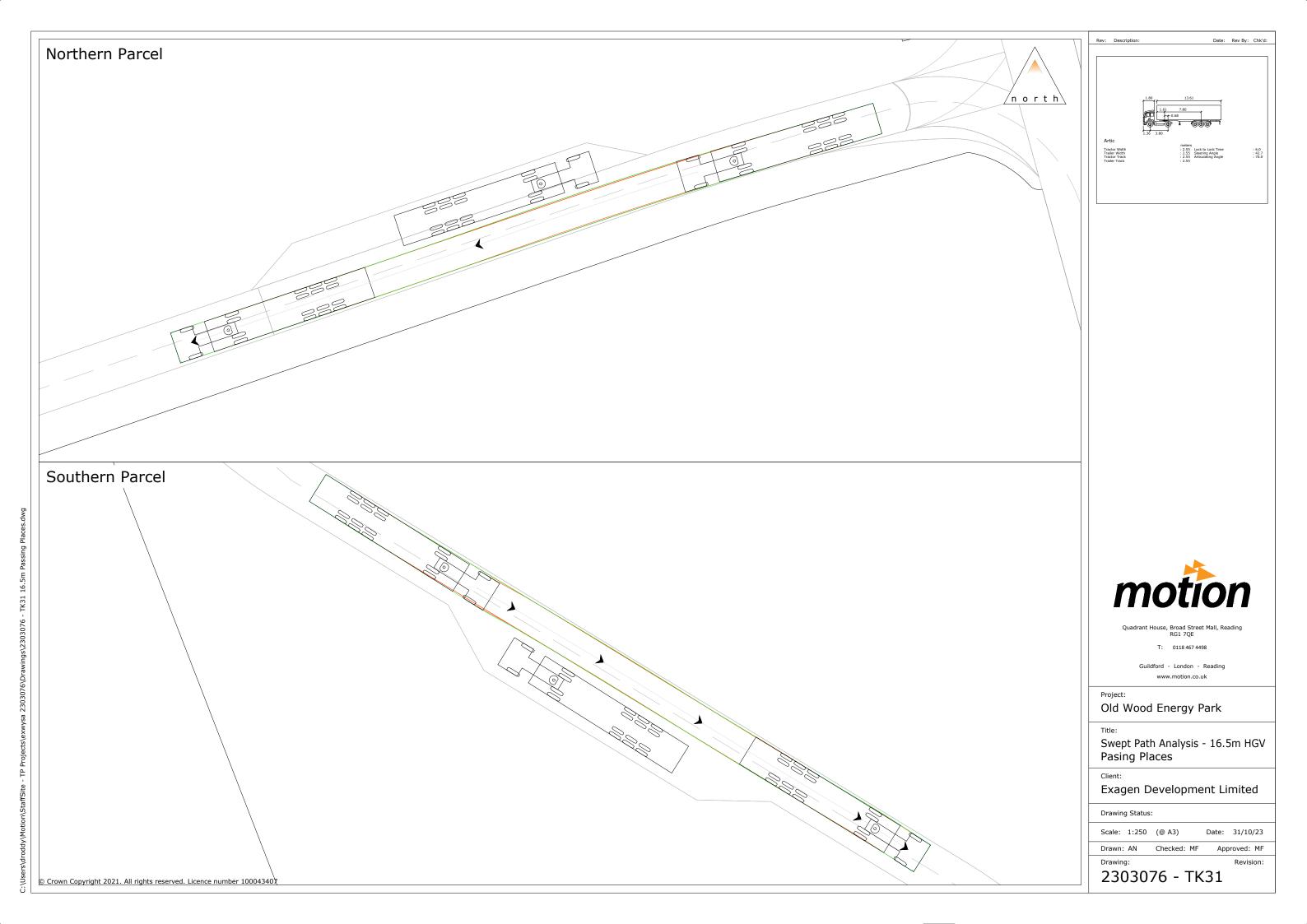
Scale: 1:250 (@ A3) Date: 31/10/23

2303076 - TK32



