Transport Statement

Ballyross BESS

Ref	05646-10119725

Revision History

Issue	Date	Name	Latest changes
01	13/06/2025	Antonis Poulakis	First Created
02	18/06/2025	Antonis Poulakis	Site boundary adjustment

Contents

1 Introduction

1.1 Purpose of the Report

This transport statement has been produced to support the development of a Battery Energy Storage System (BESS) near Raloo in County Antrim by the Applicant. Its principal objective is to provide details of the proposed transport management arrangements during the construction of the project and to provide details of transport movements during construction and operation of the project.

1.2 Policy Context

An overview of relevant national and local transport planning policies has been undertaken and listed below.

- Planning Policy Statement 3- Access, Movement and Parking, DOE (2005)
- Strategic Planning Policy Statement (2015)
- Guidelines for the Environmental Assessment of Road Traffic (1993)
- Local Development Plan 2030 – Technical Supplement 9 - Transportation (Mid & East Antrim Borough Council 2019)

During pre-application consultation with the Antrim and Newtownabbey Borough Council, there was not any design strategy proposed by the council.

1.3 Site Location

The site is located on agricultural land, approximately 1.70 km south of Raloo. The location of the proposed development is within Antrim and Newtownabbey Borough Council and is shown in ***Figure 1***.

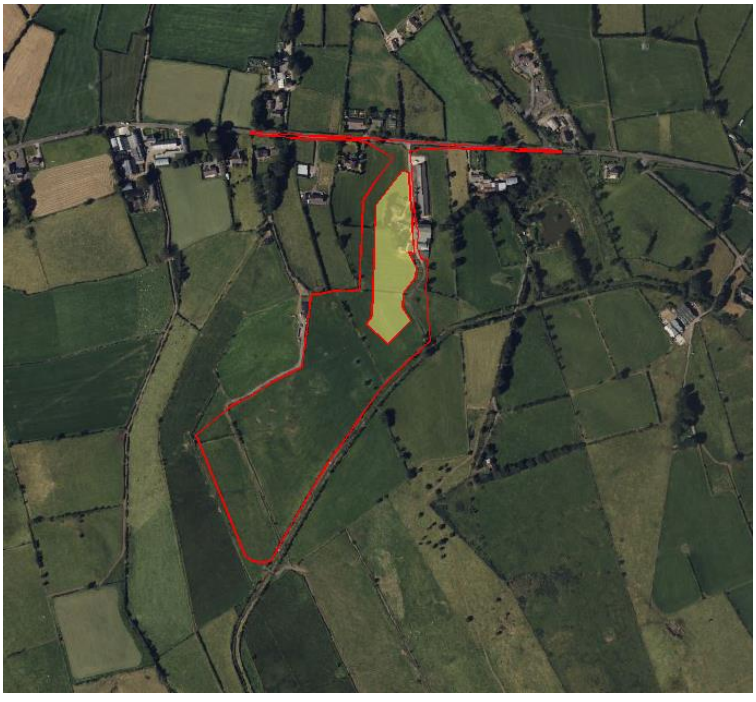


Figure 1: Site Location (yellow area is excluded)

1.4 Project Description

The proposed development will consist of the installation of several battery enclosures, associated foundations, transformers, inverters, electrical infrastructure, security infrastructure, access track, crane hardstanding, and storage containers.

During construction, temporary construction facilities will include site offices, welfare areas, parking and storage areas for plant and materials.

There are three phases of the life of the proposed development. All three phases have been considered in this assessment and are as follows:

• The Construction Phase;

• The Operational Phase; and

• The Decommissioning Phase.

Of all the three phases, the construction phase is considered to have the greatest impact in terms of transport. Construction plant, bulk materials and electrical equipment will be transported to site, potentially have an increase in traffic.

The operational phase is restricted to occasional maintenance operations which generate significantly lower volumes of traffic that are not considered to be in excess of daily traffic variation levels on the public road network.

The decommissioning phase involves fewer trips on the public road network than the construction phase, as minor elements of infrastructure are likely to be left in place, adding to local infrastructure that can potentially be used for further agricultural, or leisure uses in the future.

2 Transport Route

2.1 Description of the Route to Site

It is proposed that all equipment and construction material deliveries shall take the following route to site:

- Leave A8 towards B58
- Follow B58 until it turns into Watch Hill Rd
- Turn into Ballyvallagh Rd
- Approach site through new site access tracks

In the event of any road closures on the proposed delivery route, all vehicles will follow the designated diversion route.

An indicative transport route can be seen in Appendix A.

2.2 Strategic Road Network Assessment

The proposed development site sits on the land to the south of Ballyvallagh Road in Raloo.

2.2.1 A8

The A8 is a primary trunk road in Northern Ireland, forming a strategic link between Belfast and Larne, and passing through areas including Newtownabbey and Ballynure. The route comprises a dual carriageway from Belfast to the outskirts of Larne, designed to accommodate high traffic volumes and support freight movements to and from the Port of Larne. Beyond this section, the A8 transitions into a single carriageway as it approaches and enters Larne town centre. The road plays a critical role in regional connectivity, facilitating both commuter and commercial transport between inland urban areas and the northeastern coast.

The infrastructure along this section of route has been assessed as suitable for construction deliveries without any alterations anticipated. ***Figure 2*** indicates A8.

Figure 2: Exiting A8 onto B58

2.2.2 B58

The B58 is a classified secondary road located in Northern Ireland, running through Newtownabbey, Glengormley, and Ballyclare. It functions as a single carriageway along its entire length; however, the carriageway width is generally sufficient to accommodate two-way traffic comfortably. The B58 serves as a vital local distributor route, linking residential areas with regional centres and supporting both commuter and service traffic. ***Figure 3*** indicates B58.

The infrastructure along this section of route has been assessed as suitable for construction deliveries without any major alterations anticipated.

Figure 3: B58

2.2.3 Watch Hill Road

Watch Hill Road is an unclassified local road in Northern Ireland, located in the vicinity of Ballyclare and the surrounding rural area. It functions as a single carriageway throughout its length, with a standard rural road width that supports two-way traffic, though with limited overtaking opportunities. The road primarily serves local access needs, connecting dispersed residential properties, farms, and minor junctions to the regional road network, including the nearby B58. While not a primary route, Watch Hill Road contributes to rural connectivity and local circulation. ***Figure 4*** indicates Watch Hill Road.

The infrastructure along this section of route has been assessed as suitable for construction deliveries without any major alterations anticipated.

Figure 4: Watch Hill Road

2.2.4 Ballyvallagh Road

Ballyvallagh Road is an unclassified local road in Northern Ireland, located in the rural area near Ballymena. The road is a single carriageway with a standard width typical of rural roads, providing sufficient capacity for two-way traffic. It primarily serves as a local access route, connecting residential properties, farms, and other rural land uses to the surrounding road network, including the Ballymena area. While not a primary or major route, Ballyvallagh Road plays an important role in facilitating local movement and access to nearby services and facilities. ***Figure 5*** indicates Ballyvallagh Road.

