

Old Wood Energy Park

Land west of Wysall, Nottinghamshire

Construction Traffic Management Plan

Date: January 2024 | Pegasus Ref: P21-2533



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

Construction Traffic Management Plan

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

1.0	Introduction	1
2.0	Project Programme and Vehicular Movements	3
3.0	Site Access	5
4.0	Delivery Arrangements	8
5.0	Cable Route Installation	11
6.0	Environmental Protection	13
7.0	Corrective Measures	15
Fig	ures	
Figui	re 1.1: Site Location	1
Figui	re 3.1: Location of Public Rights of Way Surrounding the Site	6
Figui	re 3.2: PROW Crossing points	7
Figui	re 4.1: Construction Access Route	8
Figui	re 5.1: Indicative Cable Route	11
	re 5.2: Plan SC7 Traffic Signs Manual – Chapter 8 – Part 1	

Appendices

- A Site Layout
- B Swept Path Analysis Access 16.5m HGV Northern Parcel
- C Swept Path Analysis Access 16.5m HGV Southern Parcel
- D Swept Path Analysis Turning Manoeuvre
- E Swept Path Analysis 16.5m HGV Internal Passing Bays
- F Proposed Passing Bays Bradmore Road



1.0 Introduction

- 1.1 Motion has prepared this Construction Traffic Management Plan (CTMP) 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.

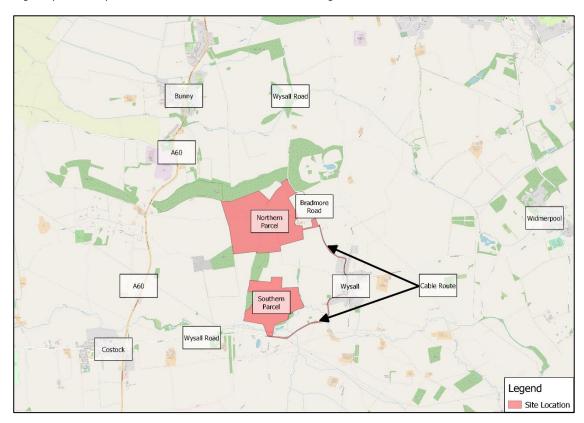


Figure 1.1: Site Location

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

Scope

1.4 The CTMP is intended to be a live document to be monitored and reviewed on a regular basis by the Developer, the Construction, Design and Management Coordinator (CDMC) and Rushcliffe Borough Council. The CTMP will be updated as needed by the Developer during the lifespan of the construction works.



- 1.5 Following this introduction, the report is structured as follows:
 - Section 2: project programme, construction phasing and vehicle movements which are predicted to occur (i.e. types of vehicles, routing, time of day, day of week);
 - Section 3: access and site compound;
 - Section 4: the arrangements for, and the controls and processes that the Developer will implement to ensure, safe deliveries including the approach to monitoring the vehicle movements and how this information will be distributed;
 - Section 5: details of the proposed cable route from the northern parcel to the Substation;
 - Section 6: the arrangements for environmental protection and safe storage / disposal of waste; and
 - ▶ Section 7: corrective measures / actions to be taken if these limits are exceeded.

Roles and Responsibilities

- 1.6 This CTMP will be delivered by the Contractor appointed to carry out the works. Nonetheless the responsibility for ensuring the measures set out in this CTMP are adhered to remains with the Developer; with Rushcliffe Borough Council as the enforcing agency.
- 1.7 Any concerns regarding the failure of part or all of this CTMP to be implemented or adhered to should be addressed to the Developer in the first instance. Should the response not be satisfactory then the concern should be raised with Rushcliffe Borough Council as enforcing agency; contact details are provided below.

Exagen Development Ltd (For the Developer)	Rushcliffe Borough Council (Enforcing Agency)	
Contact: To be completed by Exagen Development Ltd	Contact: To be completed by Rushcliffe Borough Council	
Address: To be completed by Exagen Development Ltd	Address: To be completed by Rushcliffe Borough Council	

Table 1.1: Complaint Contact Details



2.0 Project Programme and Vehicular Movements

Project Programme

2.1 The expected construction period duration is 24 working weeks.

Vehicle Types

- 2.2 Of the vehicle movements, the typical vehicle types will be as follows:
 - Light vehicles cars and small vans; and,
 - ▶ Rigid Vehicles / Tipper Lorries up to 10m in length
 - Articulated lorries up to 16.5m;
- 2.3 Typical vehicle types are illustrated in Table 2.1 below.

Classification	Vehicle Type Description	Typical Vehicle
Cars and Light Goods Vehicles (LGV)	Saloon, Hatchback, Estate, 4WD, Pick-Up	
	Light Vans	D .
Heavy Goods Vehicles (HGV)	Rigid Vehicles / Tipper Lorries	
	Articulated Lorries	

Table 2.1: Vehicle Types

Traffic Volumes

- 2.4 The following typical number of movements is expected:
 - ▶ Light vehicles: up to 15 per day
 - ▶ Rigid Vehicles / Articulated lorries: up to 30 per day
- 2.5 It is anticipated that staff will travel to the Site by private car, this is included in the anticipated light vehicle movements above.



Daily Profile of Deliveries

- 2.6 The Site's hours of operation are proposed to be:
 - ▶ 0800-1800 on Monday to Fridays; and
 - ▶ 0800-1300 on Saturdays
- 2.7 No work will be undertaken on Sundays and Bank or Statutory Holidays.
- 2.8 The Contractor will ensure, where practicable, that no HGV deliveries will occur during the weekday peak hours (08:00 09:00 & 17:00 18:00).
- 2.9 Bunny C of E Primary School is located off the A60 which forms part of the proposed construction vehicle access route to the southern parcel. Where practicable the contractor will ensure, that no HGV deliveries occur during school drop off / pick up time (08:00 09:00 & 15:00 16:00) during school term time.
- 2.10 The Contractor will be expected to manage an even distribution of deliveries throughout the day to avoid 'bunching' by initiating a booking in system, as detailed within Section 3. Stacking of vehicles on the public highway will not be permitted.