Appendix F

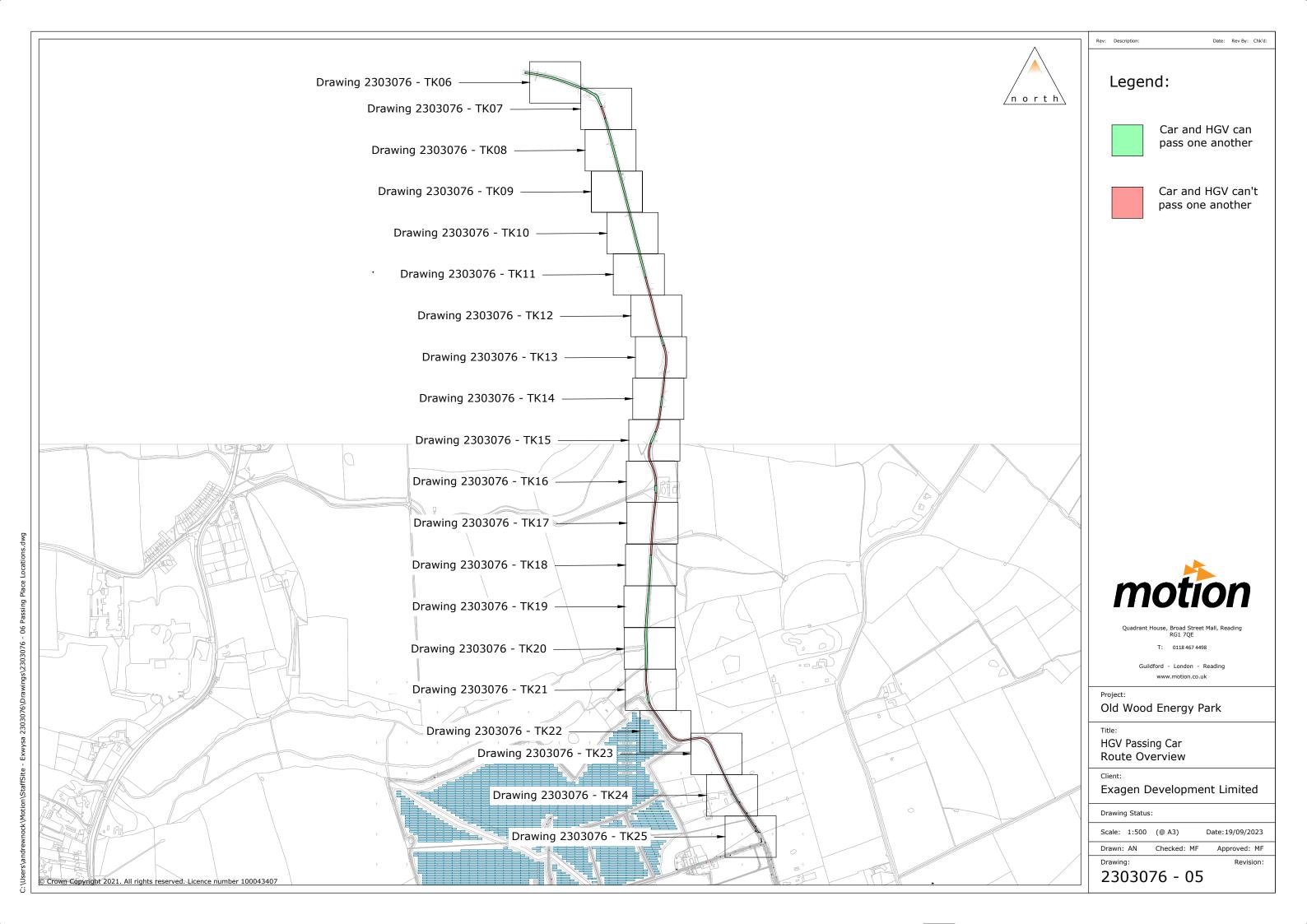
Swept Path Analysis – Internal Passing Bay