The infrastructure along this section of route has been assessed as suitable for construction deliveries without any major alterations anticipated.

Figure 5: Ballyvallagh Road at proposed site entrance

2.2.5 Site Access Track

The proposed access track accessing the site begins at the existing site entrance just to the south side of Ballyvallagh Road. Site access track will head toward the south for approximately 350m when the compound would be located.

2.2.6 Passing Places and/or Widening

During correspondence with Antrim and Newtownabbey Borough Council, the need for passing places/widened sections has not been identified within delivery transport route. Narrower sections of the Ballyvallagh Road could accommodate passing places/widened sections if required, any such locations would be identified and agreed prior to the start of construction. The detailed design of the passing places/widened sections will be in accordance with Design Manual for Roads and Bridge (DMRB) and with any guidance provided by Antrim and Newtownabbey Borough Council at this stage.

2.2.7 Proposed Site Entrance

The proposed site entrance is located at Ballyvallagh Road where the existing farm entrance is located with approximate coordinates E338437.608, N395066.157 (TM65 Irish Grid). The speed limit on the road that the proposed entrance sits on is restricted to 60MPH. The proposed site entrance is an existing junction with an existing site track where modifications will occur to form the proposed site entrance. A set back of 2.4m from the carriageway, is proposed to serve the site entrance and 160m visibility can be secured from both directions with no major enabling works. Site entrance drawing can be found in Appendix B.

A Swept Path Analysis (SPA) has been carried out for potential delivery vehicles entering and exiting site. The site entrance and the SPA drawing which can be found in Appendix B, prove that standard minor enabling works on the verge will likely be required to form the site entrance.

3 Construction Traffic

3.1 Delivery Vehicles

3.1.1 Civil Engineering Construction

On site hardstanding areas, tracks and equipment foundations shall be constructed using stone and concrete. The majority of deliveries at this stage will use tipper lorries, concrete trucks and flatbed trucks. Plant required for the works will also be delivered on low loaders or other suitable transportation vehicles.

3.1.2 Large Component Deliveries

These components will be delivered using articulated lorries. Associated goods such as smaller components, tools and other equipment will be delivered on flatbed trucks and low loaders. The majority of deliveries will fall under the UK Standard Vehicle Regulations. Large components will typically be installed by mobile crane.

During the construction phase, two abnormal loads are likely to be required; one being the mobile crane and one a flatbed vehicle used to transport the grid transformer, totalling two movements each. At this time, it is not expected that further abnormal loads will be required, however, once final supplier confirmations and technical specifications have been completed following detailed design, a comprehensive route assessment will be conducted. This assessment will identify necessary mitigation measures, such as the use of escort vehicles, in compliance with legal requirements. Should any additional abnormal loads be identified during the detailed design phase, further assessments will be undertaken to ensure full compliance with all relevant legislation and guidance.

3.1.3 Miscellaneous Equipment

Electrical and communications cables, fencing panels, drainage materials and other such miscellaneous materials will be delivered to site on flatbed trucks or low loaders. Occasional deliveries of small packages will also take place with vans and other light goods vehicles.

Site offices, welfare facilities and equipment storage containers will be delivered on flatbeds and low loaders and will be maintained on an ad-hoc basis.

Regular deliveries of fuel and water for the site plant and emptying chemical toilet waste will be made using a mini tanker.

3.1.4 Staff/Workforce

The daily commute of workers in cars, vans and small trucks will form a large proportion of the site traffic. However, the chosen Contractor will encourage all sub-contractors, labourers and tradesmen to car/van share for their journeys to and from the site to reduce the number of vehicle movements involved. Parking for the workforce will be fully accommodated on site. Parking on, or near to, the adopted highway will not be permitted.

3.2 Vehicle Movements

Throughout the construction phase there will be a combination of HGVs (for the component and material deliveries) and cars/vans (for construction staff), on site. HGV movements are expected to be most intense

throughout the first few weeks of construction whilst car/van movements are expected to be constant throughout. An estimated number of deliveries and movements for the main infrastructure can be found in the delivery table below.

Movement	Class	Estimated vehicle no.	Estimated movements
Site Mobilisation/Demobilisation	HGV	25	50
Temporary Fence Delivery	HGV	5	10
Site Welfare Maintenance	HGV	60	120
General Site Deliveries	HGV	80	160
Imported Stone	HGV	1590	3180
Concrete Delivery	HGV	200	400
BSE, PCS and MV Skid Delivery	HGV	205	410
Electrical Equipment Delivery*	HGV	20	40
Substation Equipment Delivery**	HGV	10	20
Cable and Ducting Delivery	HGV	10	20
Permanent Fence Delivery/CCTV & Lighting	HGV	5	10
Spares Container Delivery	HGV	4	8
Total	**-**	**2214**	**4428**

Table 1: Delivery table

It is expected that there will be a daily maximum of approximately 20 HGV deliveries (40 HGV movements).

Vehicle movements can vary depending on site conditions, programming, weather restrictions, etc., and therefore these numbers should be treated as a guideline only.

The expected HGV volumes are based on best estimates of trips generated for similar sized battery storage facilities and will be subject to amendments based on local conditions, working practices and timing of works.

Sufficient time will be provided between deliveries to allow for any delays (such as loading / unloading taking longer than expected) and to avoid any vehicles waiting.

3.3 Traffic Management

Details of the potential traffic management arrangements during the construction phase will be agreed with Antrim and Newtownabbey Borough Council. Any operations will be performed in accordance with local and national standards and specifications.

3.4 Timing Restrictions

It is anticipated that all traffic movements will be carried out between 08.00 to 18.00 on Monday to Friday and 08.00 to 13.00 on Saturdays and at no time on Sundays or Bank or National Holidays unless otherwise agreed in advance with Antrim and Newtownabbey Borough Council.

3.5 Duration of Works

The programme of works is anticipated to take place over approximately an 20-month period. A detailed programme of works will be produced prior construction commences.

4 Construction Activity

4.1 Pre and Post Road Condition Survey

The construction contractor will conduct a pre-construction and post-construction road condition survey to the agreed extents either side of the access point, with the contractor liable to repair any damage caused to the public roads as result of the construction of the Proposed Development.

4.2 Site Access and Entrance Work

The proposed site entrance will make use of the existing track, with widening required on both the eastern and western sides from Ballyvallagh Road to the access point. Beyond this, a new section of access track will be constructed to connect the entrance to the main site compound.

4.3 Construction Working Areas

During construction, a temporary construction working area will be set up within the wider field for construction works and temporary facilities. The temporary facilities will include site offices, welfare areas, parking, a turning area for vehicles, and storage areas for plant and materials. Once construction of the site is completed, all portacabins, machinery and equipment will be removed from site.

Vehicles will drive into the site forwards, turn around on site and exit forwards. Measures shall be in place to manage the timing of the delivery of material and plant to the site; if the site has insufficient space to accommodate a delivery (e.g., due to an ongoing delivery or obstructive site works), the delivery vehicle will be instructed to wait in a safe location, remote from site, if necessary, until suitable space is available.

