



Islandmore Wind Farm

Environmental Impact Assessment
Report

Annex 14.1: Road Safety Audit

Islandmore Wind Farm Limited

2026

**Wind Farm Application, Toobrackan,
Ballaghaderreen, Co. Roscommon
Stage 1 Road Safety Audit**





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Document Control Sheet

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1 Introduction

This report documents the findings of a Stage 1 Road Safety Audit (RSA) carried out with respect to the Proposed Wind Farm Application, Toobrackan, Ballaghaderreen, Co. Roscommon.

The audit team conducted the site visit on the 16th of August 2026. The audit was carried out in the offices of ORS on the 7th of September 2026.

The audit team comprised of the following people:

Audit Team Leader:

Mark Gallagher: AEng MIEI

Audit Team Member:

David McCormack: BEng (Hons), Dip Eng., CEng, MIEI

Audit Team Observer

John Igoe BEng (Hons), MEng, MIEI

During the site visit the weather was overcast and cloudy. The road surface was dry, and the traffic levels were noted to be low across the audit period. The posted speed in the vicinity of the site is 60kph.

The audit team reviewed the following documents and drawings provided by the design team.

- 1) FIGURE 1.0: OVERALL LOCATION MAP (STK001ISL_PAS_LOC-0.01, Rev03)
- 2) FIGURE 2.0: OVERALL LOCATION MAP (STK001ISL_PAS_LOC-0.02, Rev03)
- 3) FIGURE 3.0: SITE LAYOUT MAP (STK001ISL_PAS_LOC-0.03, Rev03)
- 4) FIGURE 4.0: SITE LAYOUT MAP PLAN 1 OF 5 (STK001ISL_PAS_LAY-0.01, Rev03)
- 5) FIGURE 4.1: SITE LAYOUT MAP PLAN 2 OF 5 (STK001ISL_PAS_LAY-0.02, Rev03)
- 6) FIGURE 4.2: SITE LAYOUT MAP PLAN 3 OF 5 (STK001ISL_PAS_LAY-0.03, Rev03)
- 7) FIGURE 4.3: SITE LAYOUT MAP PLAN 4 OF 5 (STK001ISL_PAS_LAY-0.04, Rev03)
- 8) FIGURE 4.4: SITE LAYOUT MAP PLAN 5 OF 5 (STK001ISL_PAS_LAY-0.05, Rev03)
- 9) FIGURE 5.0: SITE ENTRANCE PLAN 1 OF 6 (STK001ISL_PAS_LAY-0.06, Rev03)
- 10) FIGURE 5.1: SITE ENTRANCE PLAN 2 OF 6 (STK001ISL_PAS_LAY-0.07, Rev03)
- 11) FIGURE 5.2: SITE ENTRANCE PLAN 3 OF 6 (STK001ISL_PAS_LAY-0.08, Rev03)
- 12) FIGURE 5.3: SITE ENTRANCE PLAN 4 OF 6 (STK001ISL_PAS_LAY-0.09, Rev02)
- 13) FIGURE 5.4: SITE ENTRANCE PLAN 5 OF 6 (STK001ISL_PAS_LAY-0.10, Rev02)
- 14) FIGURE 5.5: SITE ENTRANCE PLAN 6 OF 6 (STK001ISL_PAS_LAY-0.11, Rev02)

Documents/Information not supplied:

- Speed Survey
- Traffic Count Data
- Collision Data
- Swept Path Analysis
- Public Lighting Layout.



The absence of the above information limited the audit team's ability to fully assess operational speeds, traffic behaviour and visibility performance.

The terms of reference / procedure for the Audit were as per the relevant sections of the **Transport Infrastructure Ireland Road Safety Audit Standard GE-STY-01024**. The audit examined only those issues within the design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the designs to any other criteria. The Road Safety Audit should not be treated as a design check.

The problems identified and described in this report are considered by the Audit Team to require action to improve the safety of the development and minimise accident occurrence. All comments, references, and recommendations in this safety audit are in respect of the review of information supplied by the Design Team.

2 Description of the Proposed Development

The proposed development by Islandmore Wind Farm Limited comprises a new wind farm at Largan, Boleysillagh, Cloonmeen, Toobrackan, and Tullaghanrock, County Roscommon.

A Stage 1 Road Safety Audit (RSA) has been carried out in respect of the proposed development. The site is located to the north of Ballaghaderreen, with access to the development provided off the N5 National Road via the L5501, L5506, L55018 and an unnamed local road.

The proposed scheme comprises the wind farm development together with associated site access arrangements, internal access tracks, hardstanding areas, drainage and all ancillary works required to facilitate the development.

The existing speed limit in the vicinity of the proposed site accesses is 60kph.

Figure 2.1 below illustrates the location of the proposed site layout plan.

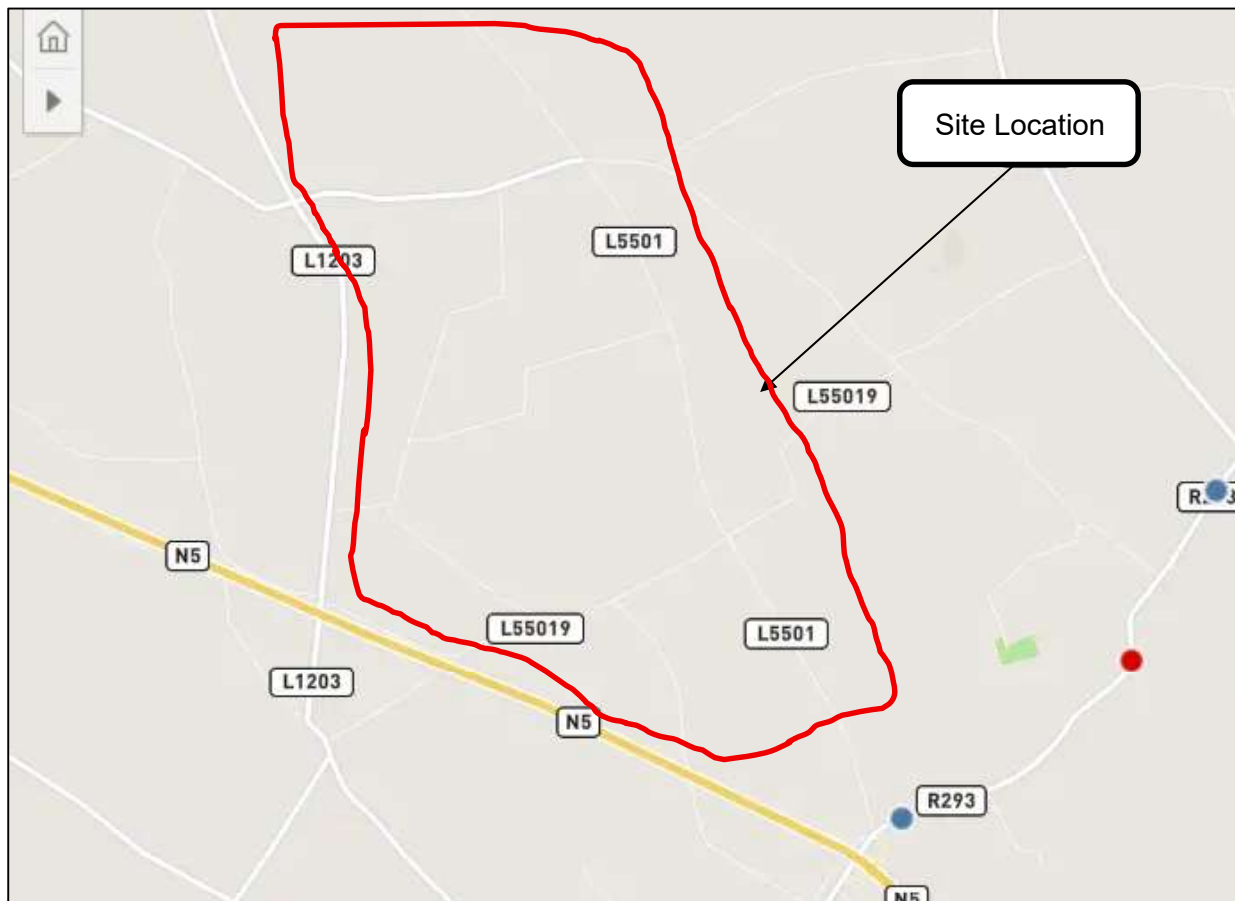


Figure 2.1: Site Layout Plan (Source: Galetch Energy Services)