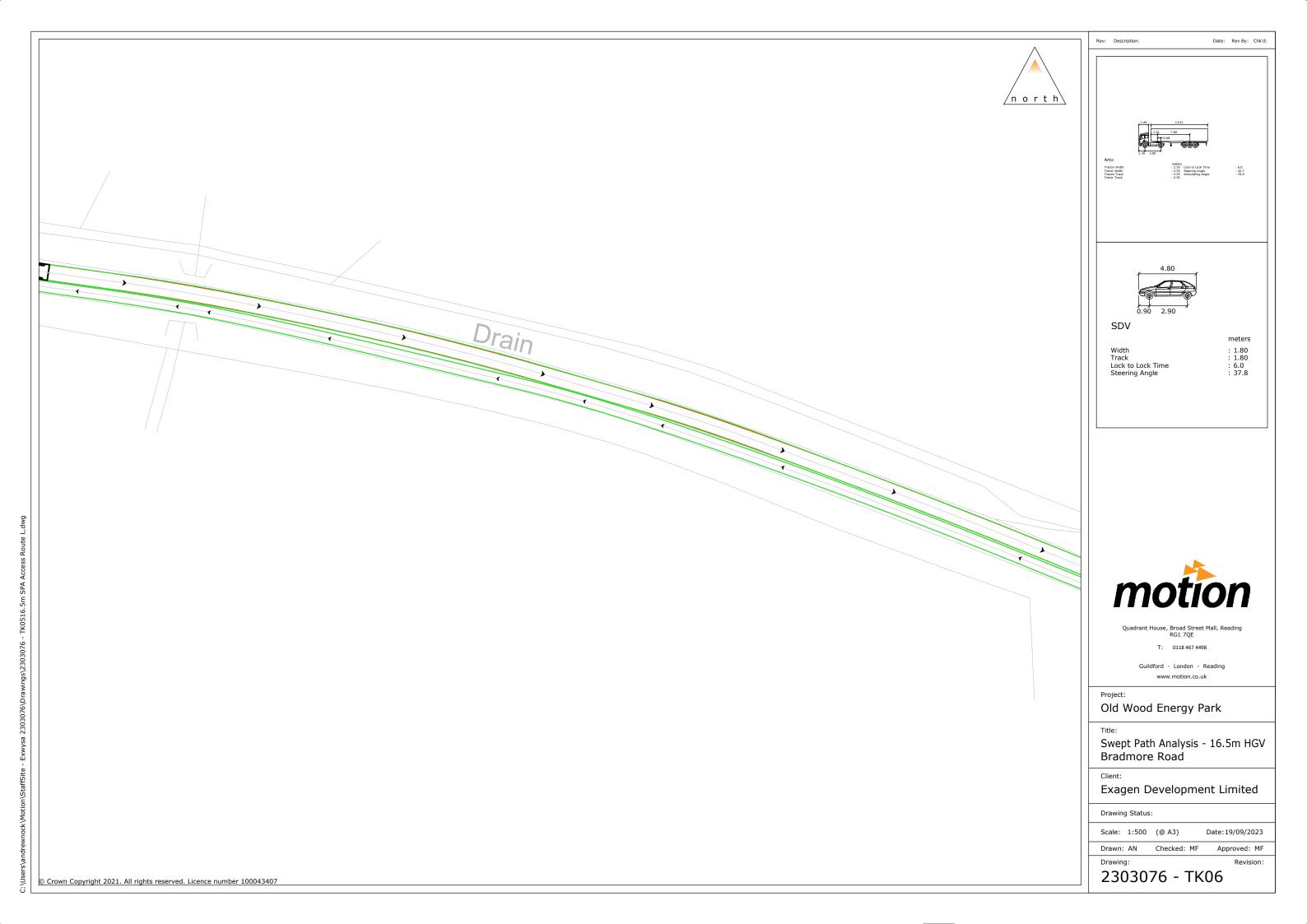




Appendix G

Bradmore Road Construction Vehicle Passing Review









SDV

meters : 1.80 : 1.80 : 6.0 : 37.8 Width Track Lock to Lock Time Steering Angle



Quadrant House, Broad Street Mall, Reading RG1 7QE

T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

Exagen Development Limited

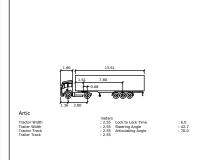
Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF

2303076 - TK07







meters : 1.80 : 1.80 : 6.0 : 37.8 Width Track Lock to Lock Time Steering Angle



Quadrant House, Broad Street Mall, Reading RG1 7QE

T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

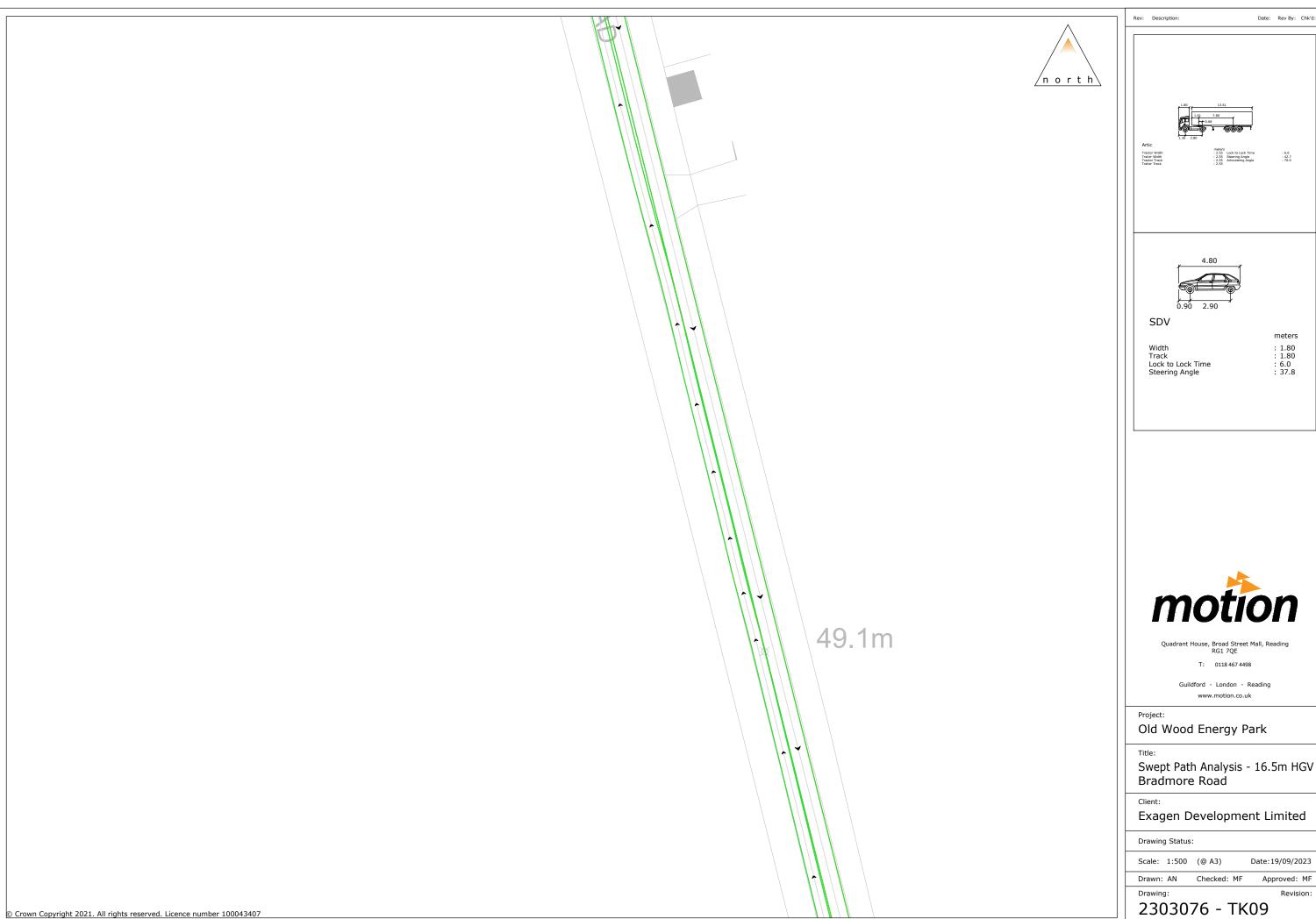
Swept Path Analysis - 16.5m HGV Bradmore Road