4.4 Mud Prevention Measures

During the works, measures shall be in place to ensure that mud and debris is not spread onto the adjacent public highway. The public highway will be regularly inspected, and any deposited debris or mud will be dealt with immediately by means of a road sweeper.

Cleaning of vehicles, including provision of wheel washing facilities, prior to exiting site onto the public road is expected to ensure mud is not spread out of site.

4.5 Pollution Control

Best practice measures will be implemented to minimise pollution due to construction. These measures are detailed in the Construction Environmental Management Plan (CEMP) which forms a separate document to this.

4.6 Emergency Services

The Police, Fire and Ambulance service will be given written notice of the construction works and invited to site for an additional briefing.

4.7 Local Services

The Applicant will make every reasonable effort to ensure that there is no disruption to local services e.g., bin collections and school buses.

5 Operational Activity

5.1 Routine Operational Phase Traffic

Once operational, the facility will be remotely controlled and as such will be unmanned. However, there will be a visit to the site approximately once a month by car, van or light goods vehicle, to carry out regular inspections and routine maintenance. Parking for these visits will be accommodated on site.

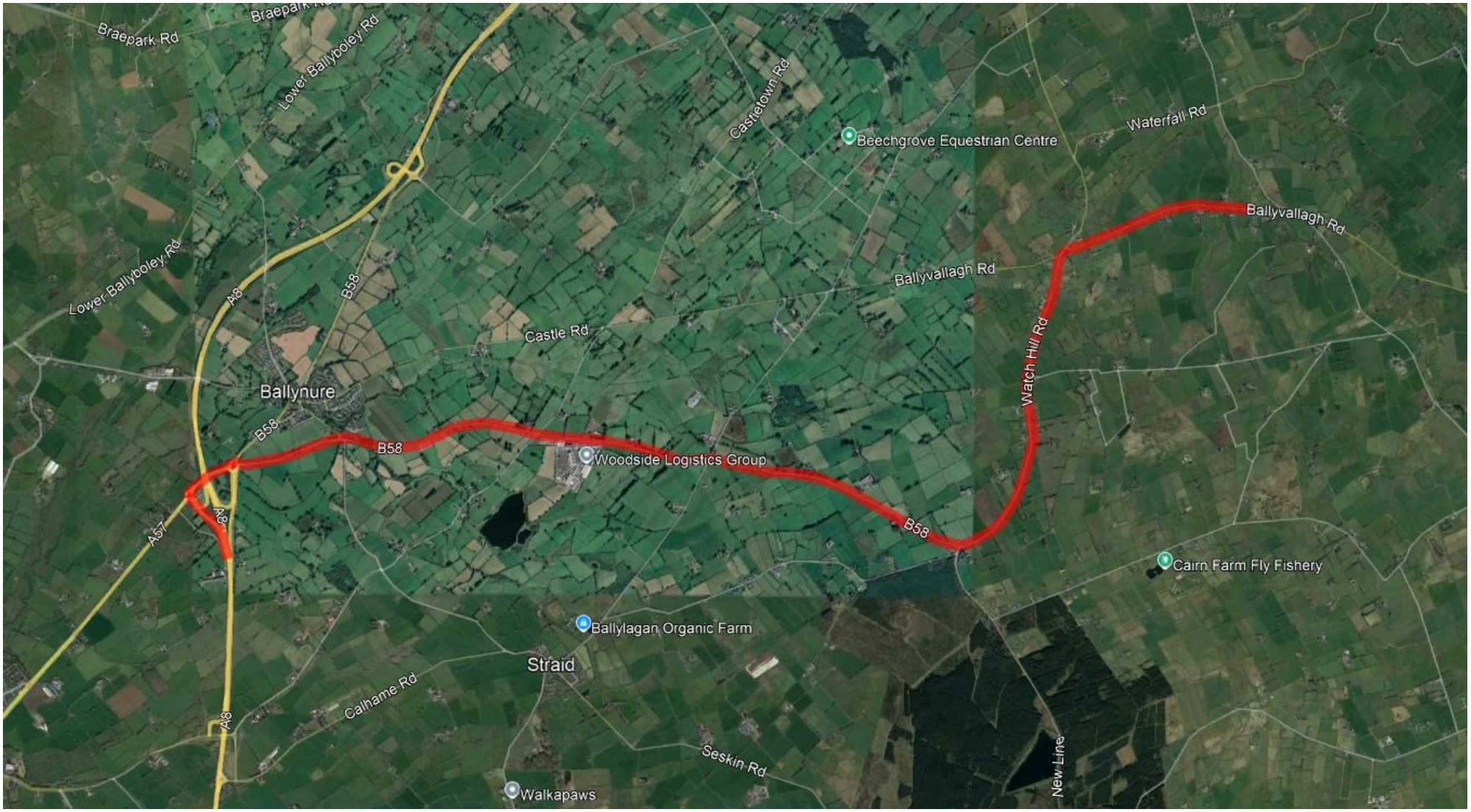
5.2 Non-Routine Operational Phase Traffic

It is possible that one or more medium or large components may require replacement during the operational life of the facility. The nature of the traffic associated with such works will be similar to that used in the construction phase of the project but will be present for a much shorter duration. Should the scale of the works be such that traffic management measures would be required to manage vehicle movements to and from the site, the necessary permissions shall be sought from the local authority in line with due process.

6 Decommissioning Activity

The traffic effects during the decommissioning phase can only be fully assessed closer to that period. As elements of the Proposed Development are likely to remain in-situ, the traffic flows associated with the decommissioning works will be lower than those associated with the construction phase. The construction phase therefore represents a worst-case assessment and as such, no further assessment of the decommissioning phase has been considered at this point. No potential significant decommissioning effects are predicted as part of the Proposed Development.

Appendix A – Indicative Access Route



Appendix B – Site Entrance & SPA Drawing

05646-RES-ACC-DR-PE-001 – Site Entrance Visibility Splays

05646-RES-ACC-DR-PE-002 – Site Entrance Swept Path Analysis

KEY:

- EXISTING ROAD
- PROPOSED ACCESS TRACK
- VISIBILITY SPLAY
- GATE
- EXISTING FENCE MODIFIED
- OUTLINE OF EXISTING HEDGE
- EXISTING TREE

NOTES:

1. LAYOUT IS INDICATIVE AND SUBJECT TO FURTHER DETAILED DESIGN.

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	AP	CH	2025-05-30	First Issue