Coordination with Other Construction Works

- 2.11 During the construction of the Development, the Contractor will make reasonable endeavours to coordinate deliveries with other current construction sites in the immediate vicinity of the Site in order to minimise the cumulative impact of construction traffic. An example of a potential construction site to coordinate with is:
 - ▶ 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).

Initiatives to Minimise Travel

- 2.12 The Contractor would undertake several activities to minimise the number and length of journeys made in relation to the construction work. These would include:
 - Providing details of local public transport services;
 - Encouraging construction staff to lift share;
 - Making reasonable endeavours to use local suppliers for materials where this is possible; and
 - Making reasonable endeavours to coordinate material supplies with other construction sites in order to minimise the number of delivery lorries on the local road network.

Abnormal Indivisible Loads

2.1 A crane will be required during construction and typically this would be an 11m long by 2.5m wide Liebherr mobile crane, or similar. Such a vehicle would be 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 prior to construction. It is anticipated that there will only be 2 abnormal vehicle movements (one to and one from the site, associated with the delivery and removal of the mobile crane). All abnormal loads would be carefully planned and agreed with the necessary authorities.



3.0 Site Access

Northern Parcel Site Access

- 3.1 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.
- 3.2 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 B.

Southern Parcel Site Access

3.3 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 C.

Internal Access Track and Turning Area

- 3.4 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.
- 3.5 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 D.
- 3.6 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 E**.
- 3.7 Smaller vehicles will transport construction materials from the temporary construction compound to the area of the development being built out. The temporary construction compound will have the following elements:
 - Loading/Unloading Area
 - Staff Welfare Facilities
 - Staff Parking
 - Material Storage Area
 - Wheel Washing Facilities

Public Rights of Way (PRoW)

3.8 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 3.1.

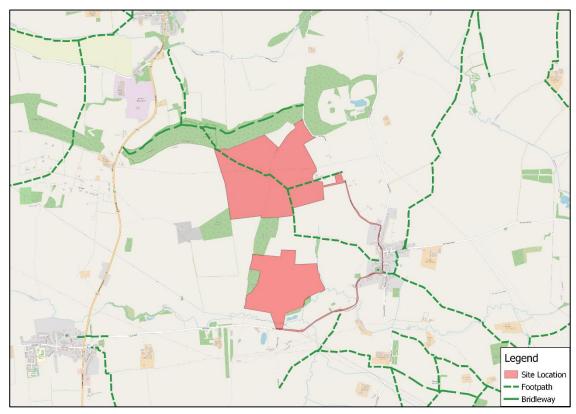


Figure 3.1: Location of Public Rights of Way Surrounding the Site

3.9 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 3.2:





Figure 3.2 - PROW Crossing Points

Security Fencing

- 3.10 Security fencing of up to 2.4 m in height will be erected and maintained in order to prevent unauthorised access to the Site. Fencing of this height will prevent unauthorised pedestrians from entering the Site. Pedestrians will still be able to use the PROW which run through the northern parcel as detailed in Paragraphs 3.8 3.9.
- 3.11 Each of the parcels construction compounds is setback into the site far from the carriageway, the potential for construction material to overspill onto the highway network is therefore low. The hoarding / fencing will further prevent the potential for construction material from spilling into the carriageway and thereby prevent the potential harm that this could cause.



4.0 Delivery Arrangements

HGV Routing

Routes

4.1 It is proposed that all HGV construction traffic will route to the Site as illustrated on Figure 4.1.

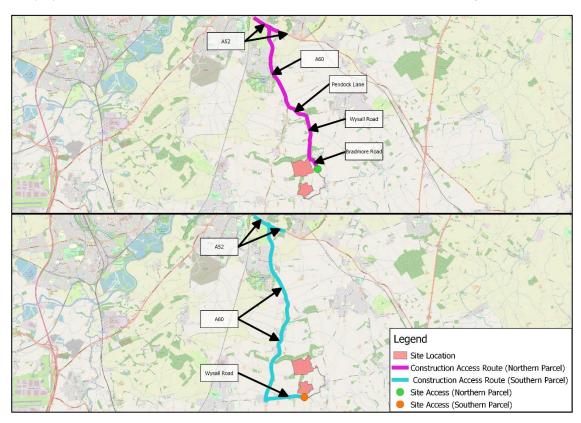


Figure 4.1: Construction Access Route

- 4.2 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 northern parcel's access is reached.
- 4.3 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 parcel's access is reached.
- 4.4 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.

Delivery Route Compliance

4.5 The delivery routes will be communicated in advance by the Contractor to all individuals and companies involved in the transport of materials and plant to and from the Site.



4.6 Information signs will be erected at the Site which will include a telephone number for the public to report concerns (see Table 1.1). This telephone number will also be provided to the Council.

Road Safety

Signage

4.7 Signage to inform motorists that the local roads are accommodating construction traffic and advising of the Site access will be provided in accordance with Chapter 8 of `The Traffic Signs Manual' and its companion guide 'Safety at Street Works and Road Works'. These will be provided for motorists and pedestrians.

Passing Places

- 4.8 It is proposed to install 4 passing places along the access route to the northern parcel, the location and design of these passing places can be viewed at **Appendix F**. The proposed passing places will 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.
- 4.9 HGV's can also pass internally within the site using the passing bays provided.