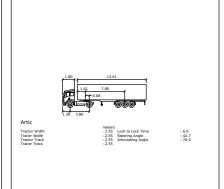
Exagen Development Limited

Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF







meters : 1.80 : 1.80 : 6.0 : 37.8 Width Track Lock to Lock Time Steering Angle



T: 0118 467 4498

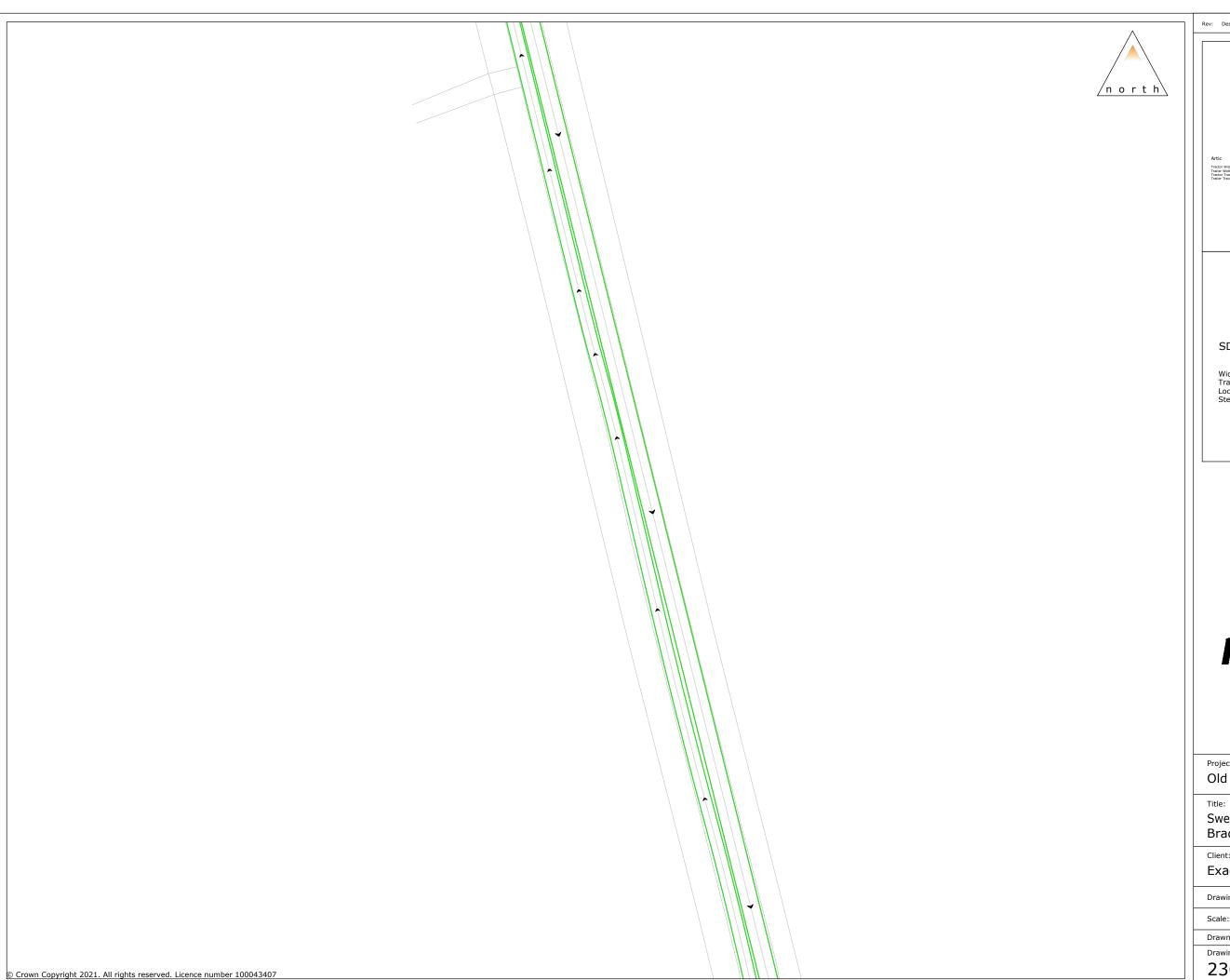
Guildford - London - Reading www.motion.co.uk