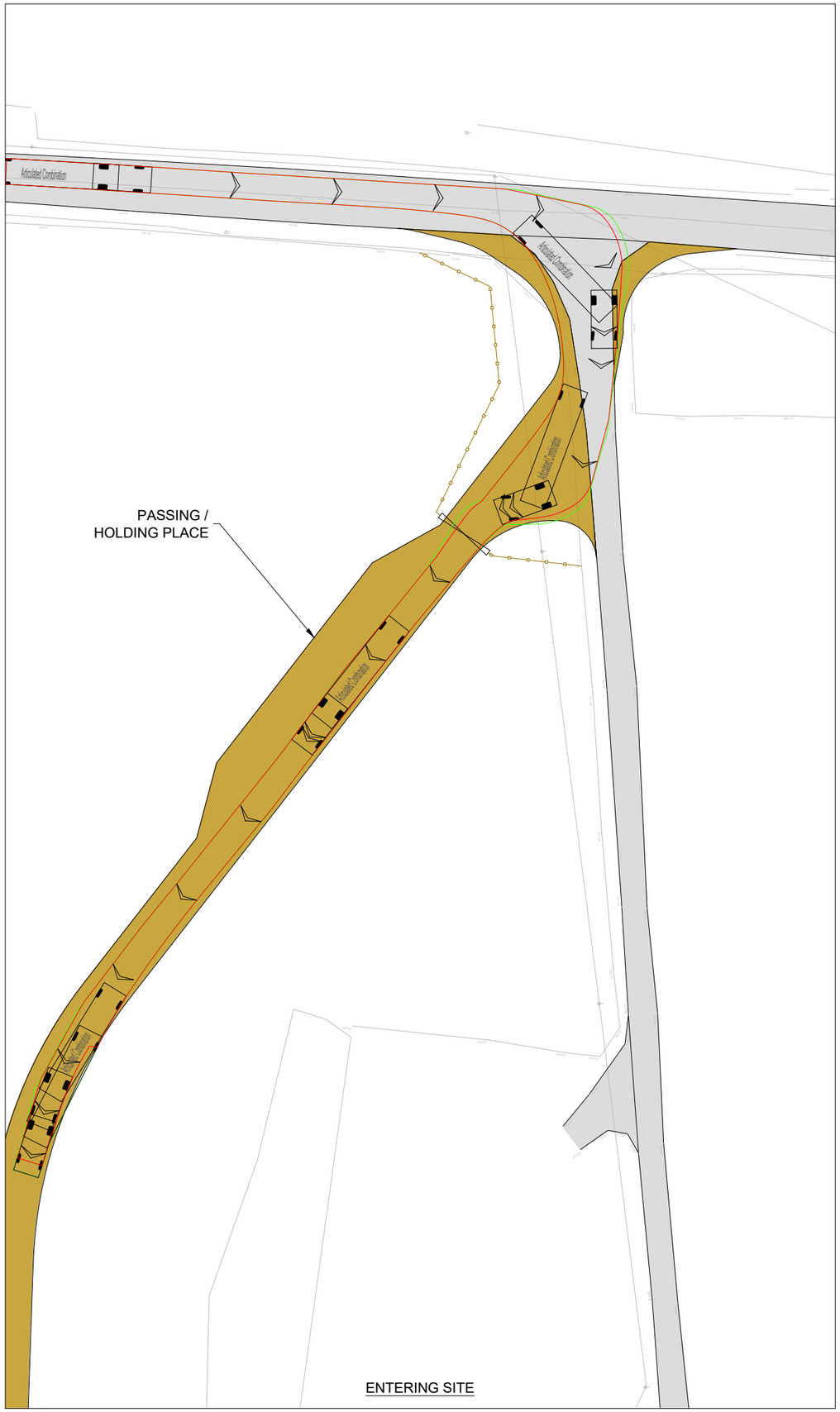
PURPOSE: PLANNING	COORDINATES: TM65 IRISH GRID
SCALE: 1:500 @ A1	DATUM: N/A
LAYOUT DWG: N/A	T-LAYOUT NO.: N/A

PROJECT TITLE: BALLYROSS

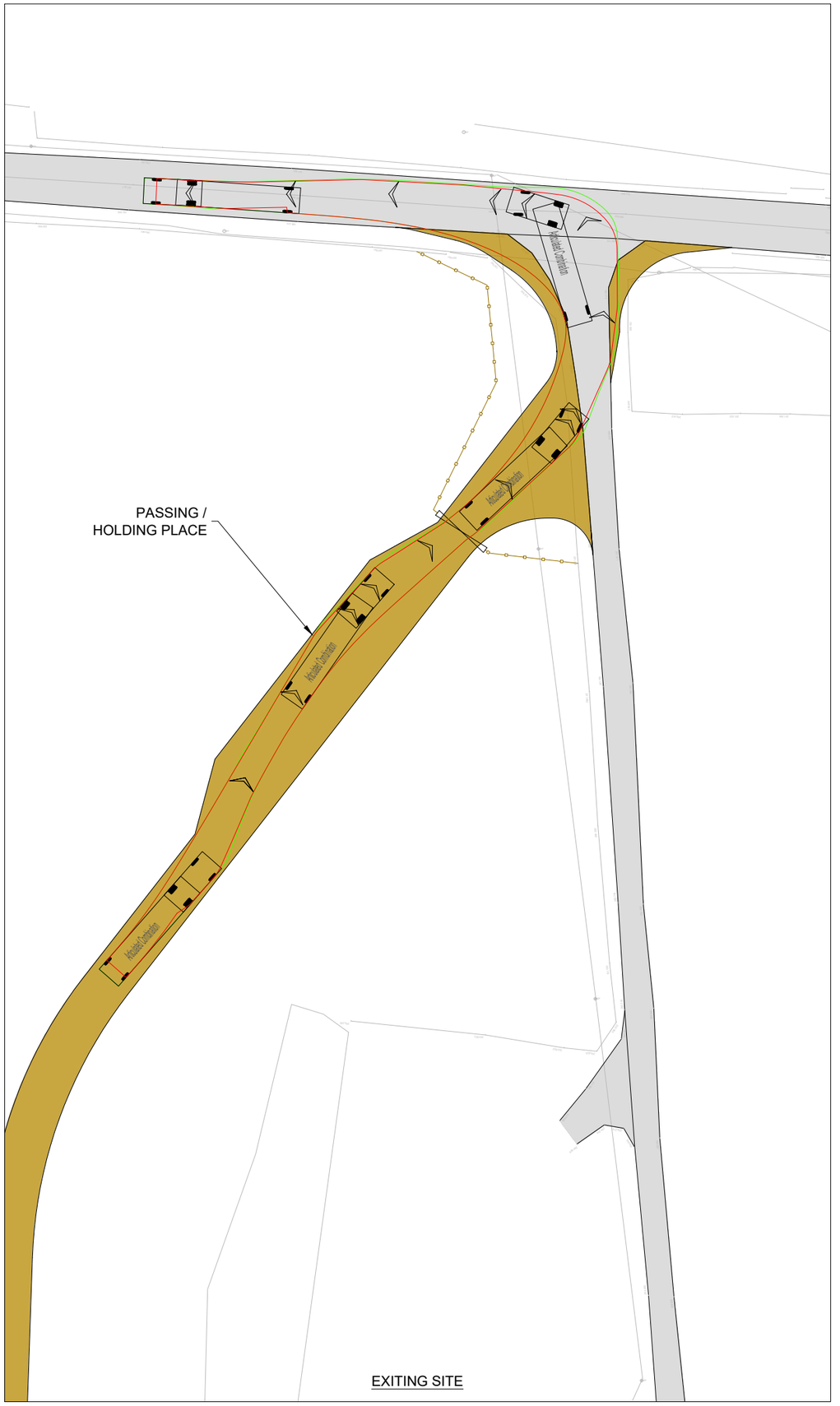
DRAWING TITLE: SITE ENTRANCE VISIBILITY SPLAYS

RES DRAWING NUMBER: 05646-RES-ACC-DR-PT-001 | REV: 1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR, UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