3 Collision History

The audit team has reviewed road collision history data for the road network in the vicinity of Largan, Boleysillagh, Cloonmeen, Toobrackan, and Tullaghanrock, County Roscommon. The dataset records two collisions resulting in serious injury along the R293 in 2017 and 2020, with a further fatal collision recorded in 2022. These collisions occurred in the vicinity of the proposed development along the R293. No collision data was identified along the L5501, L5506, L55018 and an unnamed local road, on which the proposed development is located.

The absence of a collision at a specific point does not equate to an absence of risk. The proposed site access and associated development should therefore be designed in accordance with the relevant standards to minimise potential conflicts and road safety risks for all road users.



4 Problems Raised from the Road Safety Audit

The following are problems and recommendations to address the safety issues associated with the proposal. The recommendations are proposed to the designer of the scheme to reduce any safety risks associated with it.

4.1 Potential Problems Identified

Problem No. 01: Sightline Visibility at Bends

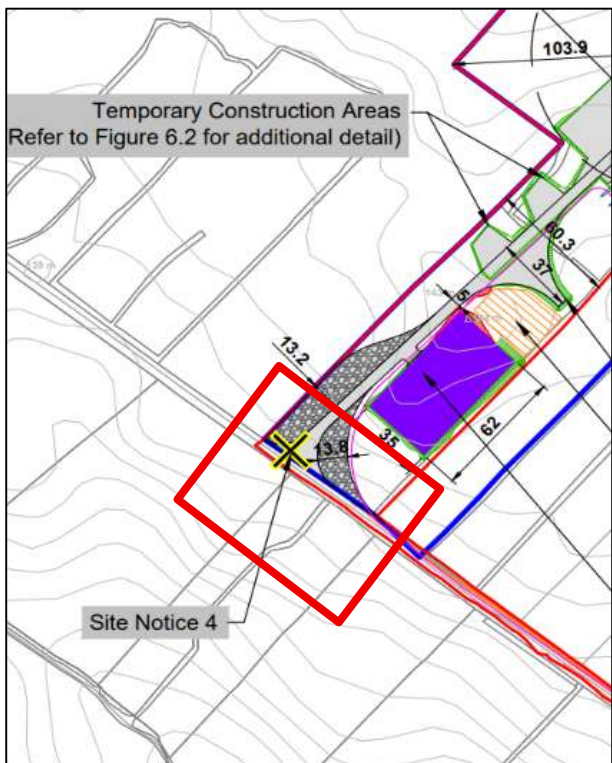
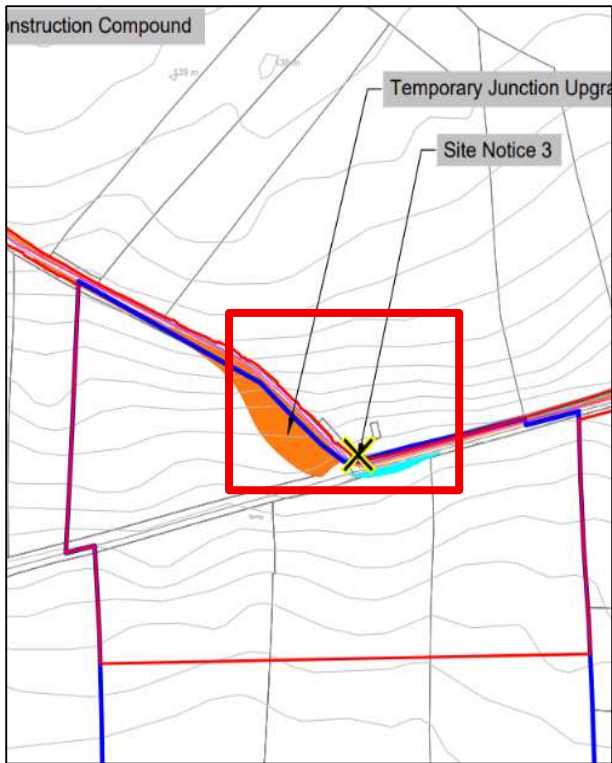
Location: Drawing Reference: (FIGURE 4.3: SITE LAYOUT MAP PLAN 4 OF 5

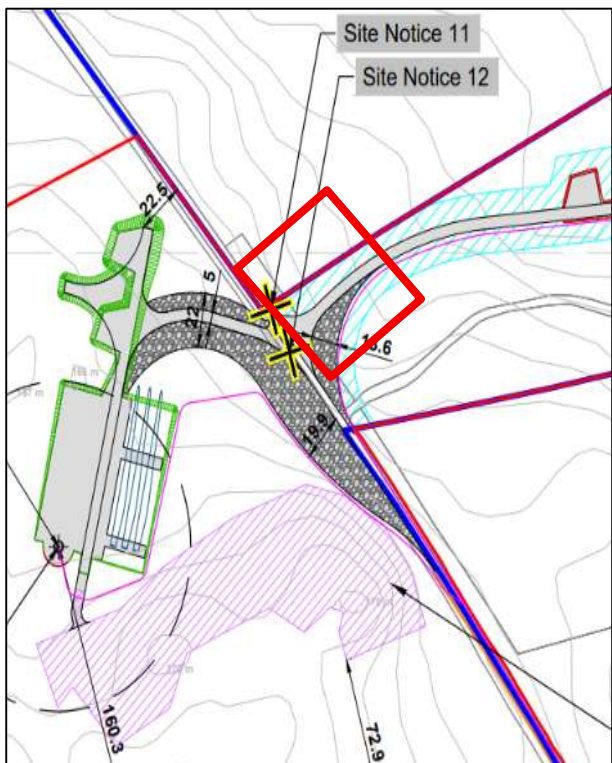
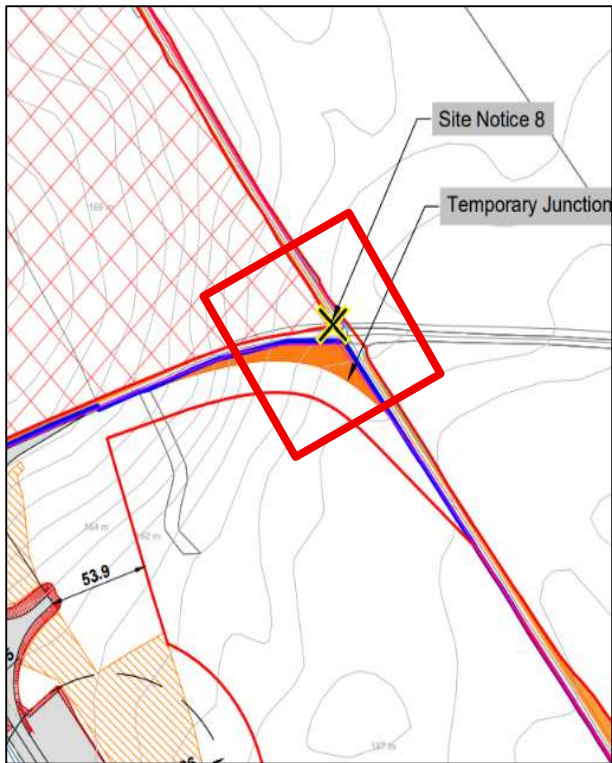
(STK001ISL_PAS_LAY-0.04, Rev03, FIGURE 4.1: SITE LAYOUT MAP PLAN 2 OF 5

(STK001ISL_PAS_LAY-0.02, Rev03)

The audit team note from the site visit that visibility is restricted at a number of bends along the access route due to existing vegetation, hedgerows and/or roadside features. The audit team are concerned that restricted sightlines from the junction and forward visibility may prevent drivers from identifying approaching vehicles in sufficient time to react safely, particularly given the anticipated HGV movements associated with the proposed development.