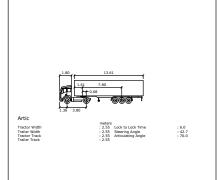
Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

Exagen Development Limited

Date: 19/09/2023







: 1.80 : 1.80 : 6.0 : 37.8 Width Track Lock to Lock Time Steering Angle

meters



Quadrant House, Broad Street Mall, Reading RG1 7QE

T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

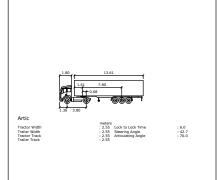
Exagen Development Limited

Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF







meters Width Track Lock to Lock Time Steering Angle : 1.80 : 1.80 : 6.0 : 37.8



T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

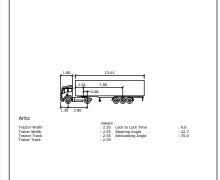
Exagen Development Limited

Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF







meters Width Track Lock to Lock Time Steering Angle : 1.80 : 1.80 : 6.0 : 37.8



Quadrant House, Broad Street Mall, Reading RG1 7QE

T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

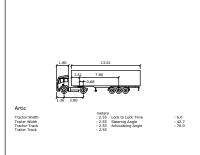
Exagen Development Limited

Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF







Width Track Lock to Lock Time Steering Angle : 1.80 : 1.80 : 6.0 : 37.8

meters



T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

Exagen Development Limited

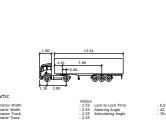
Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF



meters : 1.80 : 1.80 : 6.0 : 37.8







T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

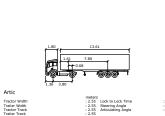
Swept Path Analysis - 16.5m HGV

Exagen Development Limited

Date: 19/09/2023



meters : 1.80 : 1.80 : 6.0 : 37.8







T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Swept Path Analysis - 16.5m HGV

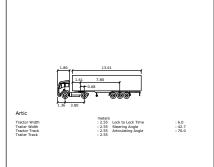
Exagen Development Limited

Date: 19/09/2023



drewnock\Motion\StaffSite - Exwysa 2303076\Drawings\2303076 - TK0516,5m SPA Access Ro



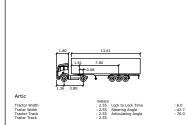




Swept Path Analysis - 16.5m HGV









meters : 1.80 : 1.80 : 6.0 : 37.8 Width Track Lock to Lock Time Steering Angle



Quadrant House, Broad Street Mall, Reading RG1 7QE

T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

Exagen Development Limited

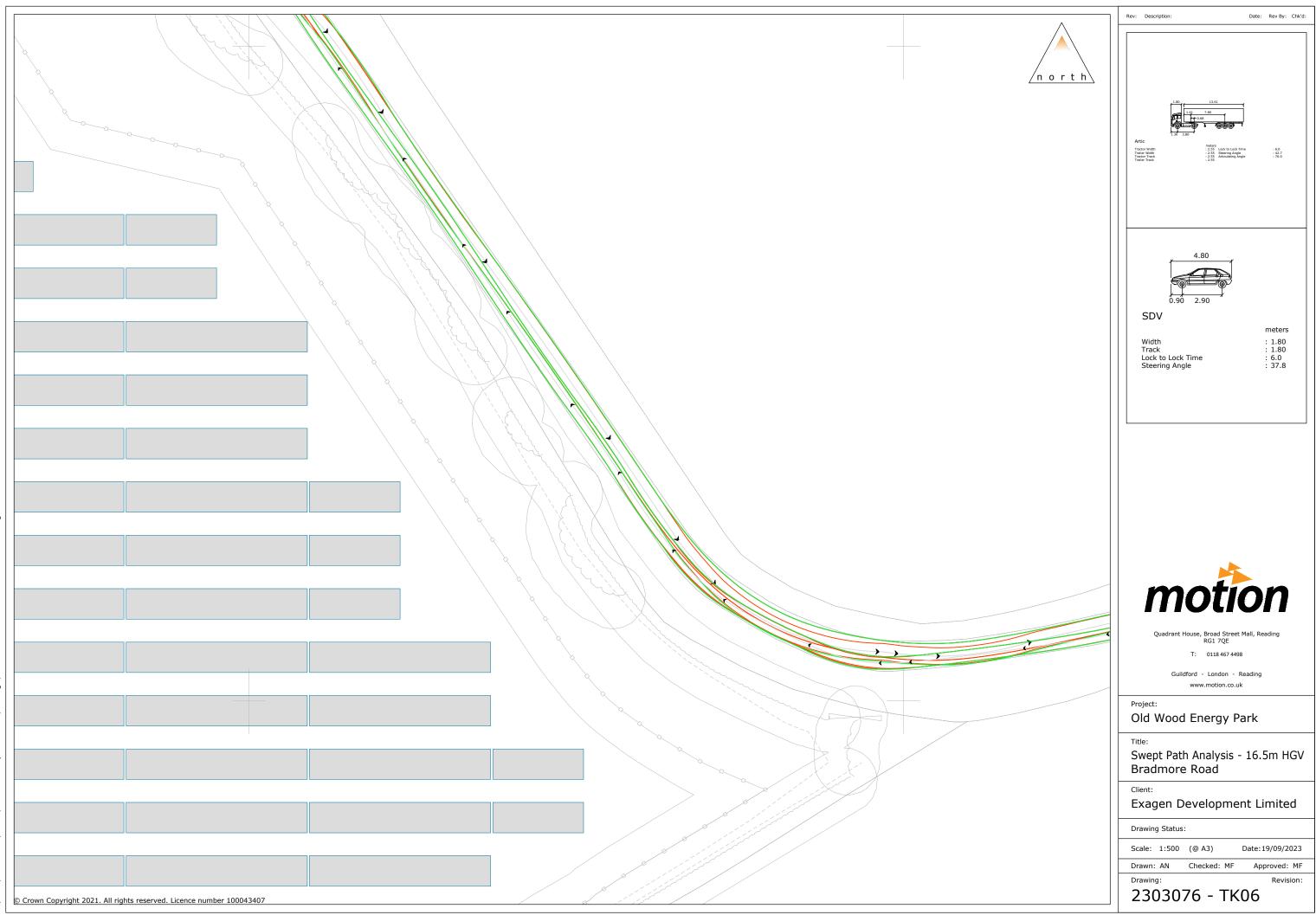
Drawing Status:

Scale: 1:500 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF







:s\andrewnock\Motion\StaffSite - Exwysa 2303076\Drawings\2303076 - TK0516.5m SPA Acce







meters : 1.80 : 1.80 : 6.0 : 37.8 Width Track Lock to Lock Time Steering Angle



T: 0118 467 4498

Guildford - London - Reading www.motion.co.uk

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road

Exagen Development Limited

Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF



: 1.80 : 1.80 : 6.0 : 37.8

meters



Swept Path Analysis - 16.5m HGV

Date: 19/09/2023



ock\Motion\StaffSite - Exwysa 2303076\Drawings\2303076 - TK0516.5m SPA Access R



Appendix H

Proposed passing bays on Bradmore Road