ENTERING SITE



EXITING SITE

KEY:

- EXISTING ROAD
- ACCESS TRACK
- GATE
- EXISTING FENCE MODIFIED

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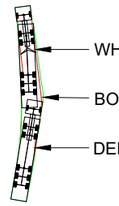

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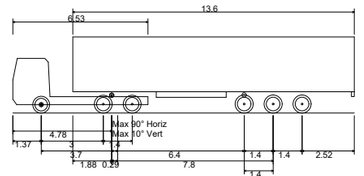
- BODY+LOAD EXTENTS (GREEN)
- DELIVERY VEHICLE (BLACK)



Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	6.530m

HGV

SHEET 1 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	AP	CH	2025-05-30	First Issue

PURPOSE: PLANNING	COORDINATES: TM65 IRISH GRID
SCALE: 1:500 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE

BALLYROSS

DRAWING TITLE

SITE ENTRANCE
SWEPT PATH ANALYSIS

RES DRAWING NUMBER	REV
05646-RES-ACC-DR-PT-002	1

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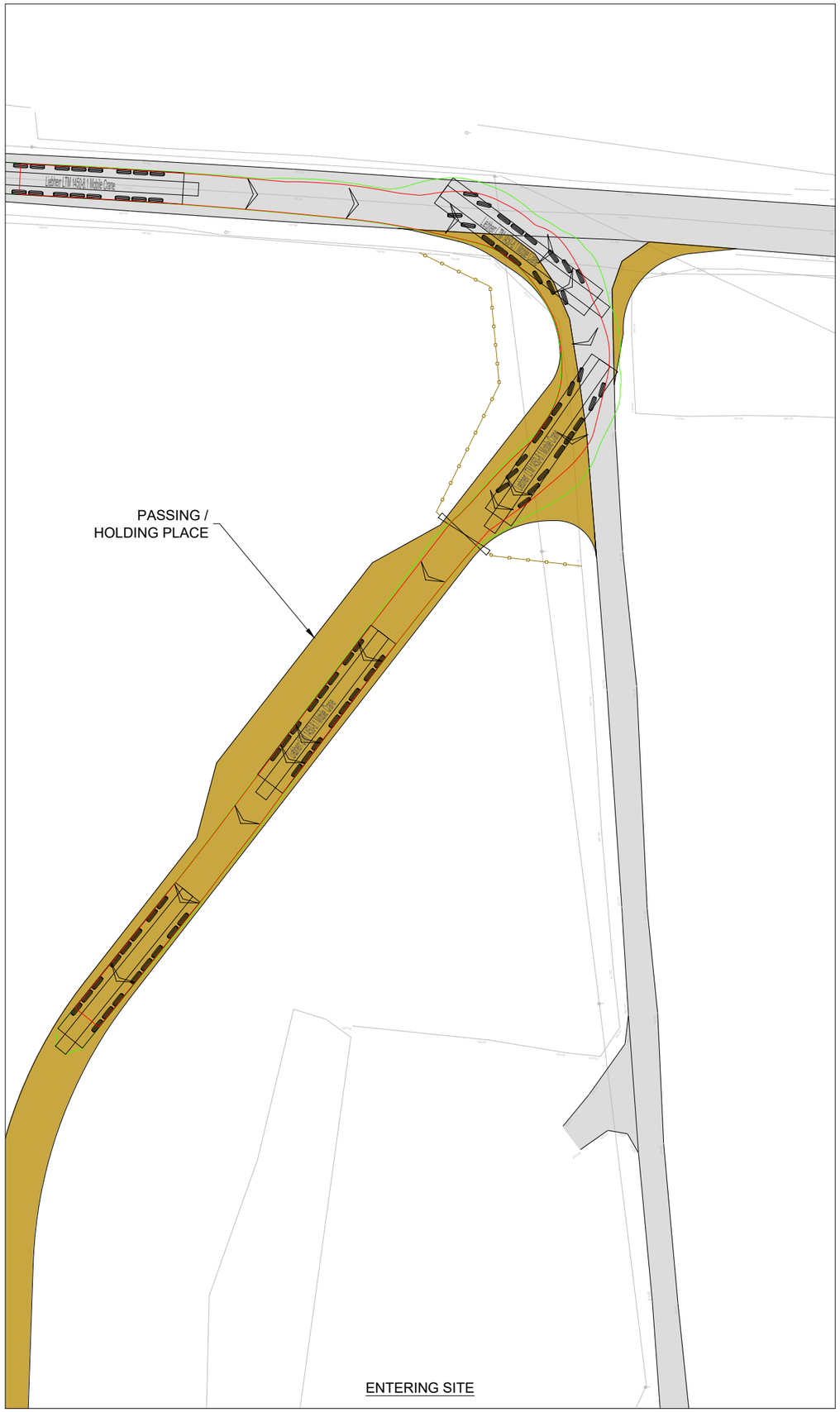
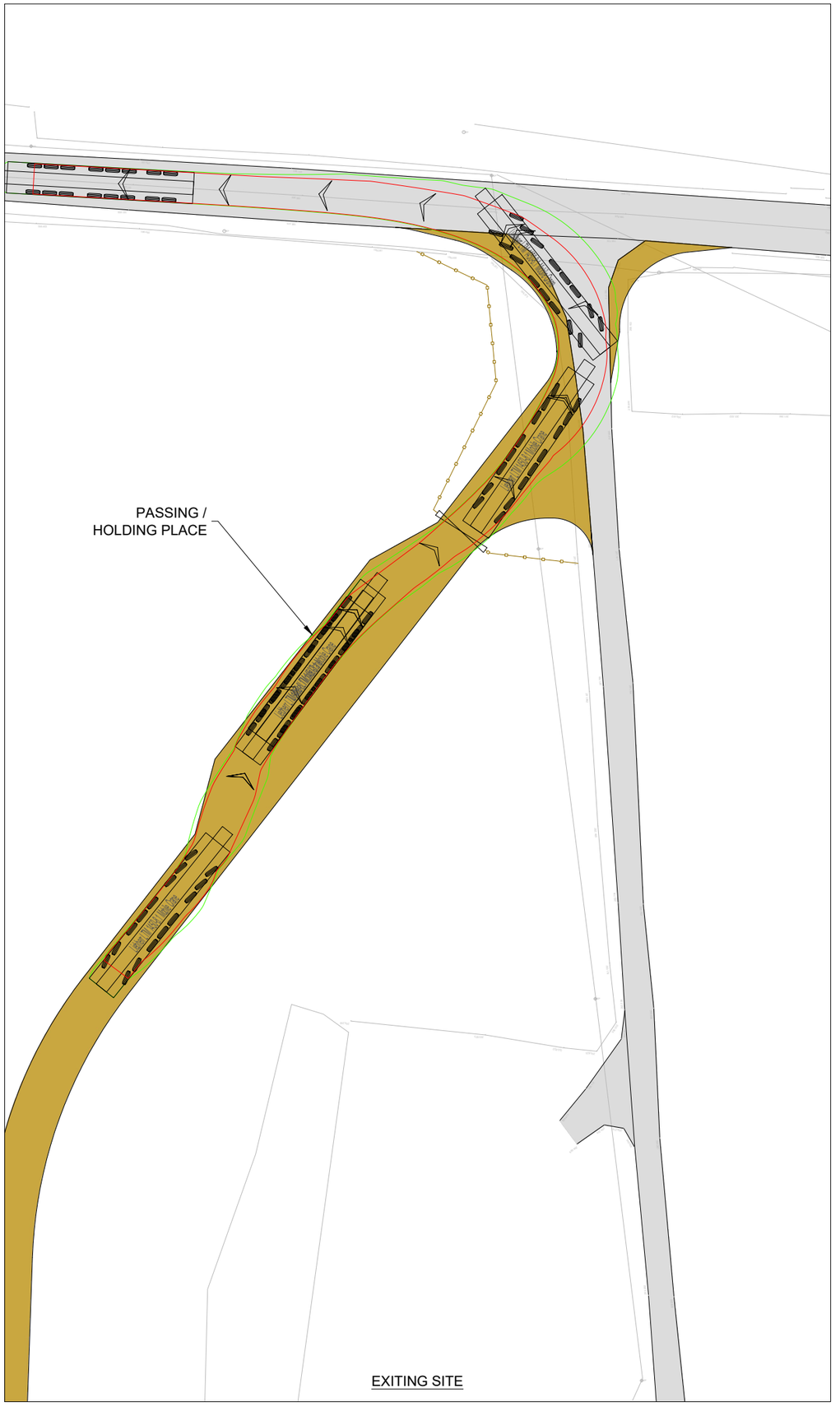
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM





KEY:

- EXISTING ROAD
- ACCESS TRACK
- GATE
- EXISTING FENCE MODIFIED

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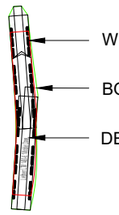
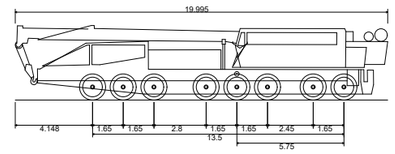


- WHEEL EXTENTS (RED)
- BODY+LOAD EXTENTS (GREEN)
- DELIVERY VEHICLE (BLACK)



Liebherr LTM 1450-8.1 Mobile Crane

Overall Length	19.995m
Overall Width	3.100m
Overall Body Height	4.000m
Min Body Ground Clearance	0.325m
Track Width	3.000m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.404m

CRANE

SHEET 2 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	AP	CH	2025-05-30	First Issue

PURPOSE: PLANNING	COORDINATES: TM65 IRISH GRID
SCALE: 1:500 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE

BALLYROSS

DRAWING TITLE

SITE ENTRANCE
SWEPT PATH ANALYSIS

RES DRAWING NUMBER	REV
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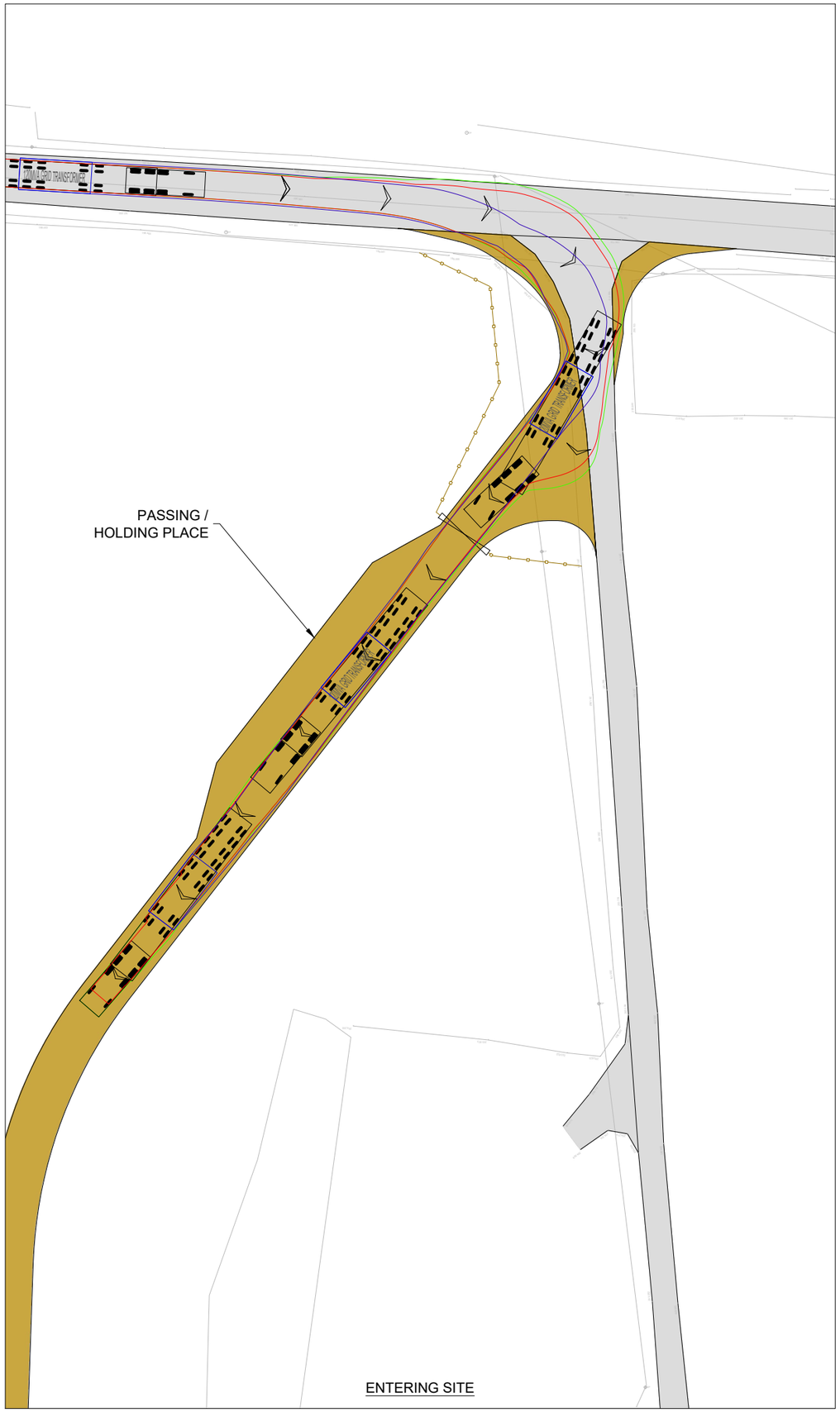
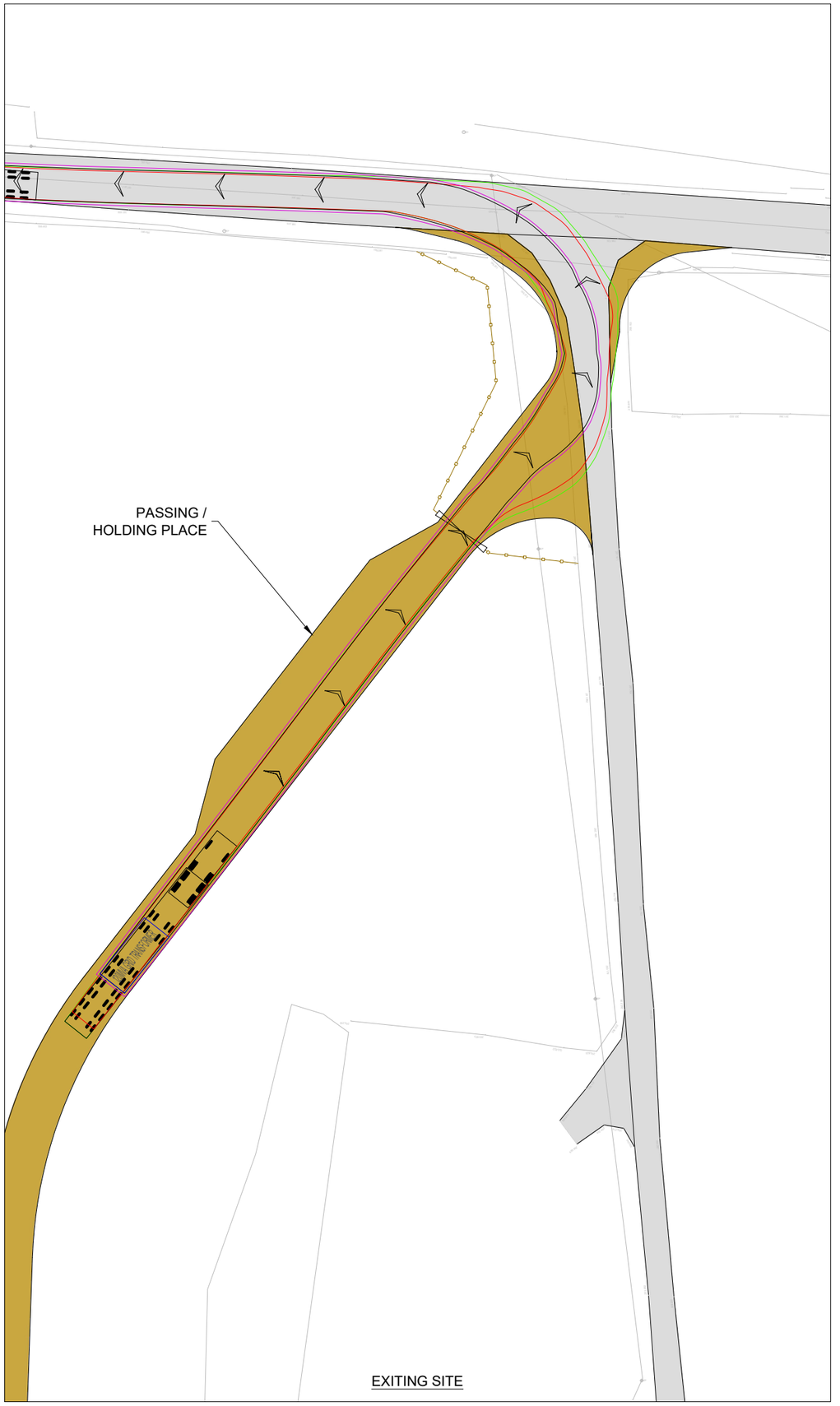