Recommendation:

The design team should ensure that adequate visibility is maintained at the locations identified and that any obstructions are removed or appropriately managed.

Problem No. 02: Soft Verges Along Local Road on Approach Route

Location: Drawing Reference: (FIGURE 4.3: SITE LAYOUT MAP PLAN 4 OF 5 (STK001ISL_PAS_LAY-0.04, Rev03))

The audit team note from the site visit that there are areas of soft/boggy roadside verge along the proposed access route. The audit team are concerned that HGV and abnormal load vehicles may be required to overrun these areas when negotiating the narrow sections of road. This may result in vehicle instability, damage to the road edge or loss of control, increasing the potential for collisions.





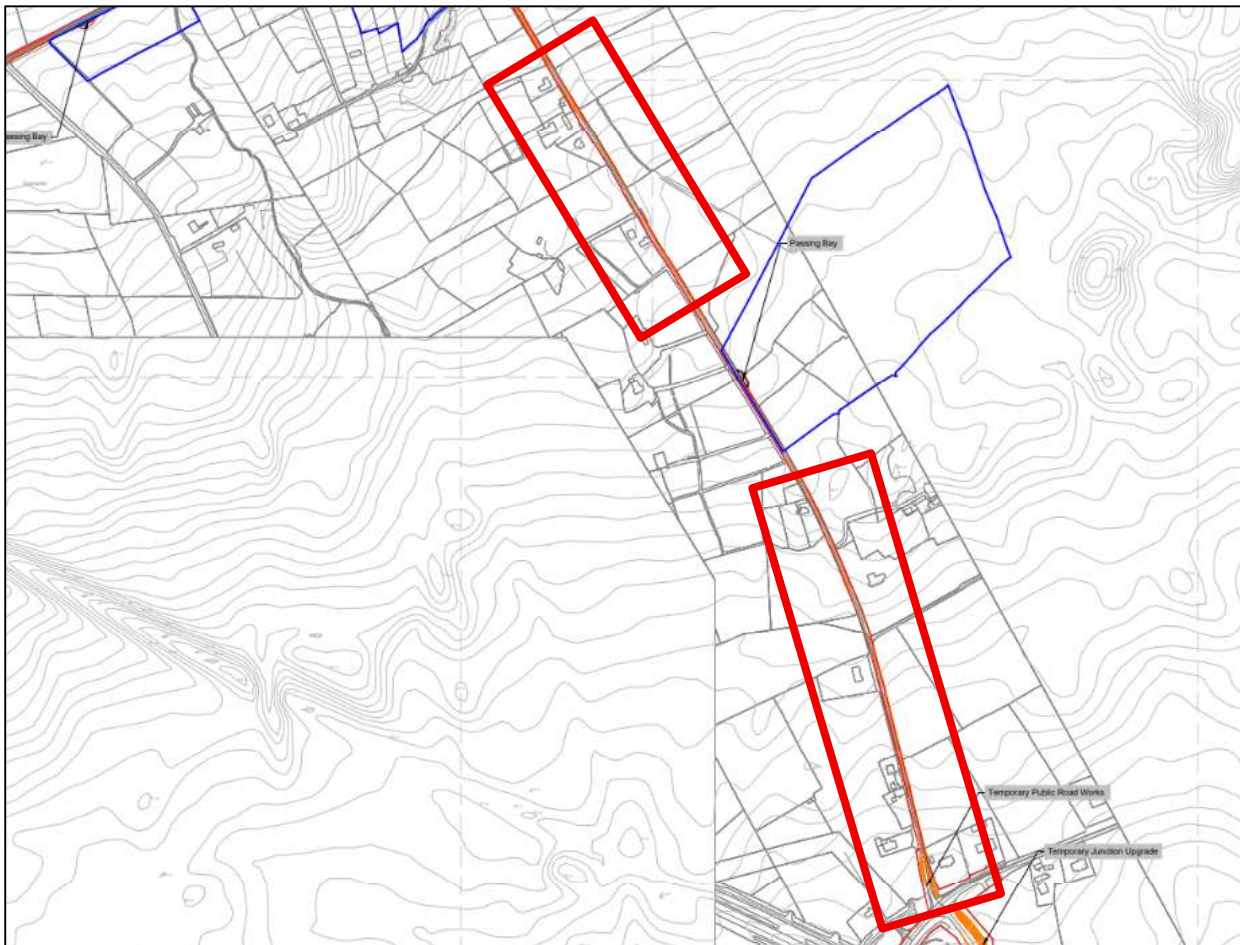
Recommendation:

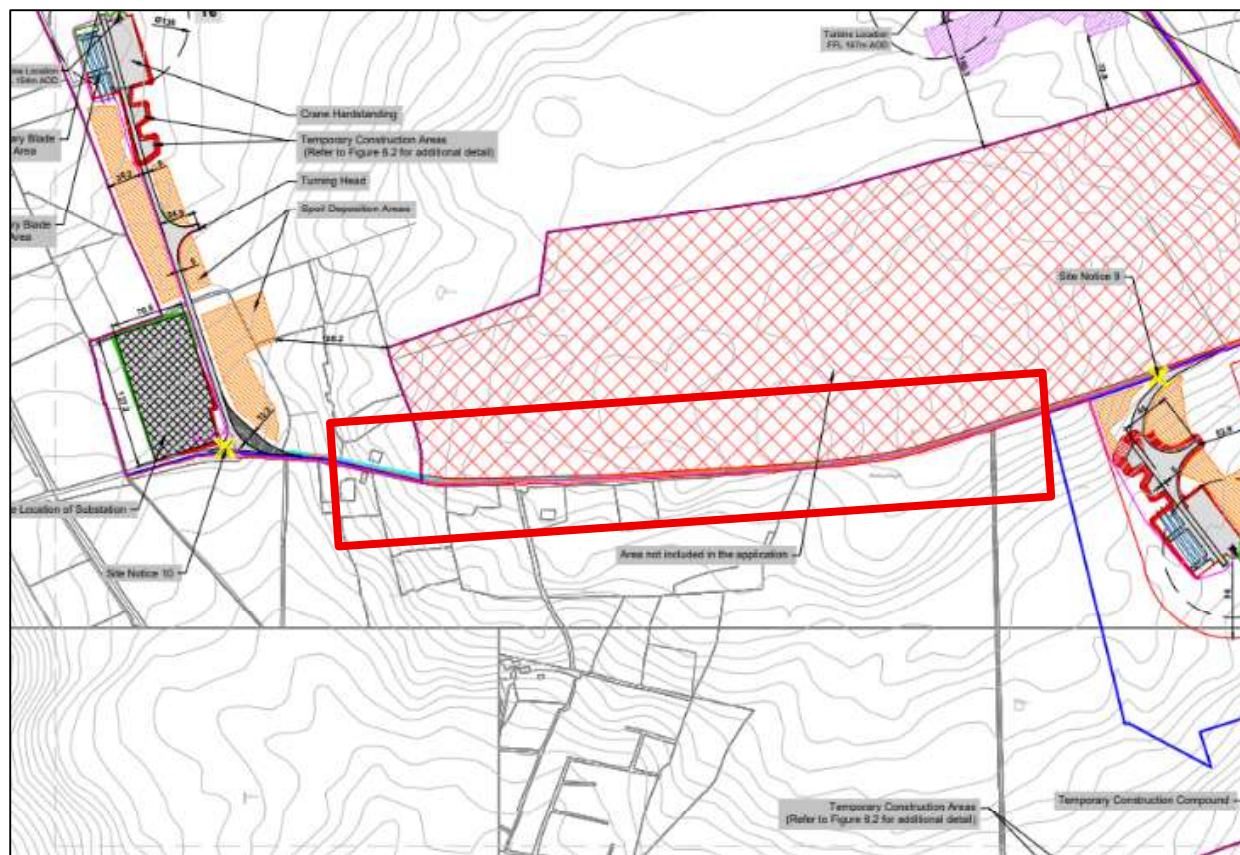
The design team should ensure that the appropriate verge markers, edge lining is introduced. These photos are examples and checks should not be confined to these areas only.

Problem No. 03: Lack of Passing Opportunities

Location: Drawing Reference: (FIGURE 4.4: SITE LAYOUT MAP PLAN 5 OF 5 (STK001ISL_PAS_LAY-0.05, Rev03), FIGURE 4.1: SITE LAYOUT MAP PLAN 2 OF 5 (STK001ISL_PAS_LAY-0.02, Rev03))

The audit team note from the site visit that there are limited opportunities for vehicles to safely pass along the narrow local roads. The audit team are concerned that the anticipated HGV and abnormal load traffic associated with the development may encounter opposing traffic along these sections. This may result in vehicles stopping, reversing or overrunning the roadside verge, increasing the potential for conflicts with other road users.





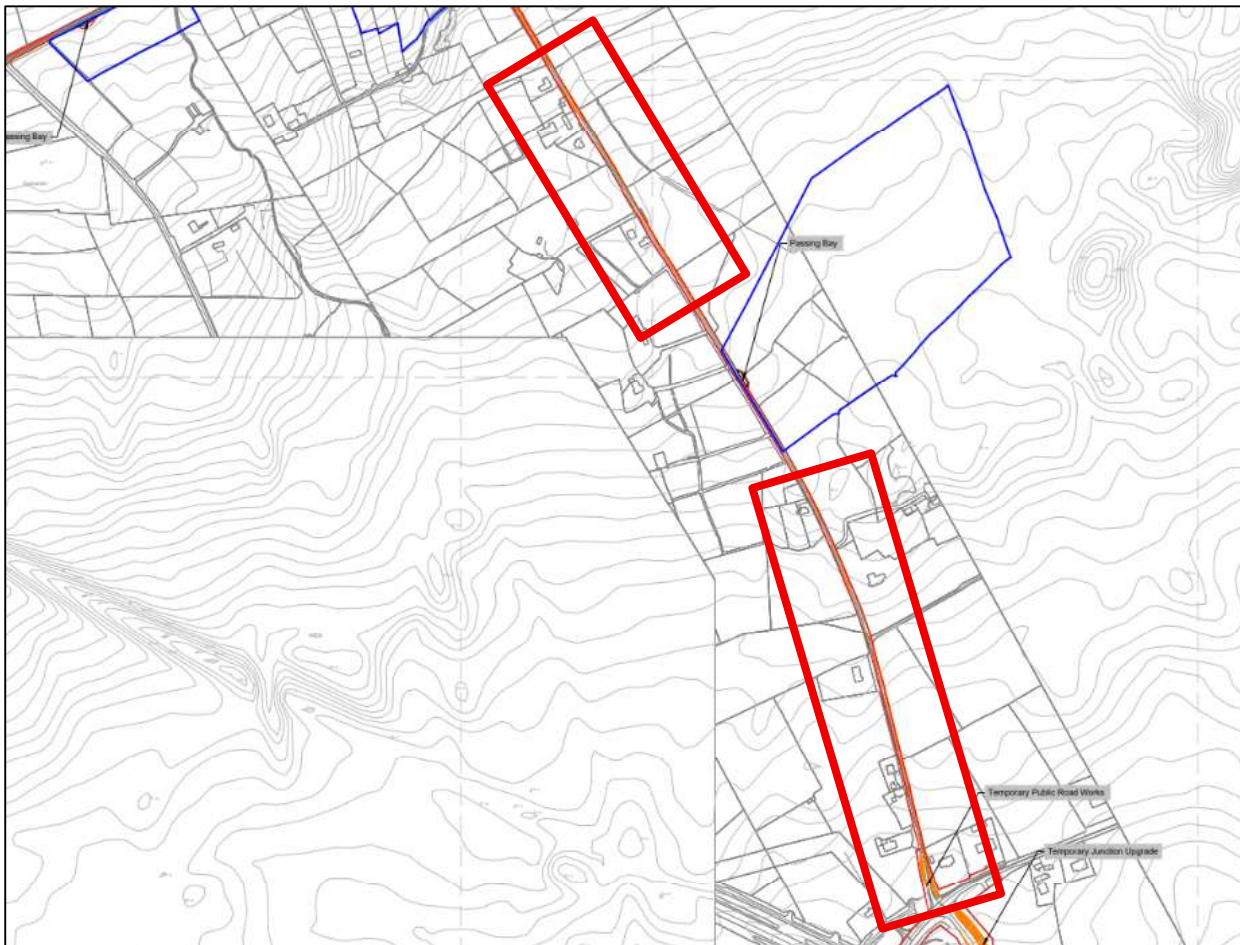
Recommendation:

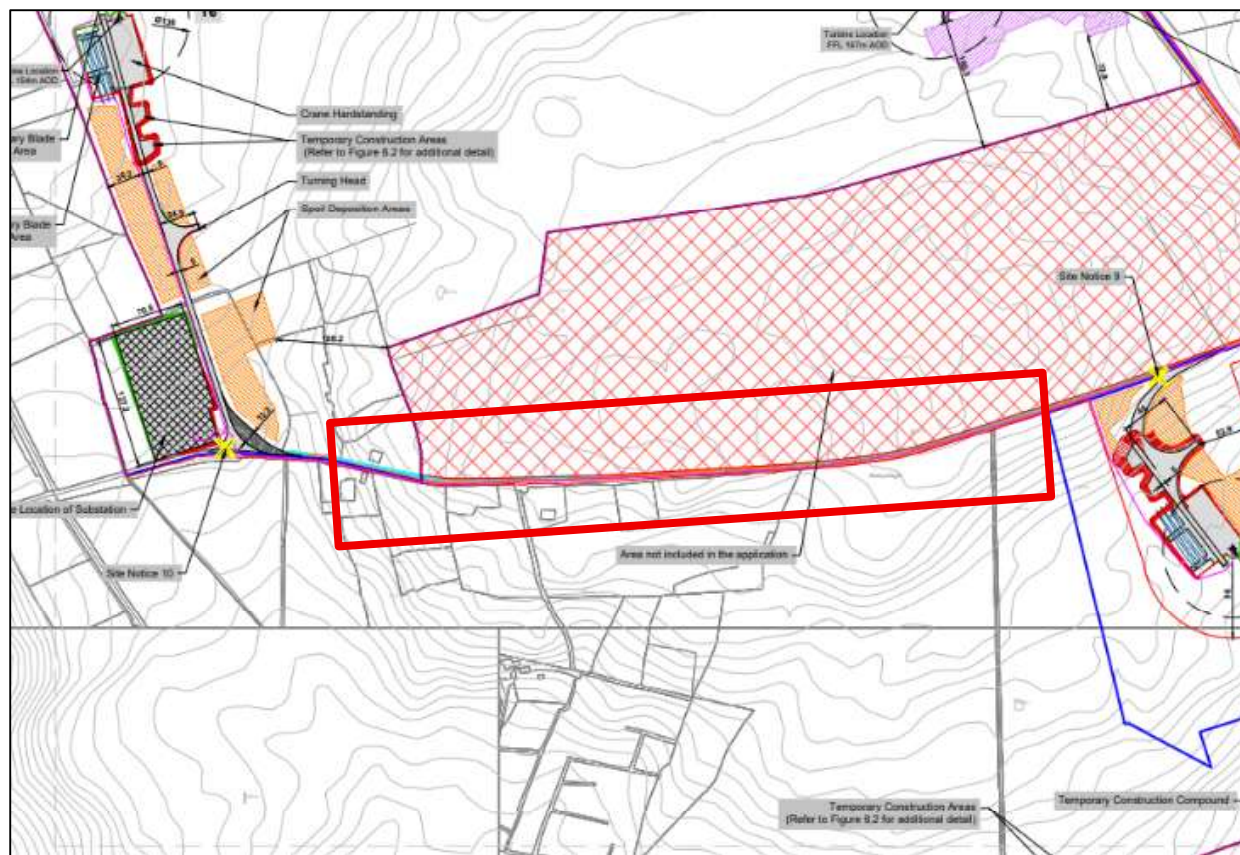
The design team should ensure that adequate provision for vehicles to safely pass and are appropriately sized for the anticipated delivery vehicles along the access route.

Problem No. 04: Intervisibility between Passing Areas

Location: Drawing Reference: (FIGURE 4.4: SITE LAYOUT MAP PLAN 5 OF 5 (STK001ISL_PAS_LAY-0.05, Rev03), FIGURE 4.1: SITE LAYOUT MAP PLAN 2 OF 5 (STK001ISL_PAS_LAY-0.02, Rev03))

The audit team note from the drawings provided that it is intended to provide passing bays along the Local Road to ensure that large vehicles can safely pass one another due to the narrow nature of the existing road. However, it is unclear if appropriate intervisibility can be achieved from one passing bay to another to allow vehicles to safely stop in time to allow another vehicle to pass due to high ditches and vegetation along the Local Road.





Recommendation:

The design team should ensure that clear visibility can be provided from one passing bay to another. The design team should also ensure that there is a dedicated Traffic Management Plan set out for the facility that provides dedicated delivery times for large vehicles to restrict the possibility of larger vehicles meeting along the Local Road.

Problem No. 05: Roadside Obstructions

Location: Various Locations Throughout the Scheme

The audit team note from the site visit that existing roadside features including vegetation were located close to the carriageway. The audit team are concerned that these features may restrict the available road width for HGV and abnormal load movements and may be struck by vehicles travelling along the route.







Recommendation:

The design team should ensure that existing roadside features do not present an obstruction or hazard to anticipated vehicle movements.

Problem No. 06: Absence of Stop Road Markings

Location: Location Identified

The audit team note from the site visit that the existing stop road markings at the junction identified appear worn and faded. Reduced visibility of the road markings may result in drivers having difficulty identifying the road layout and priority arrangements, increasing the potential for driver confusion and vehicle conflicts at the junction.



Recommendation:

The design team should ensure that the existing stop road markings at the junction are reinstated and clearly visible to all road users.

Problem No. 07: Road Surface Condition**Location: Location Identified**

The audit team note from the site visit that the existing road surface appears to be in poor condition at the various locations along the route. The audit team are concerned that the increased HGV and abnormal load movements associated with the proposed development may accelerate deterioration of the existing road surface, potentially resulting in potholes, surface deformation and a reduced standard of road condition. This may increase the potential for loss of vehicle control and conflicts with other road users.

**Recommendation:**

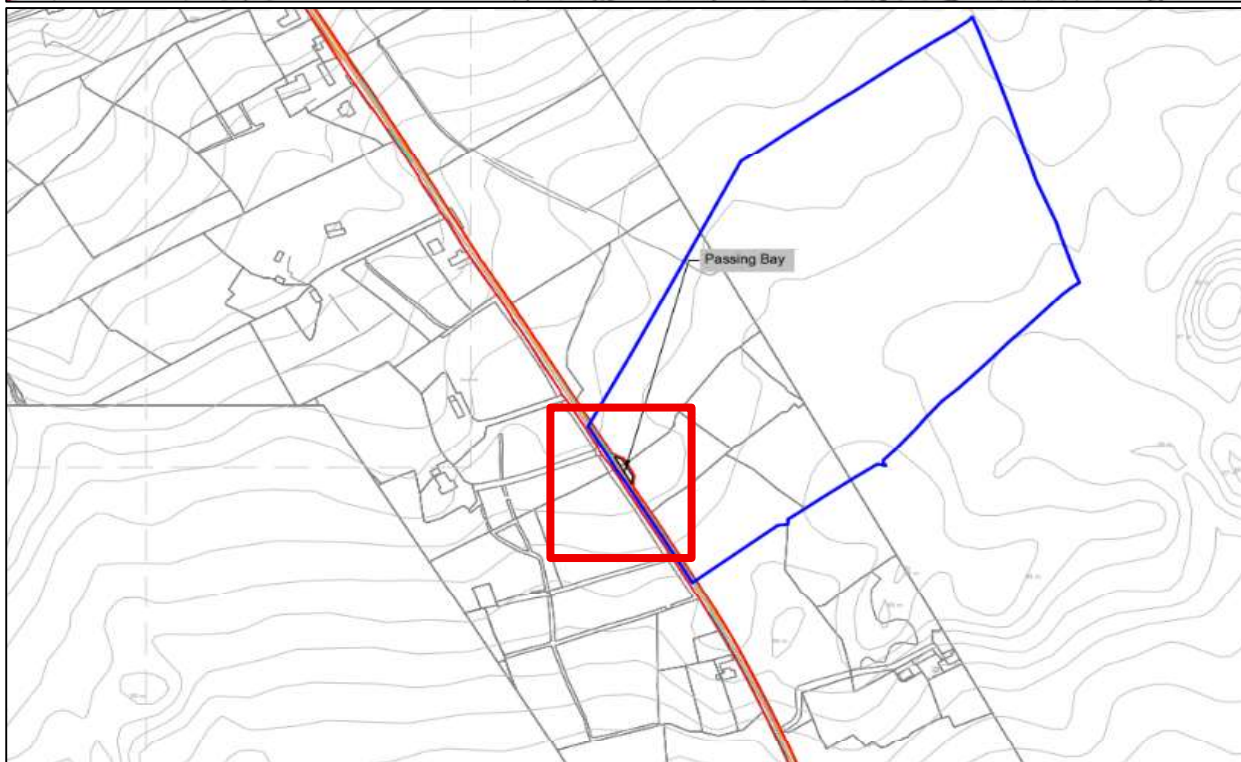
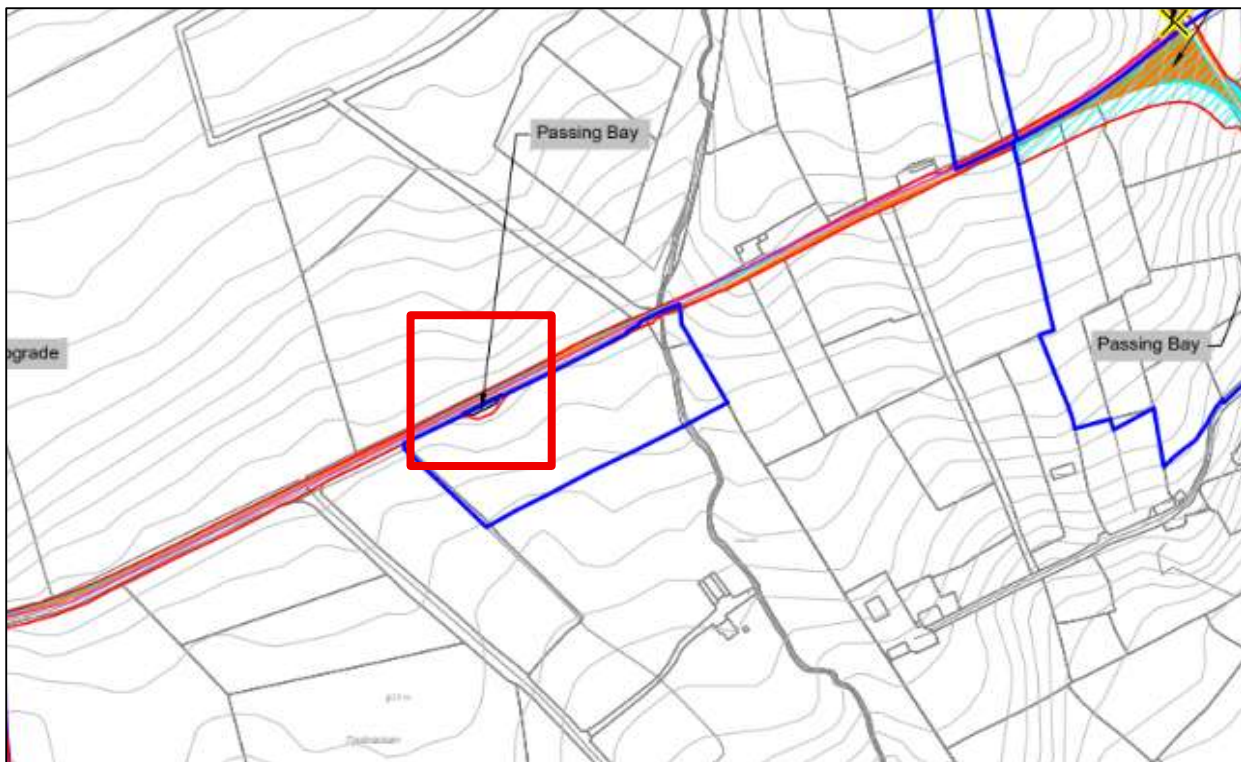
The design team should ensure that the existing road is of a suitable standard to accommodate the anticipated HGV and abnormal load movements associated with the proposed development. These photos are examples and checks should not be confined to these areas only.

Problem No. 08: Lack of Drainage Provision at Passing Bays

Location: Drawing Reference: (FIGURE 4.2: SITE LAYOUT MAP PLAN 3 OF 5 (STK001ISL_PAS_LAY-0.03, Rev03, FIGURE 4.3: SITE LAYOUT MAP PLAN 4 OF 5 (STK001ISL_PAS_LAY-0.04, Rev03, FIGURE 4.4: SITE LAYOUT MAP PLAN 5 OF 5 (STK001ISL_PAS_LAY-0.05, Rev03)

The audit team note from the drawings provided that there is limited information regarding drainage provision at the proposed passing bays and road widening locations. The audit team are concerned that the proposed widening may alter existing overland flow paths and that inadequate drainage provision may result in surface water ponding on the carriageway and passing bays. This may result in reduced skid resistance and vehicle control issues, particularly during periods of heavy rainfall.





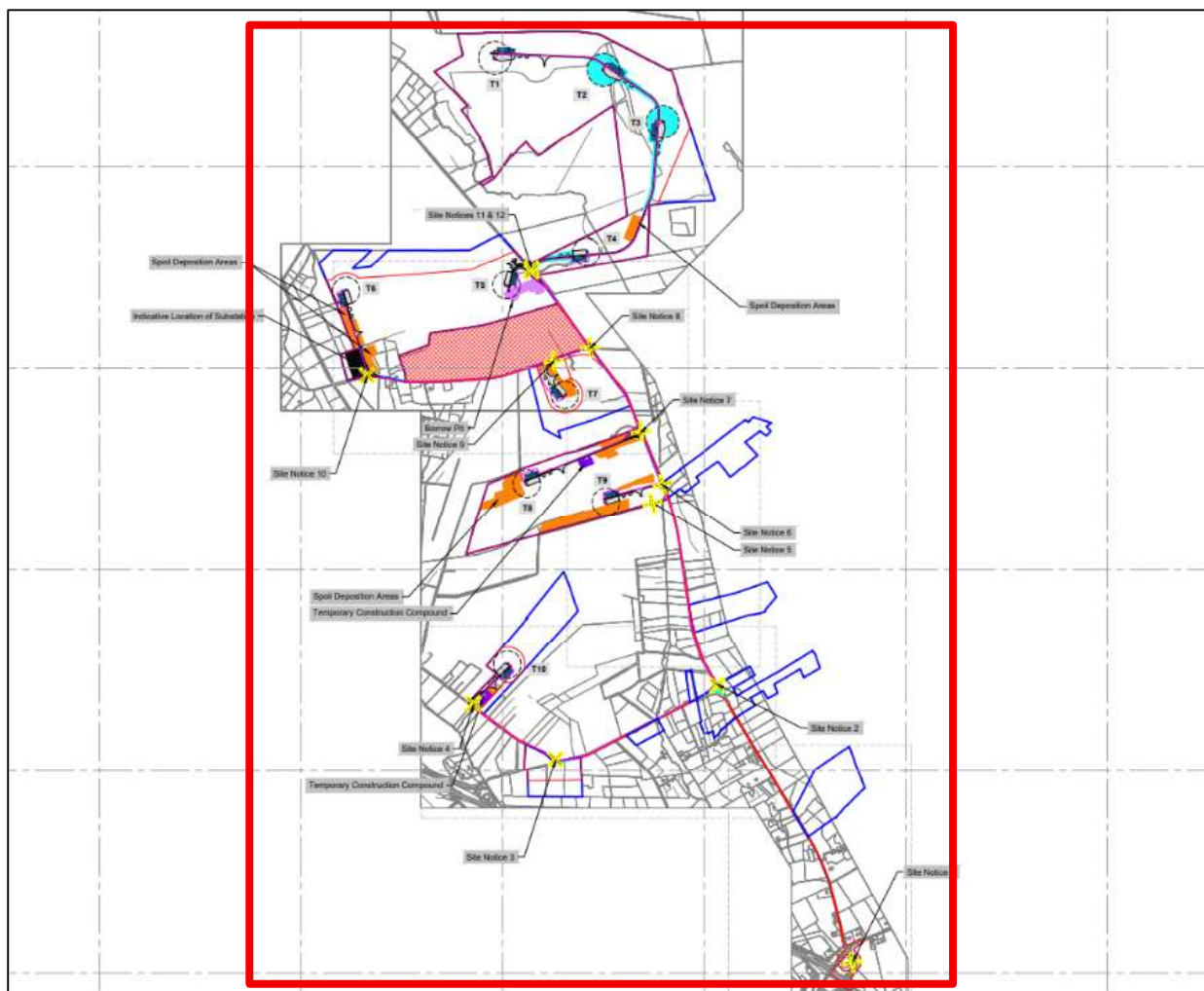
Recommendation:

The design team should ensure that appropriate drainage measures are provided at the proposed passing bays and road widening locations to maintain existing drainage paths and prevent surface water ponding on the carriageway.

Problem No. 09: Absence of Nacelle and Turbine Blade Swept Path Analysis

Location: Throughout the Scheme

The audit team note from the drawings provided that no swept path analysis has been provided to demonstrate that the proposed turbine delivery vehicles can safely negotiate the identified locations along the delivery route. The audit team are concerned that the proposed turbine blades will extend beyond the trailer during transportation and that the associated blade oversail has not been demonstrated. This may result in the blade and/or delivery vehicle conflicting with existing roadside features, vegetation, drainage infrastructure, boundaries or other obstructions, potentially requiring additional road widening or clearance works.



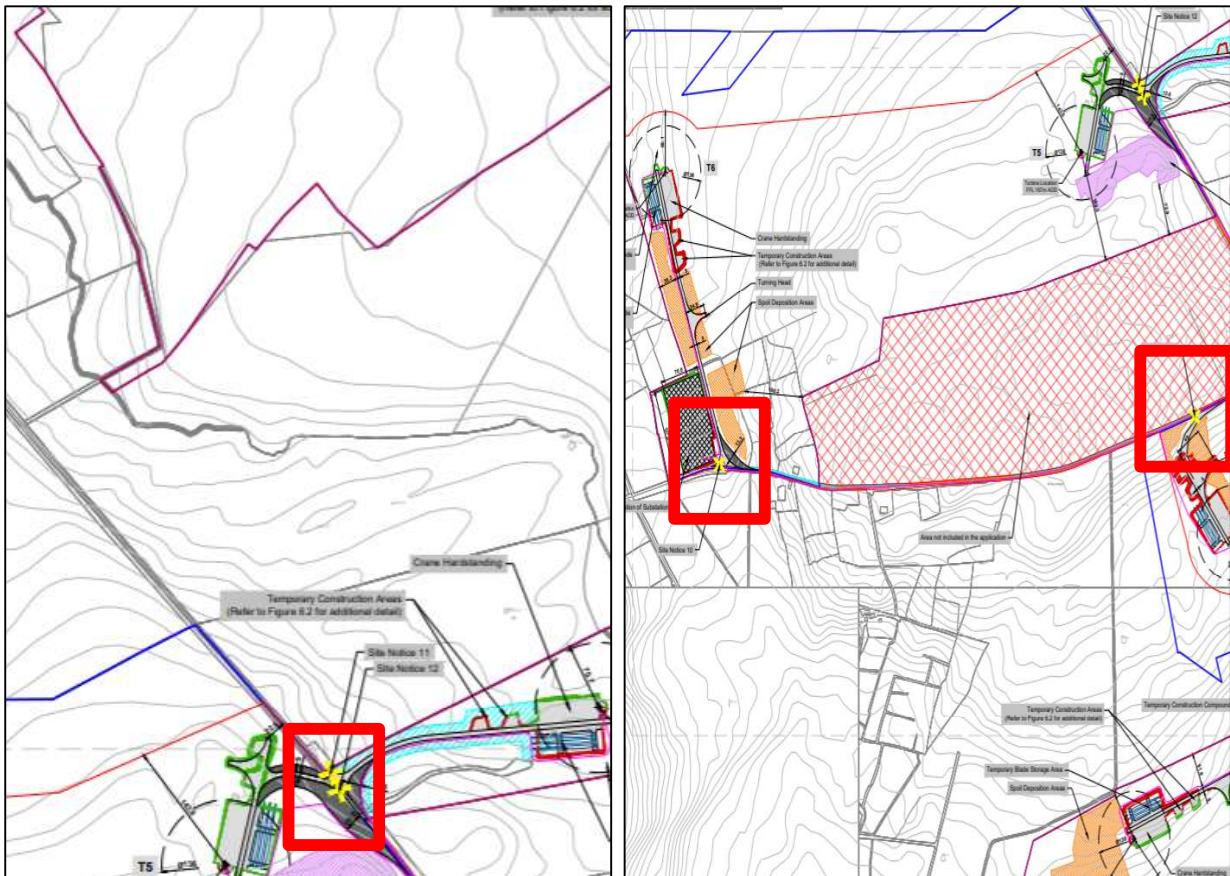
Recommendation:

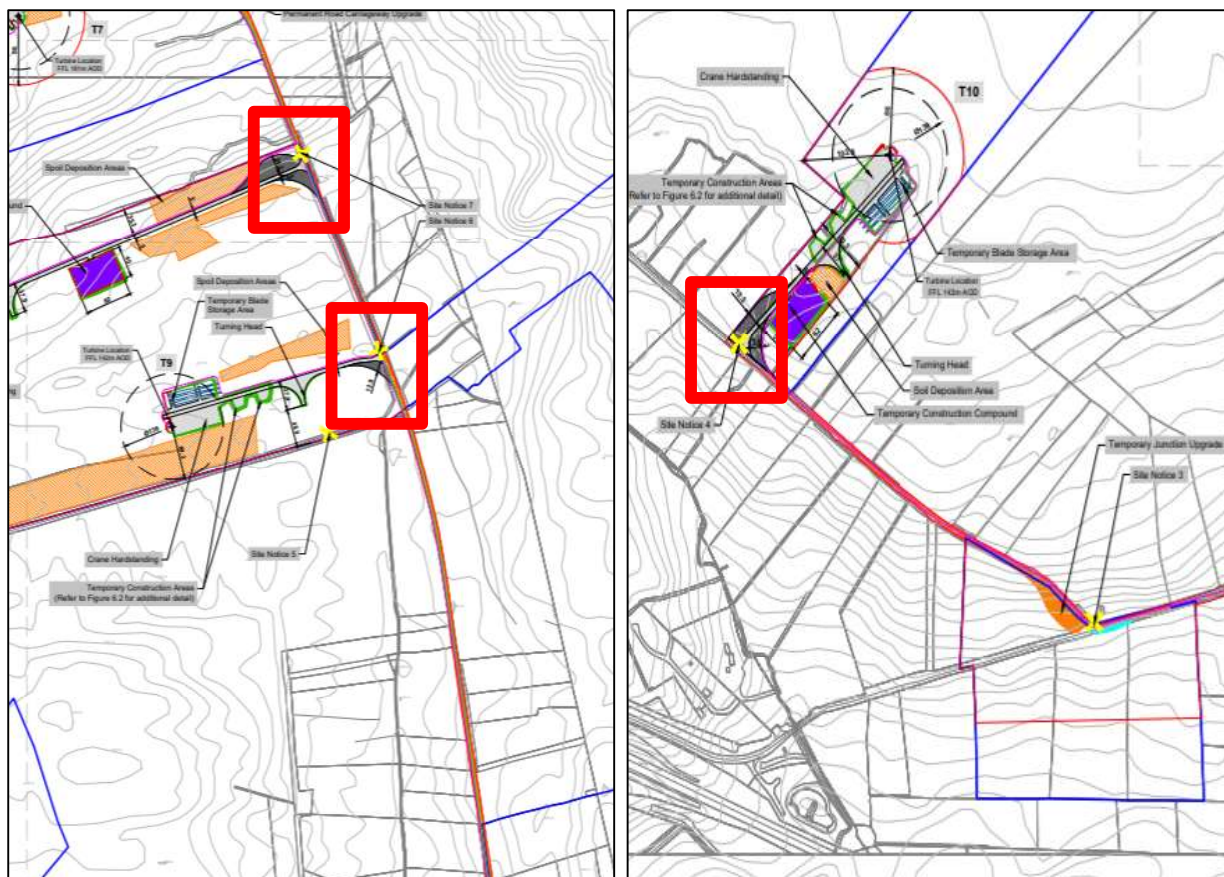
The design team should ensure that a detailed swept path analysis is undertaken for the proposed turbine delivery components and the associated vehicles, including the nacelle full blade configuration and anticipated nacelle and blade oversail, to identify any locations requiring additional road/junction widening, passing bay provision, clearance or other mitigation measures.

Problem No. 10: Risk of HGV Queuing on Local Road to Closed Site Access Gate

Location: Site Layout Plan Sheets 1-5

The audit team notes from the design drawings that there is a lack of clarity regarding vehicle queuing on the Local Road when the site access gate is closed. This presents a potential road safety risk, particularly for Heavy Goods Vehicles (HGVs) waiting to enter the site. Stationary vehicles on the live carriageway can obstruct traffic flow, reduce available sight distance, and create collision hazards for approaching vehicles — especially during low visibility conditions such as at night or in adverse weather. This situation increases the likelihood of rear-end or side-swipe incidents.





Recommendation:

The design team should ensure that the site access is located to provide an appropriate off carriageway holding space for vehicles waiting to enter the site.

4.2 General Problems Identified

Problem No.11: Advanced Warning for Slow Moving Traffic Exiting Junction

Location: All Entrances

The audit team note that there is an absence of advanced warning signage on the local road network approaching the five proposed site entrances. During the construction and operational phases of the solar farm, large delivery vehicles and slow-moving maintenance equipment will frequently exit these junctions to join the public road. Drivers travelling on the main road may not anticipate the presence of heavy vehicles emerging from site tracks. This lack of advanced notice reduces the available reaction time for approaching motorists, heightens the risk of rear-end shunts or side-swipe collisions, and is particularly hazardous in low-light or poor weather conditions.

Recommendation:

The design team should install advanced warning signage on both approaches to each of the five entrances. These signs must be positioned at appropriate distances from the junctions to provide adequate perception-response time for motorists on the local road network. and road markings are detailed on the drawings in accordance with the relevant standards.

Problem No.12 Traffic Management

Location: Within Development

The proposed development will generate significant volumes of Heavy Goods Vehicle (HGV) traffic during the construction phase, including the delivery of construction materials, concrete, plant equipment and abnormal turbine components. The drawings show multiple temporary site entrances and junction upgrades; however, no details have been provided regarding the management of HGV movements to and from the sites on the local rural road network. The construction activity increases the risk of collisions with other vehicular uses of the local road network.

Recommendation:

The design team should ensure that a comprehensive Construction Traffic Management Plan is put in place for agreement with the local authority prior to commencement of works on site to mitigate the risk outlined above.

Problem No.13: Lack of Dimensions

Location: Throughout Scheme

The audit team note that the design drawings lack specific dimensions for several key elements throughout the scheme. There is an absence of detailed corner radii and proposed carriageway widths. This lack of quantitative detail prevents a comprehensive assessment of junction safety and accessibility for large vehicles, increasing the risk of infrastructure damage, or collisions with vulnerable road users.

Recommendation:

The design team should provide a fully dimensioned set of drawings specifying carriageway widths and corner radii.

5 Audit Team Statement

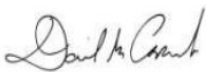
We certify that we have examined the drawings listed in Appendix A and examined the site by means of a site visit. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the safety of the scheme. The issues that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be studied for implementation.

Audit Team Leader: Mark Gallagher, MIEI
ORS

Signed: 

Date: 07th September 2026

Audit Team Member: David McCormack: BEng (Hons), Dip Eng., CEng, MIEI
ORS

Signed: 

Date: 07th September 2026

Audit Team Observer: John Igoe: BEng (Hons), MEng, MIEI
ORS

Date: 07th September 2026

Appendix A – Inspected Documents

The audit team reviewed the following drawings and documents provided by the design team.

- 1) FIGURE 1.0: OVERALL LOCATION MAP (STK001ISL_PAS_LOC-0.01, Rev03)
- 2) FIGURE 2.0: OVERALL LOCATION MAP (STK001ISL_PAS_LOC-0.02, Rev03)
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- 14) FIGURE 5.5: SITE ENTRANCE PLAN 6 OF 6 (STK001ISL_PAS_LAY-0.11, Rev02)

Appendix B – Designer Response Form

Job: 262305 – Wind Farm Application, Toobrackan, Tallaghan, Ballaghaderreen, Co. Meath

Stage of Audit: Stage 1

Date Audit Completed: 07^h September 2026

Problem Reference in Safety Audit Report	To Be Completed by the Designer			To be Completed Audit Team Leader
	Problem Accepted (Yes/No)	Recommendation Accepted (Yes/No)	Alternative Option (Describe) (Only complete if recommendation not accepted)	Alternative Option Accepted by Auditors (Yes/No)
P01	Yes	Yes. The site entrance and junction locations identified will be subject to permanent or temporary upgrade works which shall include improvements to visibility.		
P02	Yes	Yes. The proposed development provides for the widening of the carriageways of local roads as required. Verge markers and edge lining will be provided at required locations.		
P03	Yes	Yes. Four dedicated passing bays have been proposed while vehicular traffic will also be able to make use of proposed site entrances and forestry entrances for passing opportunities.		
P04	Yes	Yes. In addition to the dedicated passing bays, there are a number of other passing opportunities including at forestry and agricultural access points. A Traffic Management Plan will be prepared which will provide further detail on delivery schedules to minimise HGVs meeting along local roads.		
P05	Yes	Yes. Prior to the commencement of		

		construction, a number of haul route inspections will be carried out to ensure that all potential obstacles and hazards are removed.		
P06	Yes	Yes. As part of the proposed development, the identified junction will be subject to upgrade works. As part of the reinstatement of these works, all road markings shall be reinstated and made clearly visible.		
P07	Yes	Yes. The proposed development provides for the upgrading of the carriageways, as required, of local roads in the vicinity of the site prior to the commencement of construction. Similarly, post-construction, where any deterioration is identified and is directly attributable to the construction works, remedial measures/actions shall be undertaken.		
P08	Yes	Yes. As part of the post-consent detailed design process, appropriate drainage infrastructure shall be incorporated into the passing bay design.		
P09	No.	Yes. A detailed Route Access Survey has been conducted and the necessary works required to enable the delivery of turbine components to the project site are known and have been incorporated into the proposed development as required.		
P10	Yes	Yes. As part of the post-consent detailed design process, the precise siting of boundary fencing and gates shall be defined. However, the design process shall ensure that gates are adequately set back from the road edge to allow a HGV pull fully off the road and to avoid queuing on the public road.		
P11	Yes	The design of a scheme of advance warning signage shall be carried out as part of		Yes

		the post-consent detailed design process and as part of a detailed Traffic Management Plan.		
P12	No.	Yes. The Environmental Impact Assessment Report has set out planning-stage details relating to traffic management; however, the precise management arrangements shall form part of a Traffic Management Plan which shall be agreed with the Planning Authority prior to the commencement of construction.		Yes
P13	Yes.	Yes. The post-consent detailed design process shall incorporate the necessary level of specific detail regarding corner radii and carriageway widths. As described above, the Route Access Survey has identified the need for accommodation works along the local road network and these works have been incorporated into the proposed development as necessary.		

Signed: Joseph Buckley Designer

Date: 11/09/2026

Signed: Mark Gallagher Audit Team Leader

Date: 15/09/2026

Signed: Killian Boland Employer

Date: 15/09/2026



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