Wheel Cleaning

4.10 Wheel cleaning facilities will be provided at the Site to avoid debris reaching the public highway network.

Control of Deliveries

4.11 The Contractor is expected to manage an even distribution of deliveries throughout the day to avoid 'bunching'.

On-Street Waiting

4.12 It will be communicated to the Contractor and supply chain that they are not permitted to wait on the public highway outside of designated areas. The Contractor and supply chain will be advised in advance of the times when deliveries can be received and be required to meet those delivery windows.

Booking System

4.13 The Contractor will be responsible for managing the demand for deliveries to ensure they comply with the principles set out in this document. Up to date records of deliveries and exports from the Site will be maintained.

Communication Strategy

- 4.14 An information pack will be distributed to all suppliers involved in the transport of materials and plant to and from the Site. The pack will be a convenient size so it can be stored in a truck cab.
- 4.15 The pack will include key information on delivery routes and clearly set out procedures for dealing with emergencies and disciplinary measures for non-compliance.

Access

4.16 Staff will have telecommunication equipment to enable them to communicate with delivery drivers.

Drivers will be required to call ahead to ensure the Site is ready to receive them in advance of their arrival to avoid the risk of queuing back on to the public highway.



Monitoring Vehicle Movements

4.17 The HGV movements associated with the construction work will be continuously monitored through the use of a booking system. This will require the Contractor to keep an up-to-date record of deliveries to, and exports from the Site. The information will be provided to RBC within 14 days of a request from RBC to review it.

Stakeholder Input

4.18 Contact numbers will be on display at the Site entrance for the general public to raise any concerns with the Developer directly (Table 1.1). All enquiries will be recorded and responded to within five working days if contact details are provided. The enquirer will receive a written response detailing what action has been taken, if necessary. These records can be provided to RBC as required.



5.0 Cable Route Installation

5.1 It is proposed to route the cable from the northern parcel to the southern parcel via a buried cable laid in the public highway. The proposed cable route is shown below in Figure 5.1:

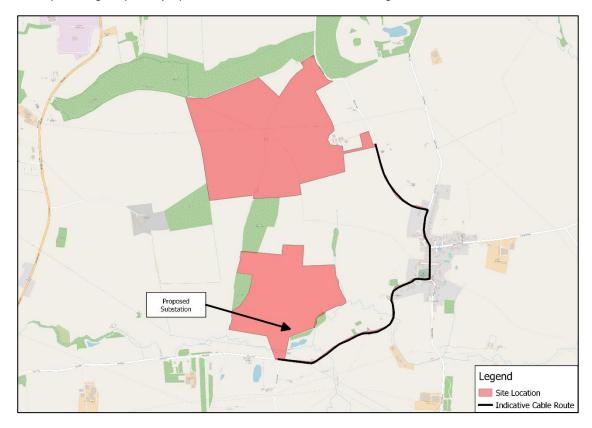


Figure 5.1 - Proposed Cable Route

5.2 The cable route extends to circa 3350 m and will run under Bradmore Road/Main Street/Costock Road/Wysall Road from the northern parcel to the southern parcel and will require rolling temporary lane closures whilst roadworks are undertaken. Such works would be expected to be completed quickly, typically over the period of a few weeks. All road works will be undertaken in accordance with "Traffic Signs Manual – Chapter 8 - Traffic Safety Measures and Signs for Road Works and Temporary Situations – Part 1 Design – 2009". An example of the typical road works for a lane closure can be seen below in Figure 5.2:



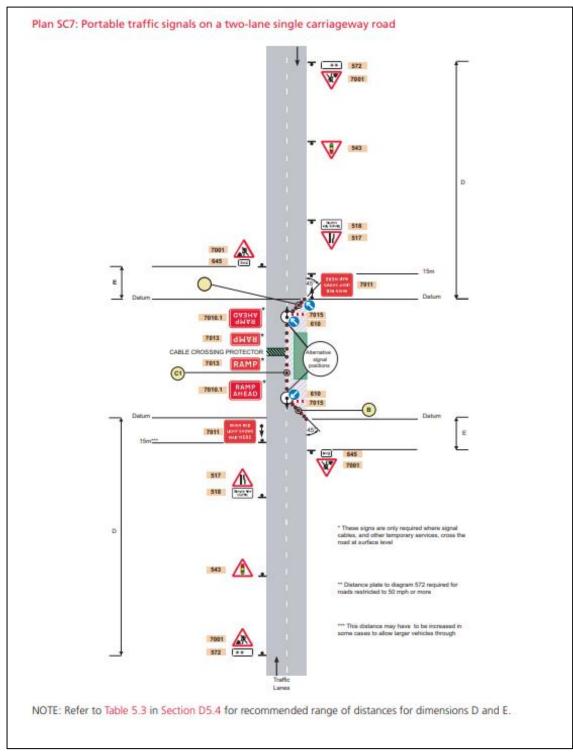


Figure 5.2 – Plan SC7 Traffic Signs Manual – Chapter 8 – Part 1

5.3 The detailed layout of the traffic management measures will be finalised alongside the detailed design.



6.0 Environmental Protection

Recycling/Disposing of Waste

- 6.1 The Contractor will be required to minimise the amount of waste removed from the Site.
- Recycling will be encouraged for all material where this is possible and natural materials such as wood can be re-purposed for ecological purposes to create refugia for reptiles/invertebrates within the Site.
- 6.3 The best practicable environmental options will be achieved at the Site to ensure compliance with the necessary legislation. Methods relating to waste can be confirmed upon the appointment of a contractor at the Site.

Measures to Control Noise and Vibration During Construction

- 6.4 The Contractor will organise and undertake construction activities on Site in a manner which demonstrates that Best Practicable Means (BPM) to control noise and vibration during activities is being adopted at all times. In particular the Contractor is expected to meet the requirements of BS5288, 'Code of practice for noise and vibration control on construction and open sites' and the 'London Good Practice Guide: Noise & Vibration Control for Demolition and Construction' (2016). Notwithstanding this general requirement and the other provisions set out in this report, the Contractor will specifically be required to:
 - Maintain all equipment in good working condition and take care that all mufflers or other noise dampening features are correctly fitted and maintained.
 - Staff will be trained in the correct use of equipment to ensure, inter alia, that it is only used for the purpose for which it has been designed.
 - Assessments will be made at Site boundary to ascertain impact of noise / vibration on local residents during these periods of work; if deemed above acceptable levels, liaison with the client and adjoining properties will be undertaken to agree any further restrictions on working times.

Measures to Control Emissions, Dust and Dirt During Construction

- 6.5 The Contractor is expected to follow best practice at all times to control and limit emissions of gaseous and particulate pollutants into the atmosphere from construction and demolition activities, including from vehicles and plant.
- 6.6 The Contractor is expected to meet the requirements of Greater London Authorities (GLA) Best Practice Guide "The control of dust and emissions from construction and demolition" which inter alia includes following requirements:
 - Paragraph 5.11: Install solid screens or barriers around dust generating activities. These will be at least as high as any stockpiles on-site. Cover stockpiles especially of sand, gravel and other granular material to prevent wind whipping;
 - ▶ **Appendix 7 Air Quality Control:** Regularly clean hoardings, fencing, barriers and scaffolding using wet methods where possible to prevent re-suspension of particulate matter;
 - ▶ **Paragraph 5.39:** Undertake vehicle wheel cleaning on vehicles exiting the Site to reduce the risk of dirt being carried onto the public highway;
 - ▶ The Contractor will be encouraged to utilise low emission plant at the Site;
 - ▶ Paragraph 5.18: Manage the works so that vehicles do not have to wait to park safely. Should vehicles have to wait they should not idle. Generally, if a vehicle is stationary for more than a minute, turning off the engine will reduce emissions;



- ▶ Paragraph 5.30: Completely cover skips, chutes and conveyors to ensure that dust does not escape;
- ▶ Paragraph 5.26: Where necessary, spray water (preferably from a water efficient spray pump) over material being worked to reduce the amount of dust generated;
- Paragraph 5.31: No burning of any material is permitted on-site; and,
- Concrete batching is not permitted on-site.



7.0 Corrective Measures

7.1 This section provides a summary of the mechanisms that will ensure that the proposed control measures are effectively implemented.

Correction Process

- 7.2 A three-stage correction process is proposed:
 - ▶ Stage one Rushcliffe Borough Council highlights a potential breach and requests the Developer to review the data and concerns. The Developer and Rushcliffe Borough Council will then agree the extent of the breach of controls, if it is material, and agree action. This is likely to be a Contractor warning at this stage.
 - Stage two If a further material breach is identified, the Contractor will be given a further warning and required to produce an action plan to outline how the issue will be rectified and any additional mitigation measures proposed.
 - ▶ Stage three Should further breaches still occur, the Contractor will be required either to remove the offender from Site or to stop using an offending supplier.

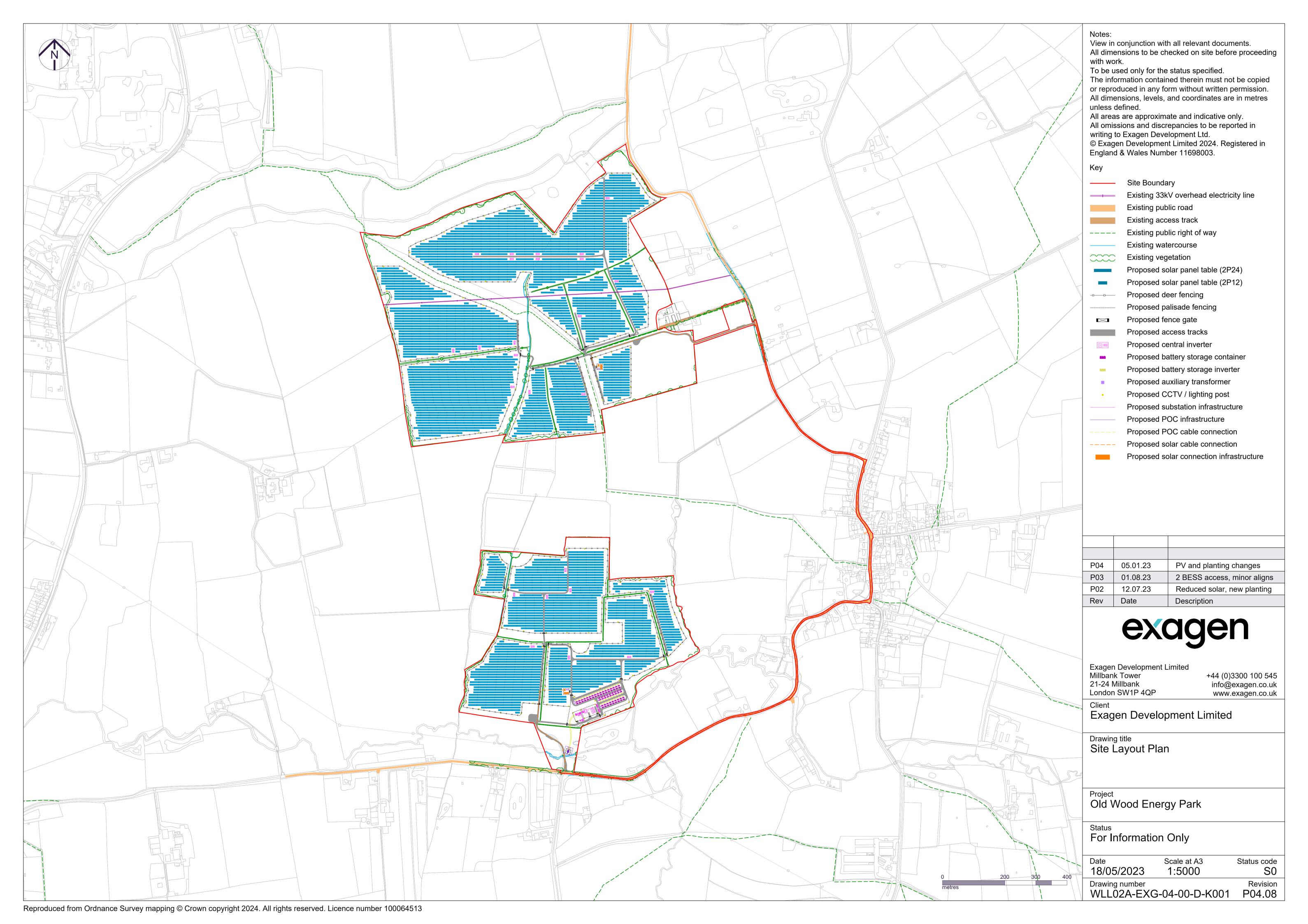
Road Condition Survey - Pre/Post Construction

- 7.3 Under Section 59 of the Highways Act (1980) Highway Authorities have the power to recover payment for maintaining the highway when damage has been caused by 'excessive weight passing along the highway, or other extraordinary traffic thereon'.
- 7.4 It is proposed that a pre and post construction road condition survey are undertaken of Wysall Road and Bradmore Road in the vicinity of the Site accesses to provide a record of the current condition of the highway such that damage caused by the Developments construction traffic can be identified and rectified. The Applicant is willing to accept a condition to undertake this pre and post construction road condition survey.



Appendix A

Site Layout



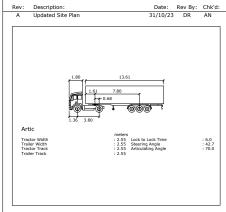


Appendix B

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









Appendix C

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

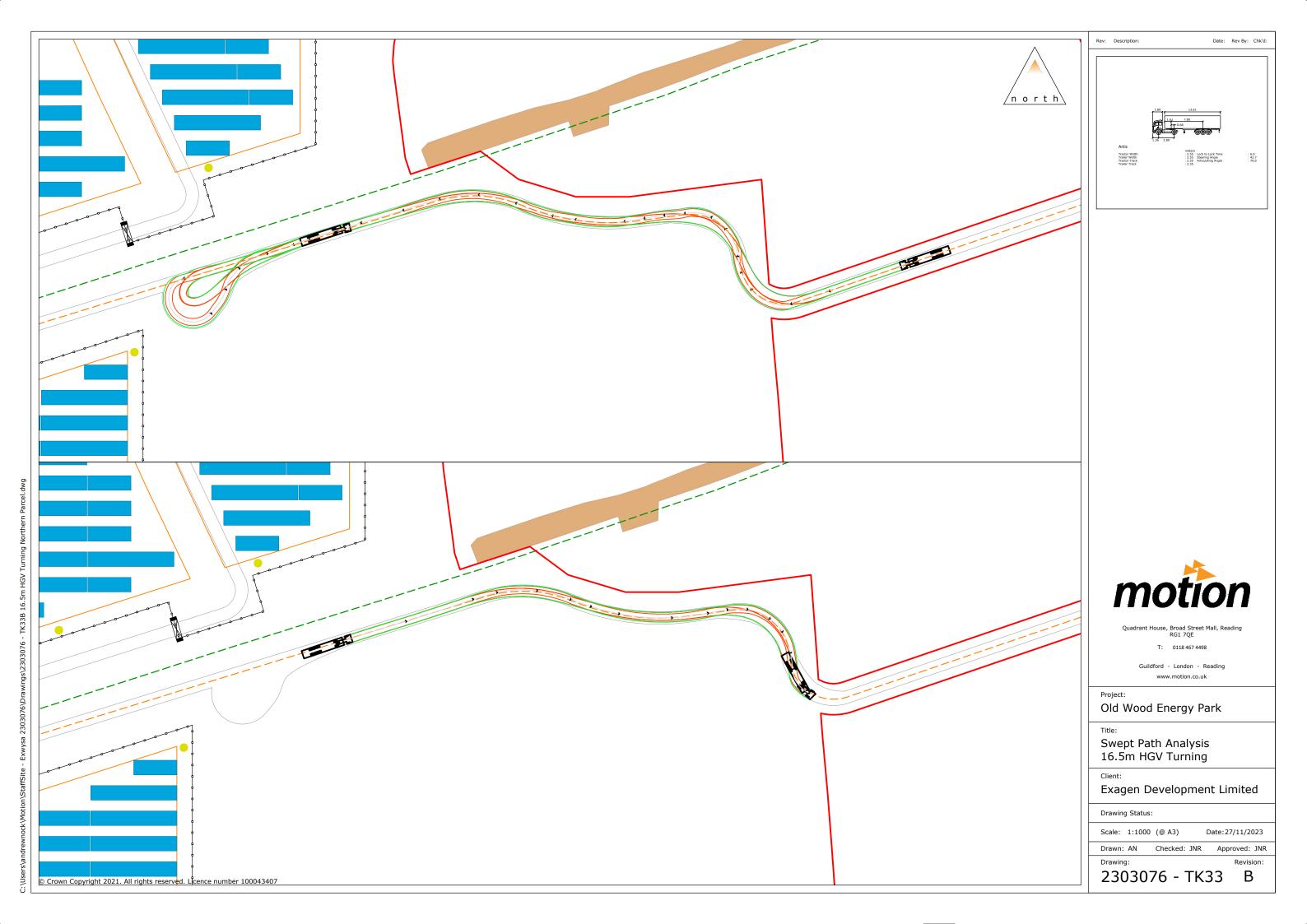
Drawn: AN Checked: MF

Approved: MF

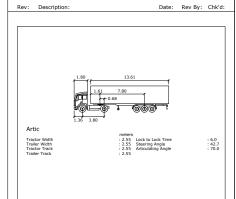


Appendix D

Swept Path Analysis – Turning Manoeuvre









T: 0118 467 4498

Guildford - London - Reading

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

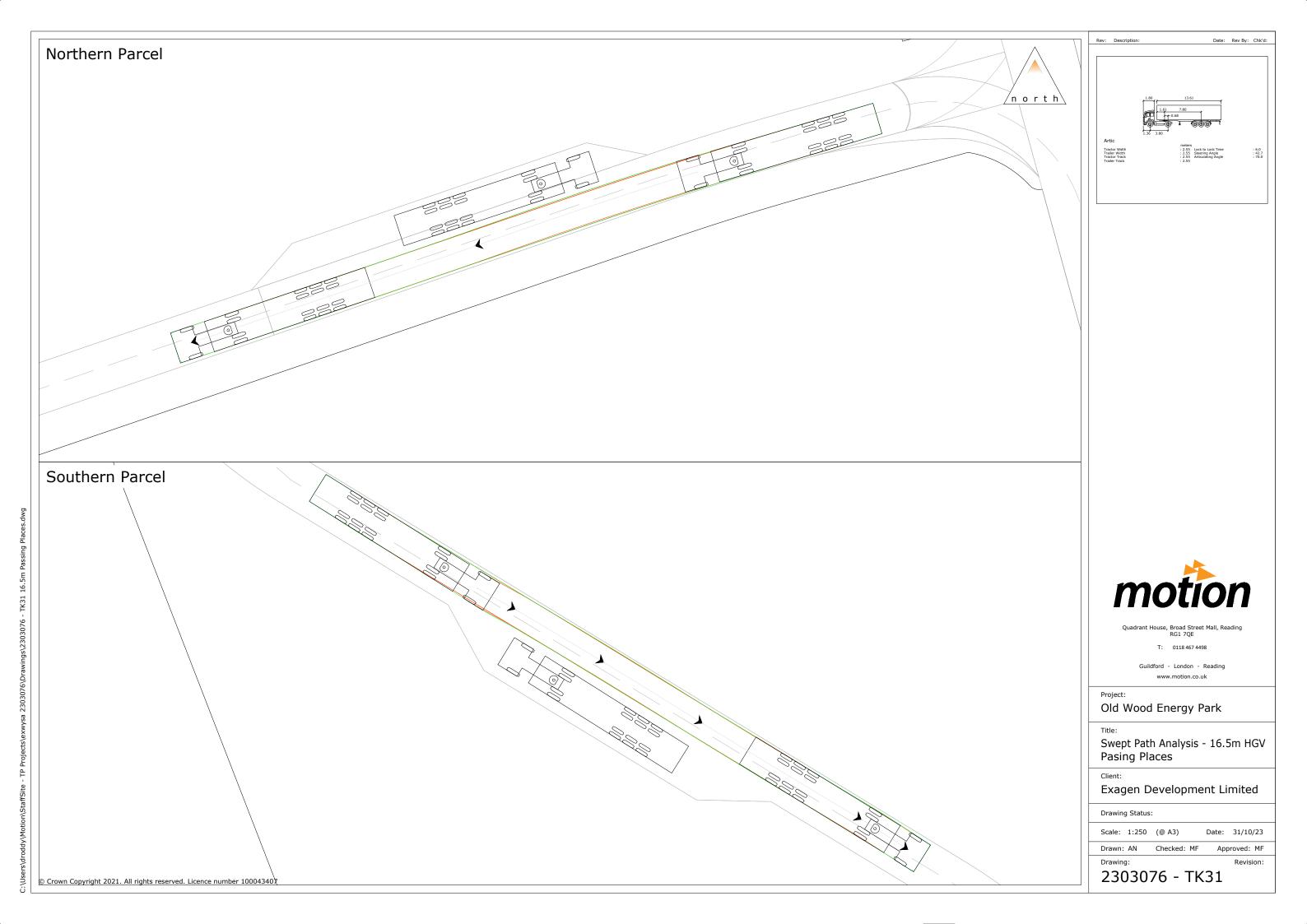
Exagen Development Limited

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



Appendix E

Swept Path Analysis – 16.5m HGV – Internal Passing Bays





Appendix F

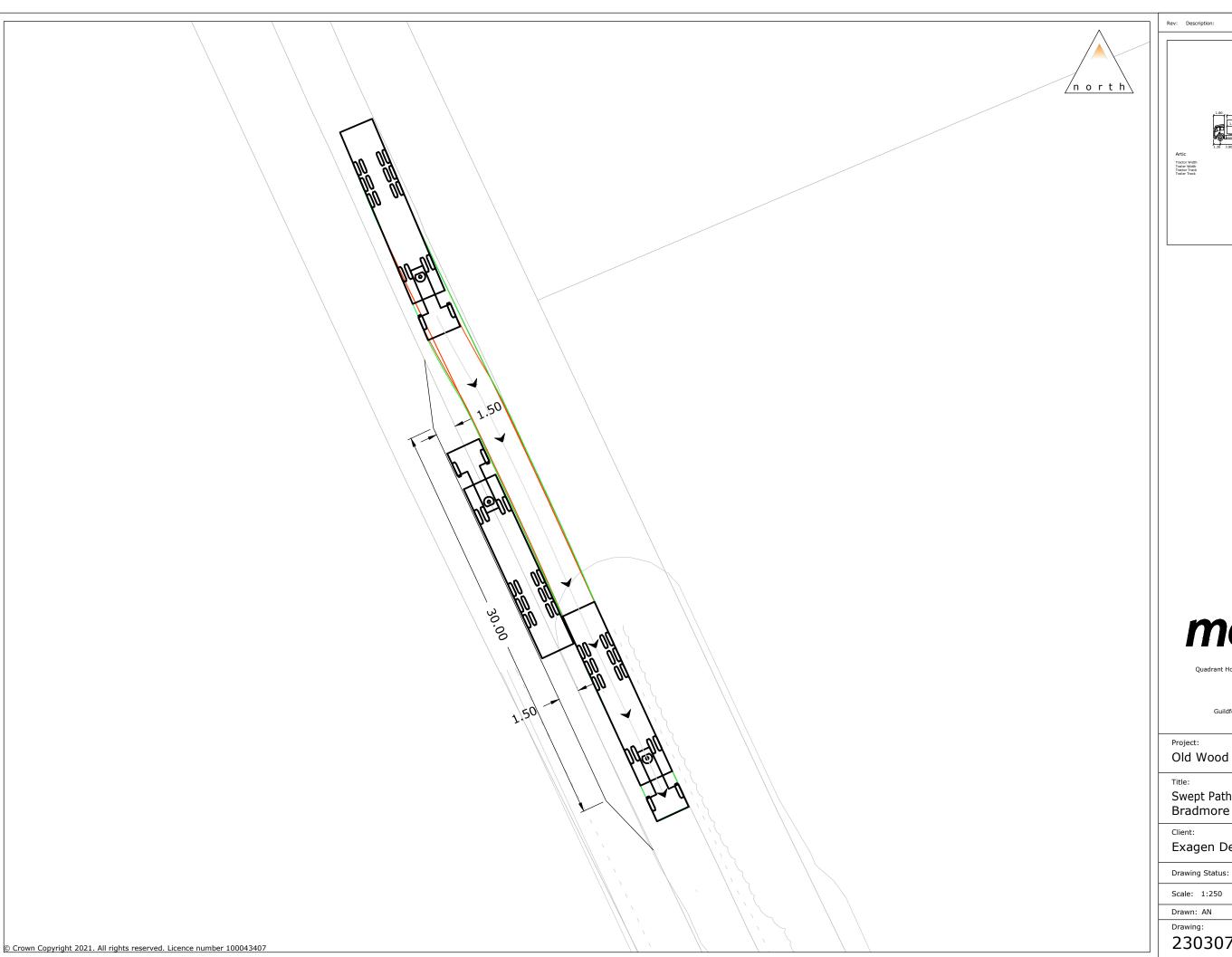
Proposed Passing Bays – Bradmore Road







Bradmore Road, Passing Place





T: 0118 467 4498

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

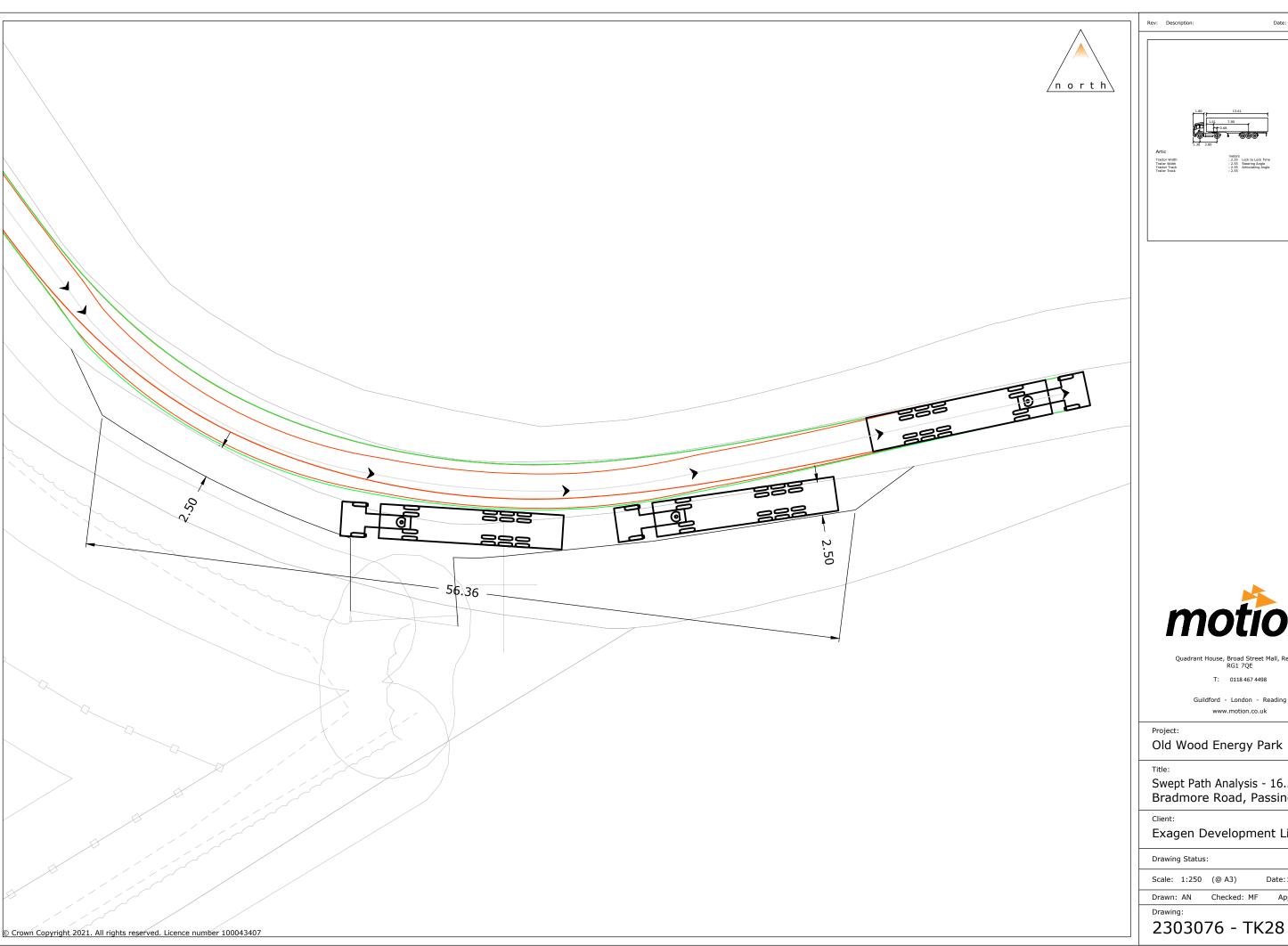
Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road, Passing Place

Exagen Development Limited

Scale: 1:250 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF





Quadrant House, Broad Street Mall, Reading RG1 7QE

T: 0118 467 4498

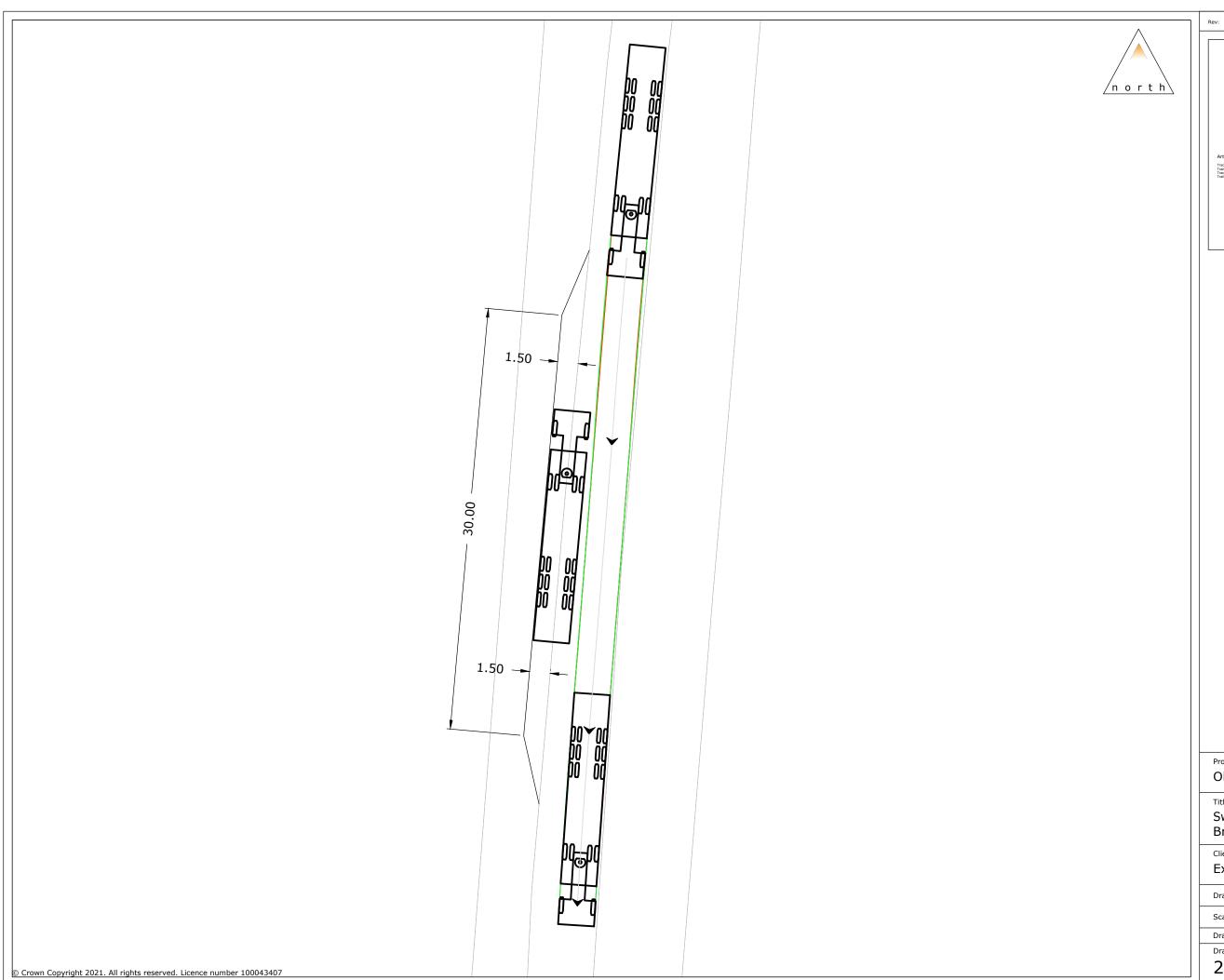
Guildford - London - Reading www.motion.co.uk

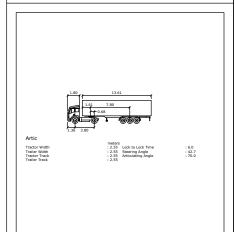
Swept Path Analysis - 16.5m HGV Bradmore Road, Passing Place

Exagen Development Limited

Scale: 1:250 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF







T: 0118 467 4498

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

Old Wood Energy Park

Swept Path Analysis - 16.5m HGV Bradmore Road, Passing Place

Exagen Development Limited

Drawing Status:

Scale: 1:250 (@ A3) Date: 19/09/2023

Drawn: AN Checked: MF Approved: MF