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM





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- GATE
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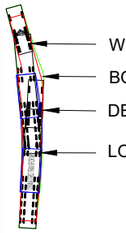

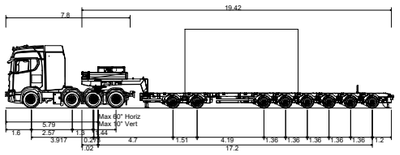

140MVA GRID TRANSFORMER	
Overall Length	24.190m
Overall Width	2.740m
Overall Body Height	4.942m
Min Body Ground Clearance	0.018m
Max Track Width	2.460m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.990m

LOW LOADER WITH TRANSFORMER

SHEET 3 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	AP	CH	2025-05-30	First Issue

PURPOSE: PLANNING	COORDINATES: TM65 IRISH GRID
SCALE: 1:500 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

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SWEPT PATH ANALYSIS

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KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
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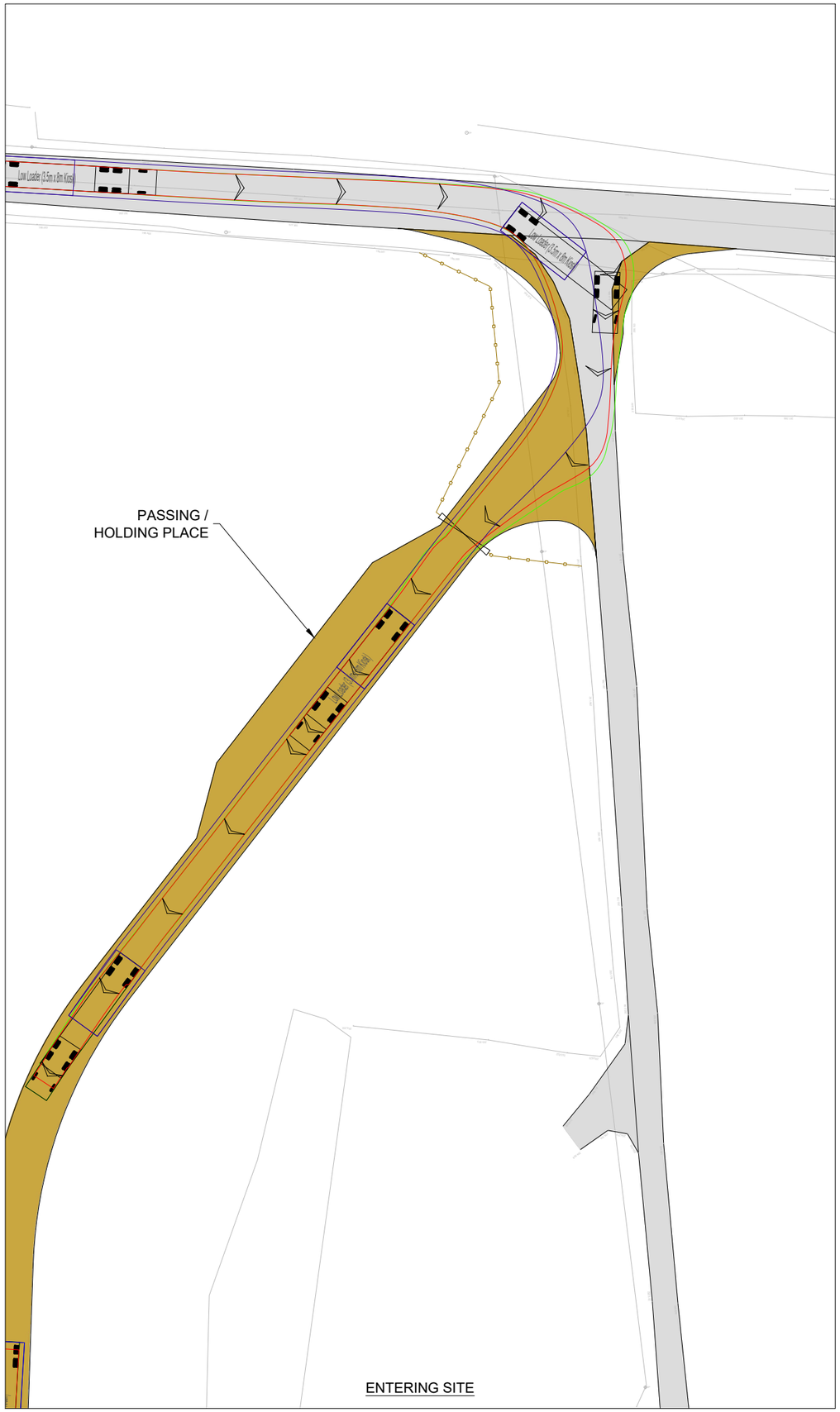

