

25232-02-001

EAST LIMERICK SUBSTATION DEVELOPMENT

Road Safety Audit Stage 1/2

for

MPA CONSULTING ENGINEERS

On behalf of

**HARMONY SOLAR EAST LIMERICK
LTD.**

SEPTEMBER 2026



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DOCUMENT CONTROL SHEET

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Document No.	25232-02-001

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TABLE OF CONTENTS

1. INTRODUCTION4

2. STAGE 1/2 AUDIT5

3. AUDIT TEAM STATEMENT7

4. SAFETY AUDIT FEEDBACK FORM8

APPENDIX A9

1. INTRODUCTION

- 1.1 This report describes a Stage 1/2 Road Safety Audit carried out at the proposed substation at East Limerick commissioned by Harmony Solar East Limerick Ltd. on behalf of MPA Consulting Engineers. The audit was carried out on 9TH September 2026 in the offices of Roadplan Consulting, Kilkenny.
- 1.2 The audit team members were as follows:
 - George Frisby, BE CEng MIEI
Auditor Number GF51255
 - Jithin Philip Zachariah, PhD
Auditor Number JP438023
 - Jan-Ross Jordaan
Audit Trainee
- 1.3 The audit team members visited the site by day on the 8th September 2026. The audit comprised of an examination of the drawings relating to the scheme supplied by MPA Consulting Engineers and an examination of the site.
- 1.4 The speed limit at the proposed works location is 60 km/h.
- 1.5 This Stage 1/2 Audit has been carried out in accordance with the relevant sections of TII GE-STY-01024. The team has 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 design to any other criteria.
- 1.6 All problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence.
- 1.7 Appendix A contains copies of the audited drawings.
- 1.8 The proposed access to the sub-station site from the R516 will be a temporary delivery access only if required. Any delivery via this access point will be carried out with necessary temporary traffic arrangements in place.

2. STAGE 1/2 AUDIT

2.1 Problem: Skewed Angle

Location: Substation Access

The proposed development access intersects the local road at a skewed angle rather than at, or close to, a right angle. As a result, drivers exiting the development will be required to look back over their right shoulder to observe approaching traffic on the local road. This manoeuvre may reduce the effectiveness of driver observations and compromise intervisibility between exiting and approaching vehicles. Consequently, the likelihood of missed observations and vehicular conflicts may be increased.

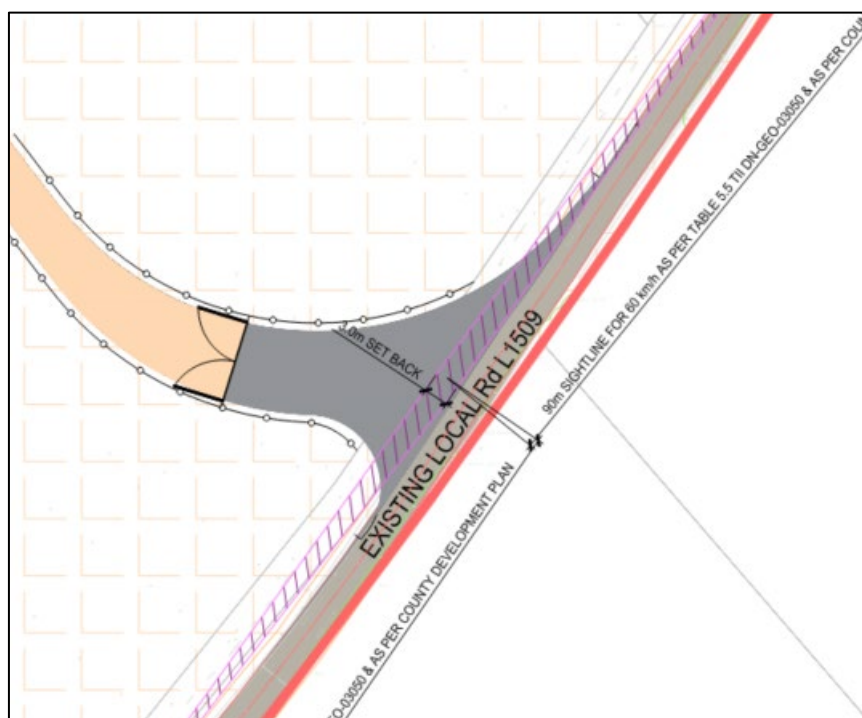


Figure 2.7 – Skewed Angle

Recommendation: Revise the alignment of the proposed development access to form a junction angle as close as practicable to 90 degrees with the local road.

2.2 Problem: Vehicle Over-run

Location: R513/L1509 Junction

Swept path analysis indicates that the proposed delivery vehicle overruns the existing footpath and carriageway edge at the R513/L1509 junction during turning manoeuvres. As a result, pedestrians using the footpath may be at increased risk of conflict with turning vehicles. Repeated overrun of the footpath may also result in damage to the footway surface, potentially creating trip hazards for pedestrians. In addition, vehicle overrun of the carriageway edge may increase the risk of loss-of-control collisions and damage to the road infrastructure.

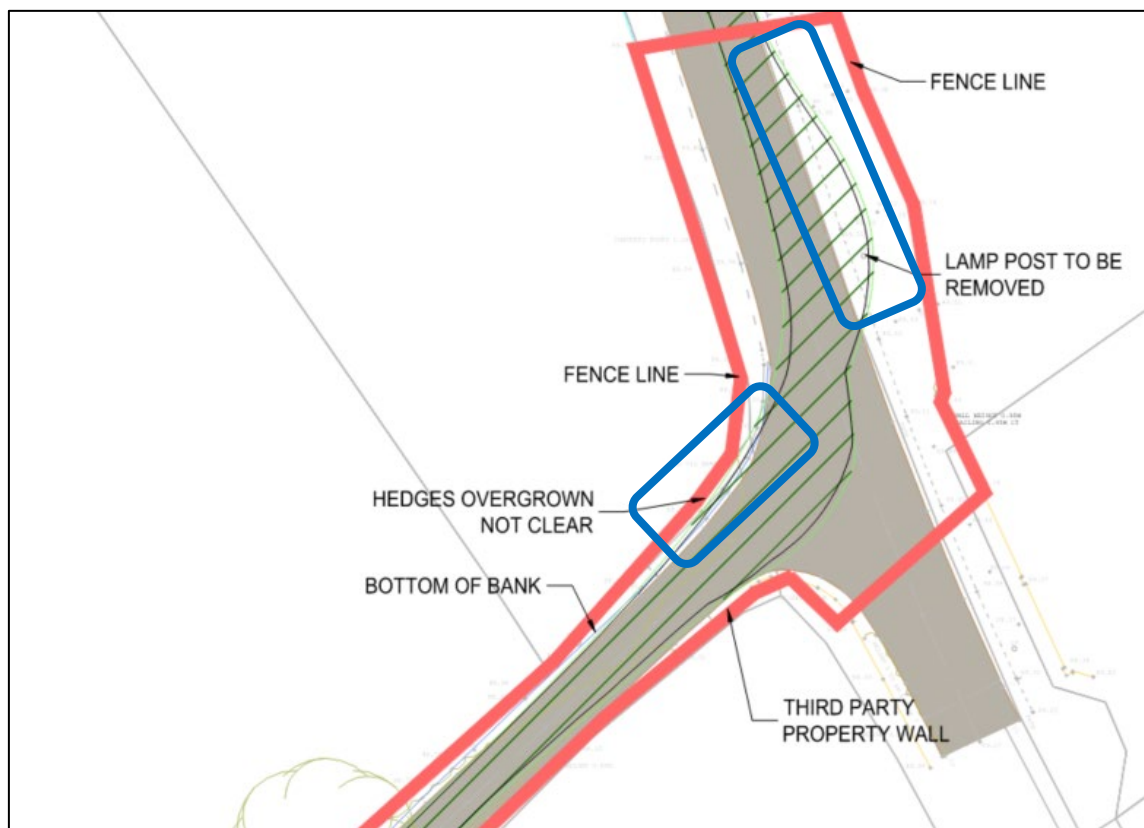


Figure 2.8 – Vehicle Over-run

Recommendation: Review the junction layout and vehicle access arrangements to ensure that the design delivery vehicle can complete the required turning manoeuvres without overrunning the existing footpath or carriageway edge. Where this cannot be achieved, appropriate measures should be provided to mitigate the risk to pedestrians and other road users.

3. AUDIT TEAM STATEMENT

- 3.1 We certify that we have examined the drawings listed in Appendix A and have inspected the site. This examination has been carried out with the sole purpose of identifying any features of the scheme that could be removed or modified to improve the safety of the scheme.

Signed.....  George Frisby

Date 9th September 2026.....

Signed.....  Jithin Philip Zachariah

Date 9th September 2026.....

4. SAFETY AUDIT FEEDBACK FORM

Scheme: Proposed Substation, East Limerick

Document Number: 25232-02-001

Audit Stage: Stage 1/2

Date Audit Completed: 9th September 2026

Paragraph No. in Safety Audit Report	To Be Completed By Designer			To Be Completed by Audit Team Leader
	Problem accepted (yes/no)	Recommended measure Accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted.	Alternative measures or reasons accepted by auditors (yes/no)
2.1	Yes	Yes. The access has been revised to form a junction angle of 70 degrees as per DN-GEO-03060. This provides a less skewed junction angle, while still facilitating the vehicle movements associated with the transformer delivery. This is shown on drawing no. 251014-SS-X-X-XXX-DR-CE-1200.		
2.2	Yes	Yes. The drawing has been updated to show temporary road widening measures to facilitate the vehicle movements associated with the substation delivery. This is shown on drawing no. 251014-SS-X-X-XXX-DR-CE-1201.		

Safety Audit

Signed off  Design Team Leader

Print Name .Martin Peters.....

Date ...09/09/26...

Safety Audit

Signed off ...  ... Employer

Print Name William Leeche.....

Date ...09/09/26...

Safety Audit

Signed off  Audit Team Leader

Print Name ...George Frisby

Date ...10/9/2026.....

Please complete and return to:

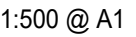
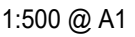
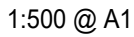
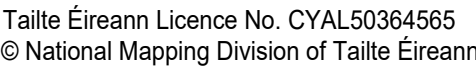
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7, Ormonde Road
Kilkenny
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APPENDIX A

List of Drawings Examined

The following drawings have been provided electronically in PDF format by MPA Consulting Engineers and are appended here.

Drawing Number	Rev	Drawing Title
251014_MPA_SS_X_X_XXX-DR-CE-1200	01	Proposed Substation Access Layout
251014_MPA_SS_X_X_XXX-DR-CE-1201	01	Proposed Access Road Layout-Sheet 1 of 3
251014_MPA_SS_X_X_XXX-DR-CE-1202	01	Proposed Access Road Layout-Sheet 2 of 3
251014_MPA_SS_X_X_XXX-DR-CE-1203	01	Proposed Access Road Layout-Sheet 3 of 3



Issue Register

GENERAL NOTES:-

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS.
2. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS & ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ALL DISCREPANCIES TO BE NOTIFIED, IN WRITING TO ENGINEERS & ARCHITECTS FOR RESOLUTION.
4. ALL DIMENSIONS ON DRAWINGS ARE IN METERS UNLESS OTHERWISE NOTED.

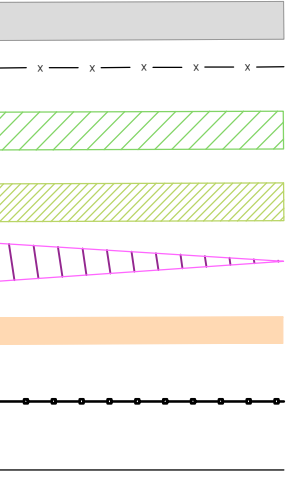
DRAWING NOTES:-

REFER TO NOTES TEMPLATE

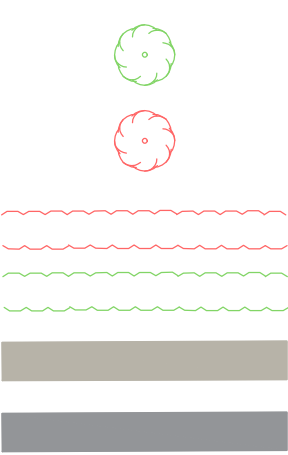
ABBREVIATIONS:-

BTM	BOTTOM
C/C	CENTRE TO CENTRE
CTRS	CENTRES
SFL	STRUCTURAL FLOOR LEVEL
FFL	FINISHED FLOOR LEVEL
TOC	TOP OF CONCRETE
TP	TOP
TOS	TOP OF STEEL
UNO	UNLESS NOTED OTHERWISE

GENERAL LEGEND:-



DENOTES EXISTING BUILDING WITHIN SITE
 DENOTES SOLAR FARM FENCE
 DENOTES EXISTING HEDGEROW
 DENOTES PROPOSED HEDGEROW
 DENOTES PROPOSED SIGHTLINES
 DENOTES PROPOSED SOLAR FIELD ACCESS
 TRACK
 DENOTES POST AND RAIL FENCE AS PER TI
 CC-SCD-00301
 DENOTES PROPOSED KERB



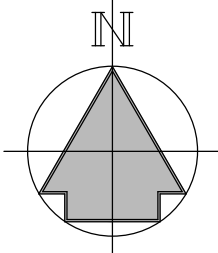
DENOTES EXISTING TREES
 DENOTES EXISTING TREES TO BE REMOVED
 DENOTES EXISTING ROAD SIDE
 HEDGING TO BE REMOVED
 DENOTES EXISTING ROAD SIDE
 HEDGEROW AS PER TOPO SURVEY
 DENOTES EXISTING ROAD
 DENOTES ASPHALT DWELL AREA
 AS PER DETAILS

Client: HARMONY SOLAR EAST LIMERICK LTD.									
Project: EAST LIMERICK SUBSTATION DEVELOPMENT, HOSPITAL , Co. LIMERICK									
Drawing Title: PROPOSED SUBSTATION ACCESS LAYOUT									
Project	Originator	Phase	Element	Spatial Zone	Level	Type	Role	Number	
25/01/24	MPA	SS	X	X	XXXX	DR	CE	1200	
Date	Checked	Date	Scale	Purpose				Revision	
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 Consulting Engineers

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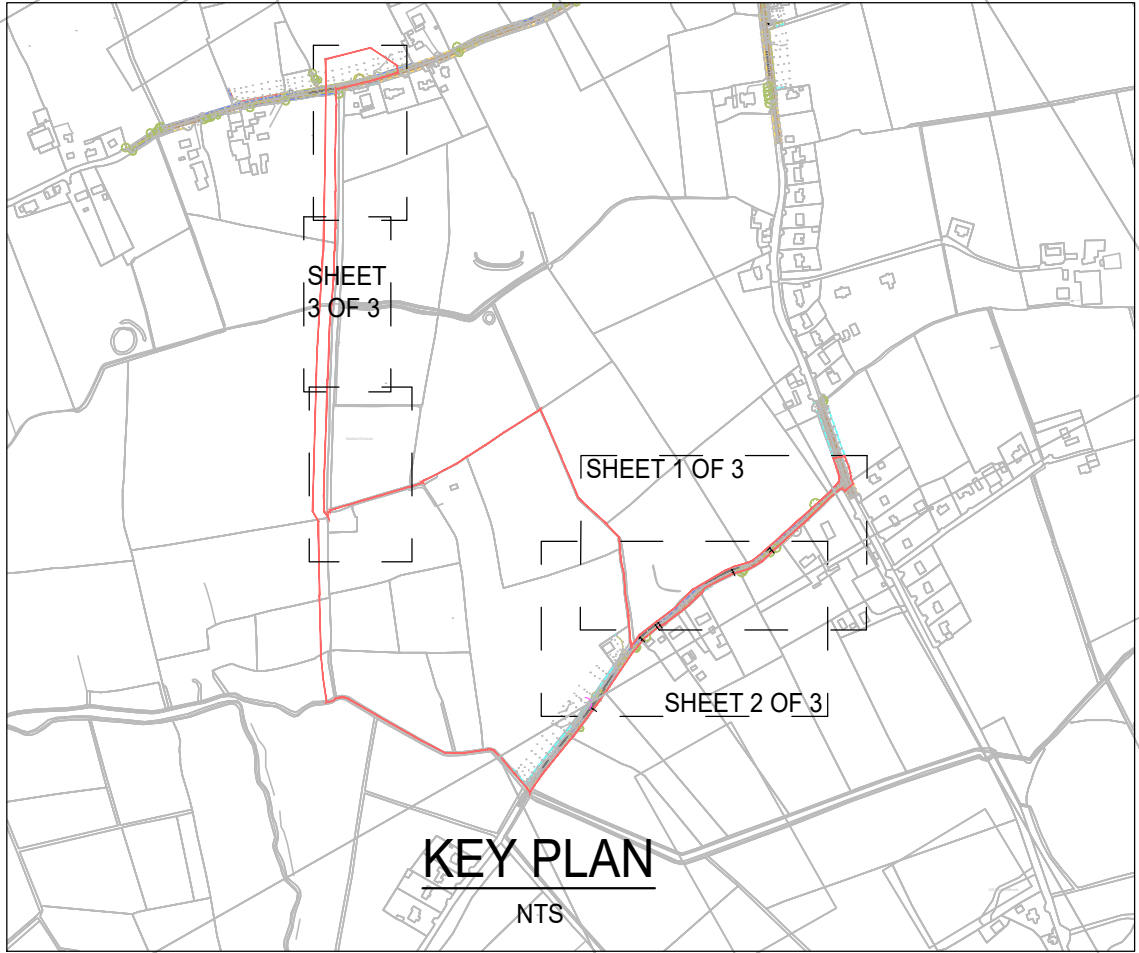
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PROPOSED ACCESS ROAD LAYOUT
1:500 @ A1



Issue Register

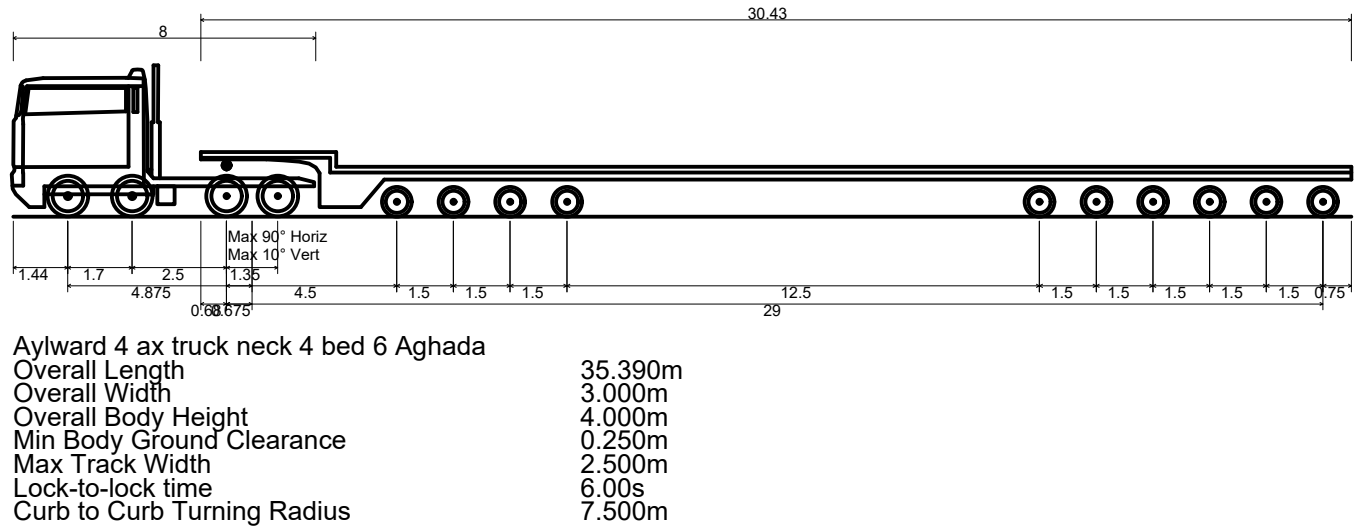
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GENERAL LEGEND:-

- DENOTES SITE BOUNDARY
- DENOTES FENCE LINE
- DENOTES BOTTOM OF BANK
- DENOTES ROAD EDGE
- DENOTES PROPOSED KERB
- DENOTES PROPOSED ROAD WIDENING WORKS



Client: HARMONY SOLAR EAST LIMERICK LTD.

Project: EAST LIMERICK SUBSTATION DEVELOPMENT, HOSPITAL, Co. LIMERICK

Drawing Title: PROPOSED ACCESS ROAD LAYOUT - SHEET 1 OF 3

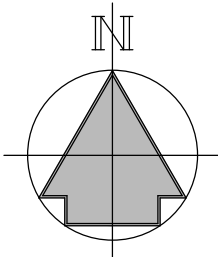
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Drawn	Checked	Date	Scale	Project	Revision
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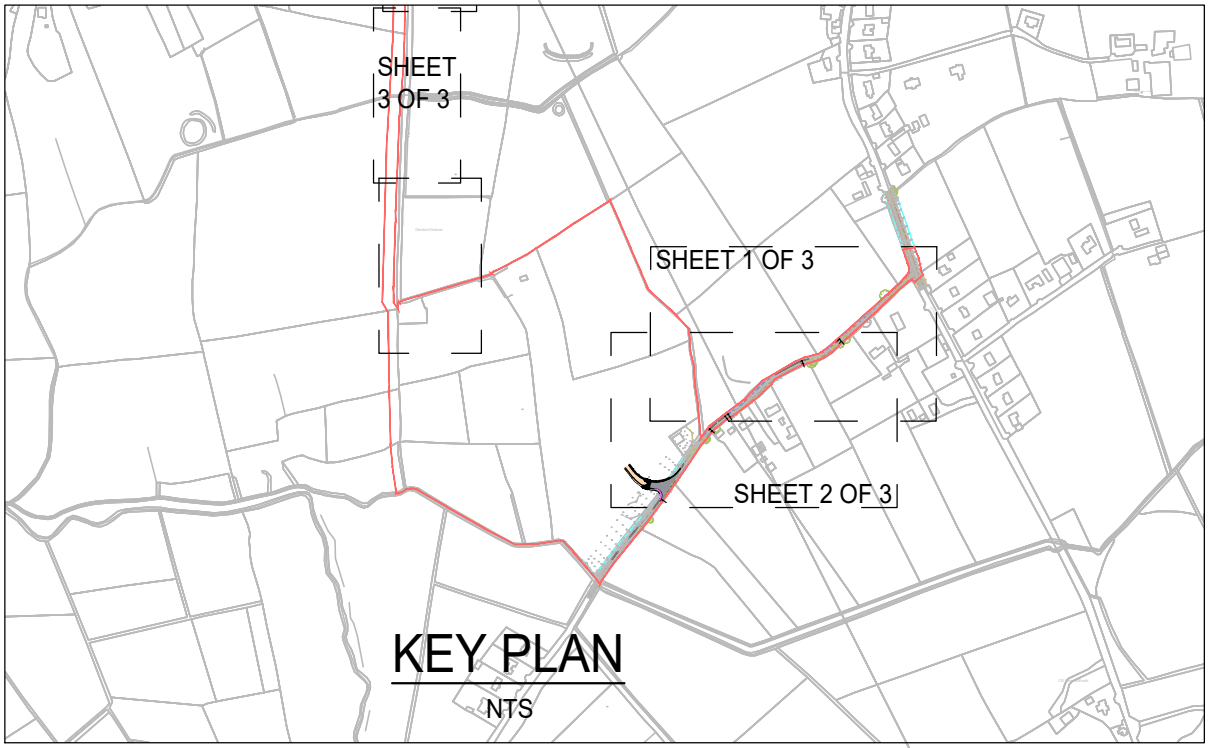


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PROPOSED ACCESS ROAD LAYOUT

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Issue Register

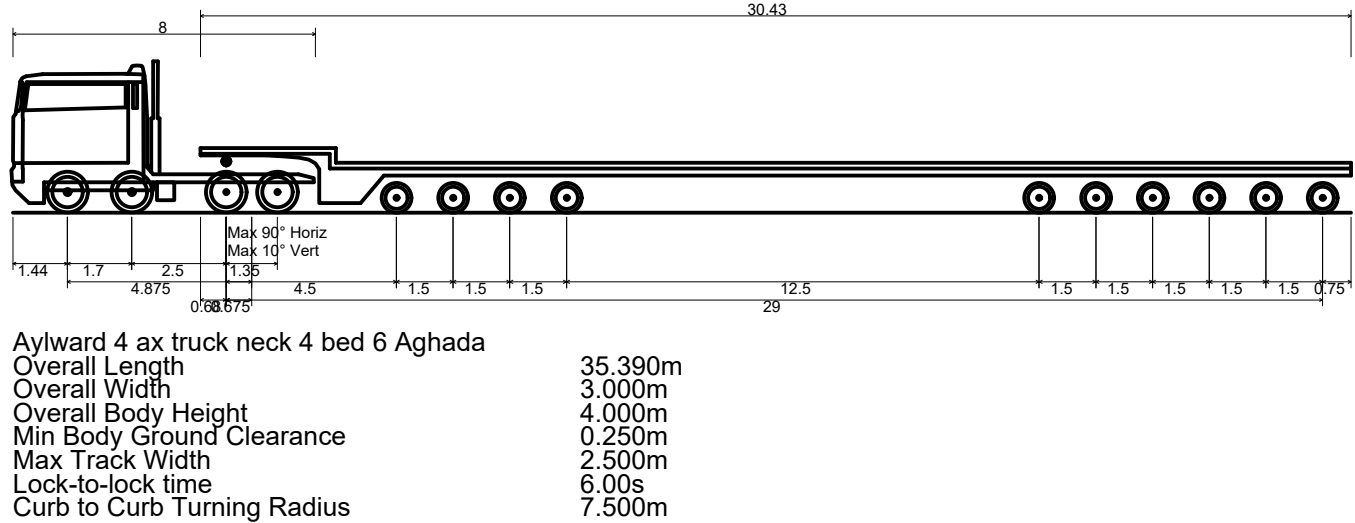
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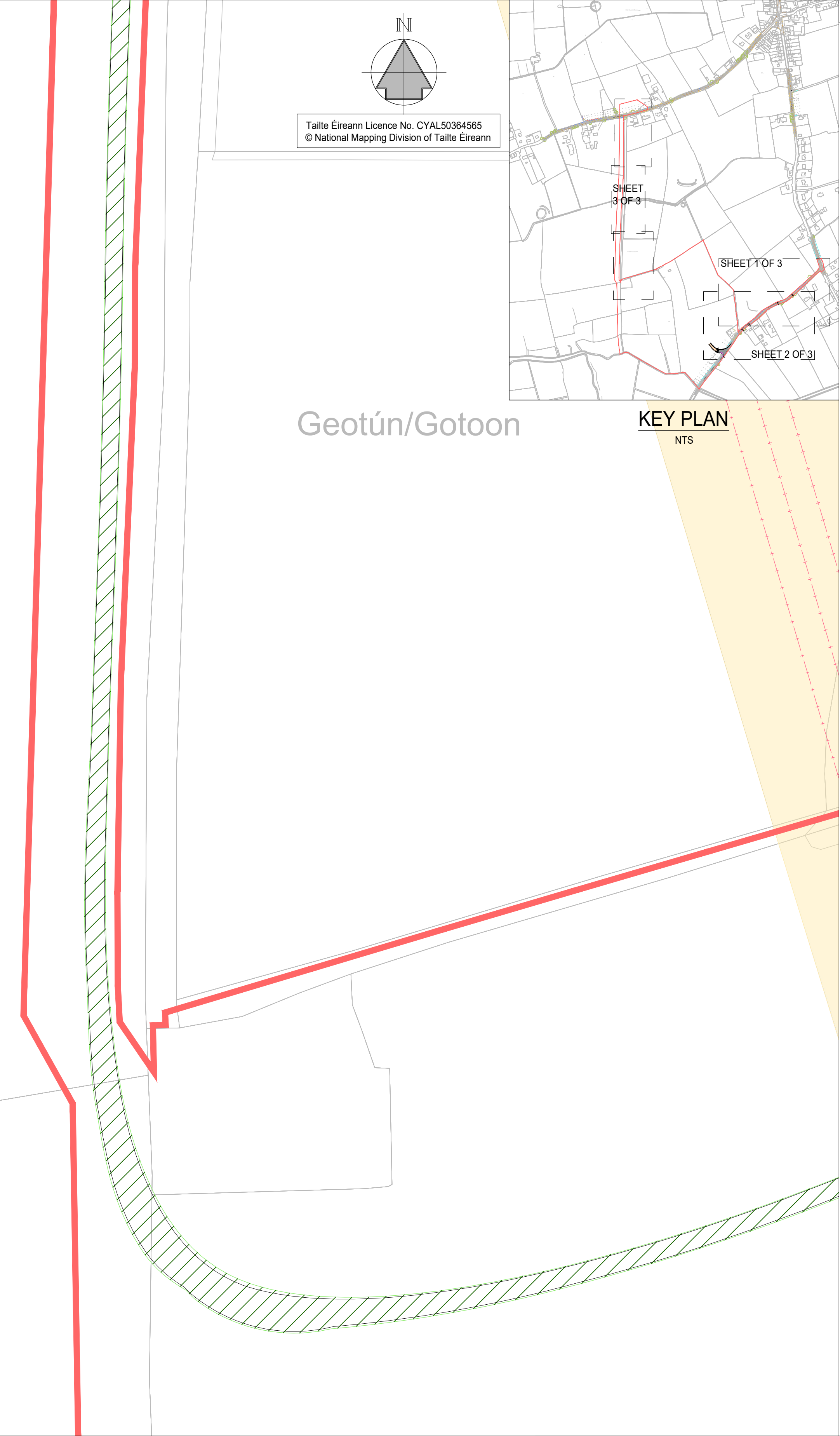
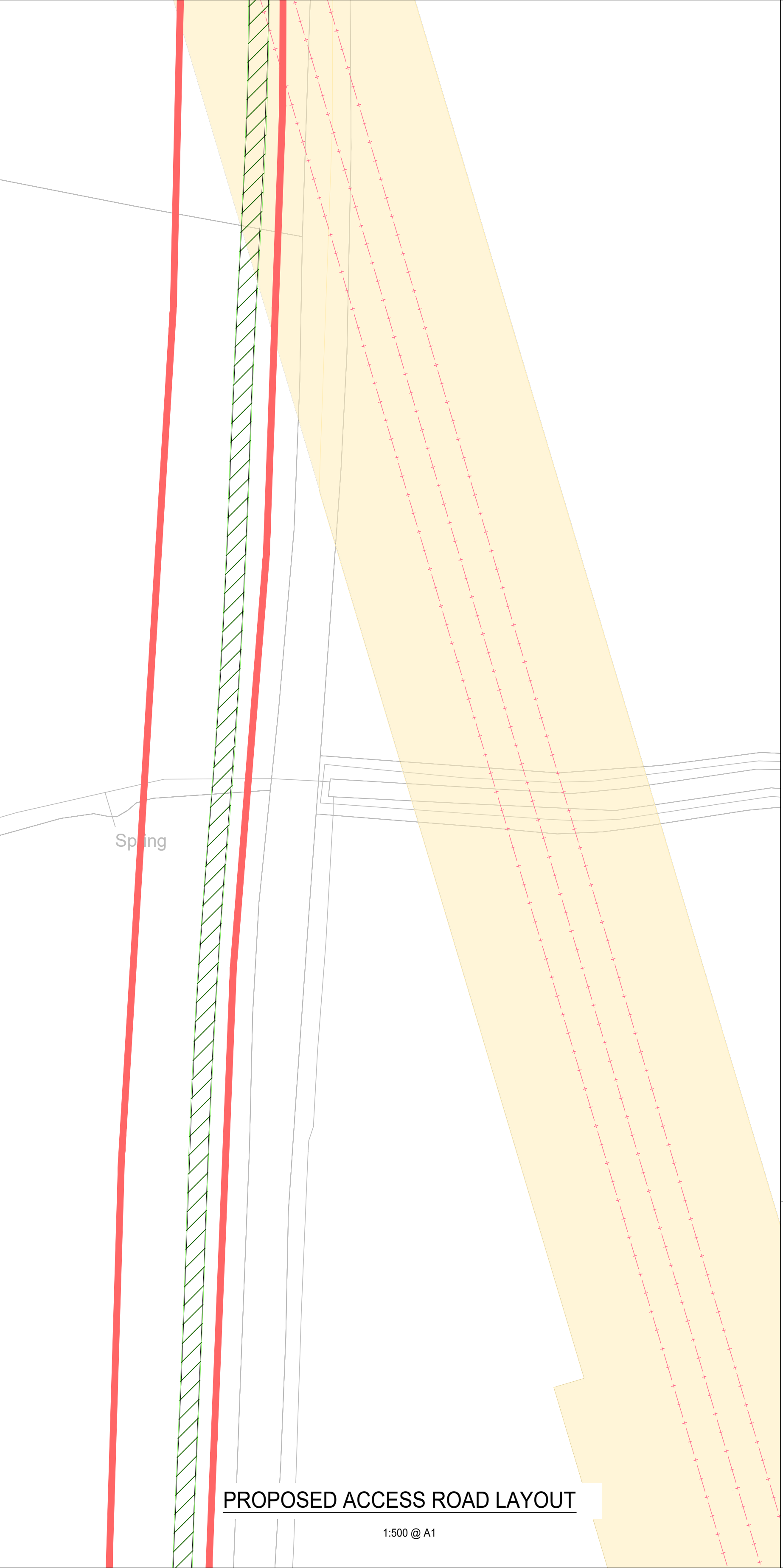
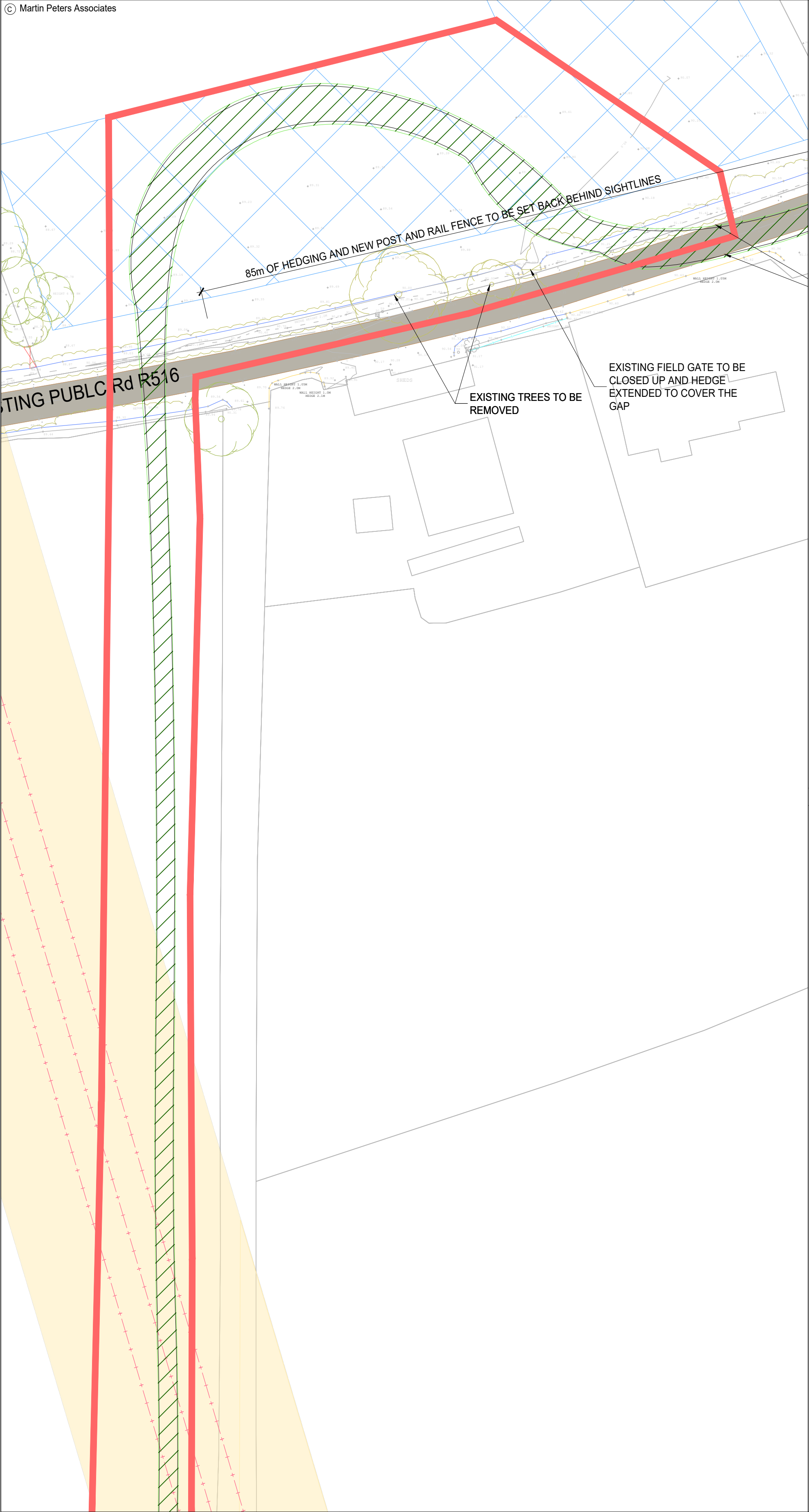
Project:
EAST LIMERICK SUBSTATION DEVELOPMENT,
HOSPITAL, Co. LIMERICK

Drawing Title:
PROPOSED ACCESS ROAD LAYOUT -
SHEET 2 OF 3

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Drawn	Checked	Date	Scale	Purpose	Rev	Rev	Rev	Rev
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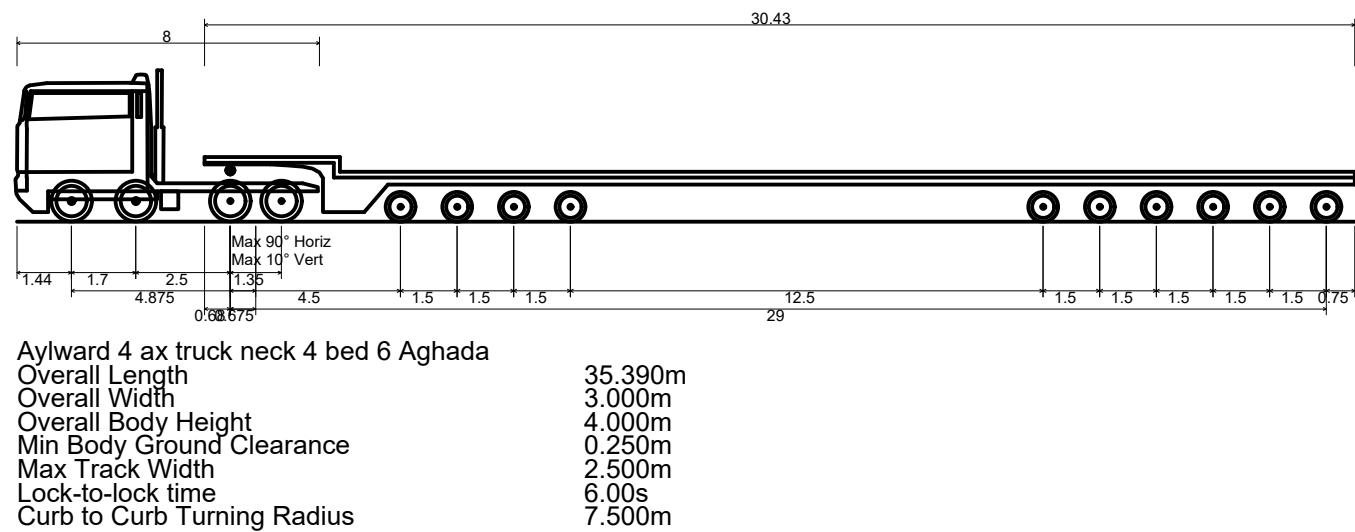
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Client: HARMONY SOLAR EAST LIMERICK LTD.

Project: EAST LIMERICK SUBSTATION DEVELOPMENT, HOSPITAL, Co. LIMERICK

Drawing Title: PROPOSED ACCESS ROAD LAYOUT - SHEET 3 OF 3

Project	Originator	Phase	Element	Spatial Zone	Level	Type	Role	Number
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