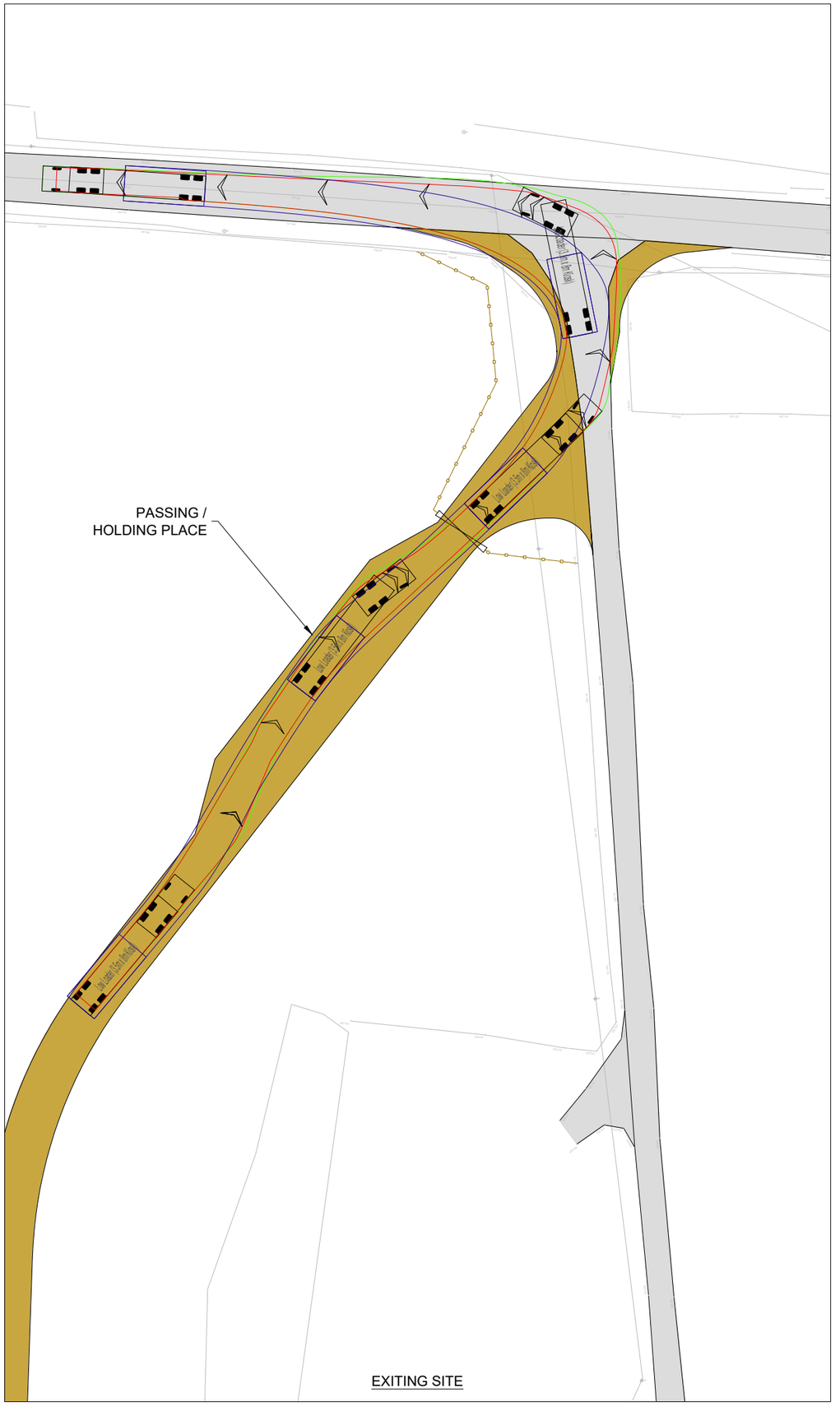

KEY:

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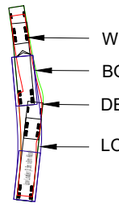
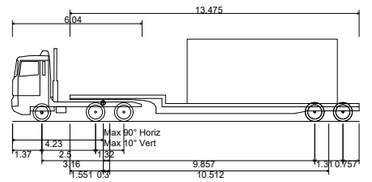
- ACCESS TRACK
- GATE
- EXISTING FENCE MODIFIED

VEHICLE TRACKING:



- WHEEL EXTENTS (RED)
- BODY+LOAD EXTENTS (GREEN)
- DELIVERY VEHICLE (BLACK)
- LOAD OUTLINE (BLUE)



Low Loader (3.5m x 8m Kiosk)	
Overall Length	16.154m
Overall Width	2.520m
Overall Body Height	3.830m
Min Body Ground Clearance	0.318m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.990m

LOW LOADER WITH KIOSK

SHEET 4 OF 4

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	AP	CH	2025-05-30	First Issue

PURPOSE: PLANNING	COORDINATES: TM65 IRISH GRID
SCALE: 1:500 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE: BALLYROSS

DRAWING TITLE: SITE ENTRANCE SWEPT PATH ANALYSIS

RES DRAWING NUMBER: 05646-RES-ACC-DR-PT-002 | REV: 1

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EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM