Pell Frischmann

Land West of Ratby

Pell Frischmann Transport Technical Note

109003

Pell Frischmann

Project	Land West of Ratby
Document Title or Subject	Pell Frischmann Transport Technical Note
Document Reference	109003-PEF-ZZ-XX-T.TN-H-000019
Revision Reference	S2_P1
Date	27/05/2026

1 Introduction

1.1.1 Pell Frischmann (PF) has been instructed by Lagan Homes (the Client) to provide highways and transport advice to support an outline planning application (with all matters reserved apart from access) for a phased, mixed-use development comprising about 470 dwellings (Use Class C3) and provision of 1FE primary school (Use Class F1) and associated operations and infrastructure including but not limited to site re-profiling works, sustainable urban drainage system, public open space, landscaping, habitat creation, internal roads/routes, and upgrades to the public highway.

1.1.2 The Parish Council have held a meeting with the Local Highway Authority to discuss a number of highway points regarding the Outline Planning Application for this site. It is understood that following these discussions, LCC have agreed/reaffirmed that the vehicle numbers/volume of traffic has been accounted for as part of the TA. Notwithstanding this, following the meeting, LCC have suggested that clarification could be made of the re-routing of larger vehicles post the downgrade of Burroughs Road and further tracking/testing of the proposed junction upgrades/changes for these vehicles that will use the Desford Lane Junction.

1.1.3 The following presents additional detail and clarification regarding the re-routing of these larger vehicles as well as tracking of these vehicles in both the existing situation and the future situation following the re-routing along the spine road.

2 Existing Burroughs Road Access

2.1.1 It is understood that the Parish Council have concerns with the existing manoeuvres of large vehicles off Main Street accessing businesses to the west off Burroughs Road, primarily including slurry vehicles and also occasional coaches. **Figure 1** shows the type of vehicles using the existing access, as provided by the Parish Council via the Local Planning Authority.

Figure 1. Existing Vehicles Using Burroughs Road/Main Street

2.1.2 As shown in the images, parking is commonly present opposite the existing junction making existing manoeuvres difficult. Furthermore, the two primary vehicle types used include an articulated HGV and tractor towing a slurry trailer. It is understood that the tractor is likely used for more local movements.

2.1.3 Drawing 109003-PEF-ZZ-XX-DR-TP-00027 shows the existing Burroughs Road/Main Street access with manoeuvres made by two different slurry vehicle types, a coach and a max length HGV while vehicles are parked opposite. This drawing assumes no other vehicles are manoeuvring at the same time as the vehicles accessing/egressing. Certain vehicles/movements are restricted when vehicles are parked opposite meaning vehicles must turn the opposite way or mount or overhang the footways to undertake these movements.

2.1.4 It should also be noted that due to the narrow turning width available as cars park opposite the Burroughs Road access and Burroughs Road narrows to a single Lane, vehicles already on Burroughs Road can in some circumstances have to mount the pavement in front of Ratby Primary School to manoeuvre around slurry lorry's accessing Burroughs Road as shown in **Figure 2,** base image as provided by the Parish Council via the Local Planning Authority.

Figure 2. Existing Vehicles Mounting Footway at Burroughs Road/Main Street Junction

2.1.5 Subsequently, should these vehicles be re-located to access elsewhere from this location, these manoeuvres would be removed from here and the road safety concerns raised by the Parish Council would be alleviated resulting in an overall improvement to the highway conditions at this location.

3 Proposed Route

3.1.1 **Figure 3** shows the current route to the existing highway network along Burroughs Road as well as the proposed diversion routes for larger vehicles accessing businesses to the west on Burroughs Road back to the existing adopted highway north/south to Markfield Road/Desford Lane. If required, appropriate signage can be incorporated directing HGVs to a specific route.

Figure 3. Burroughs Road Heavy Vehicle Routes

3.1.2 Drawing 109003 PEFZZ XX DR TP 00025 demonstrates that the larger vehicles (tractor with trailer, articulated HGV with tanker, full length HGV and a coach) can all successfully manoeuvre through the new access to Burroughs Road onto the new spine road.

3.1.3 Drawings 109003 PEFZZ XX DR TP 00026 and 00028 show that the revised access off Desford Lane and the Phase 2 access off Markfield Lane can accommodate these occasional large vehicle movements. It should also be noted that the primary function of these junctions will be for light vehicles which the majority of the traffic will form based on the trip generation of the wider site and anticipated changes in network related traffic from the new link.

3.1.4 Therefore, in order to ensure these junctions do not encourage excessive vehicle speeds and that they are not over-designed for their function, the proposals are considered appropriate. Furthermore, the design proposals for the Desford Lane junction have been subject to a Stage 1 Road Safety Audit and as such are considered safe in principle subject to future design stages/RSA's etc, with the Markfield Road junction being subject to a reserved matters application including a Stage 2 RSA.

3.1.5 The designs also show that these heavy vehicle movements can manoeuvre safely and successfully when compared to the existing situation off Main Street where there is limited space for other vehicles due to the parked vehicles opposite reducing the through traffic to single file. Vehicles can wait and manoeuvre if required and without the need to overrun or overhang footways (some manoeuvres of certain vehicles result in overhanging of the verge at the Markfield Road junction only). If required, appropriate signage can be incorporated directing HGVs to a specific route.

3.1.6 Furthermore, the traffic on Burroughs Road will be reduced both at the Main Street access and also off the new spine road west along Burroughs Road, with vehicle access severed west of the playing fields splitting movements associated with the playing fields/pub/school etc. to the east, and farm/businesses/woodland etc. to the west.

4 Summary

4.1.1 It is understood that the Parish Council have concerns with the existing route for larger vehicles accessing businesses to the west on Burroughs Road. Specifically, their concerns regard existing turning movements at the Burroughs Road/Main Street junction as some there is inadequate space for HGV's to manoeuvre due to local parking resulting in vehicles sometimes needing to overrun the footway opposite a school.

4.1.2 With the development proposals in place, these movements will be removed from the Burroughs Road/Main Street junction which will result in a benefit to the operation and safety of this junction. The vehicle routing and tracking shows that these vehicles can successfully manoeuvre through the new junction on the spine road as well as the revised layout accessing the spine road via Desford Lane and the Phase 2 access off Markfield Road. If required, appropriate signage can be incorporated directing HGVs to a specific route.

4.1.3 Subsequently, the proposals are considered appropriate and safe for their function and as such, there should not be any highway related reasons for there to be barriers to development of the site.

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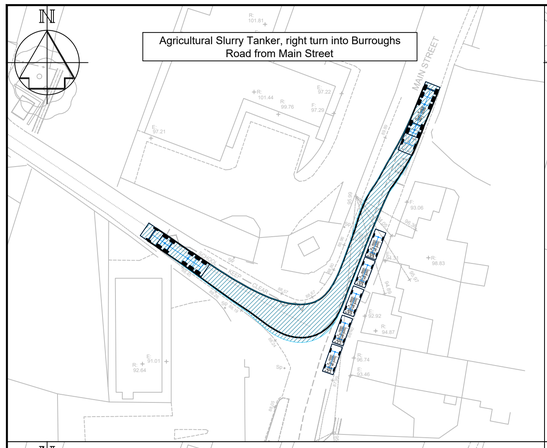
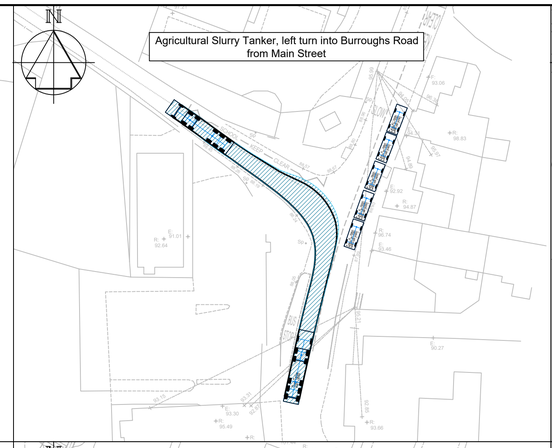
Report Ref.	**109003-PEF-ZZ-XX-T.TN-H-000019_S2_P2 - Burroughs Road Access Vehicles.Docx**
File Path	\\RSBGUKFS01\NOTEngineering\Data\109003 - Ratby Phases 3 & 4 Outline\01 - WIP\Documents\Transport Planning\109003-PEF-ZZ-XX-T.TN-H-000019_S2_P2 - Burroughs Road Access Vehicles.docx

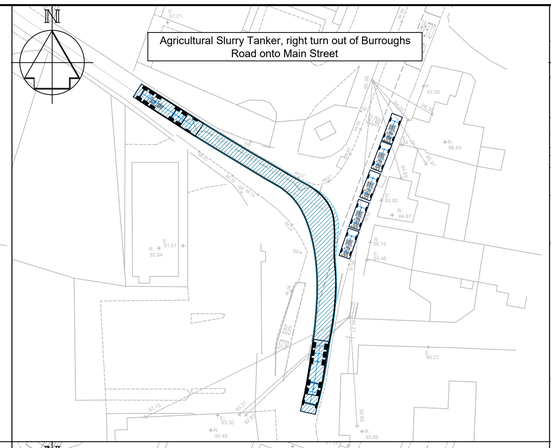
Rev	Suit	Description	Date	Originator	Checker	Approver
P1	S2	Initial Draft	22/05/26	J.Hope	L.Thomas	L.Thomas
P2	S2	Revised Issue Following Client Comments	27/05/26	J.Hope	L.Thomas	L.Thomas

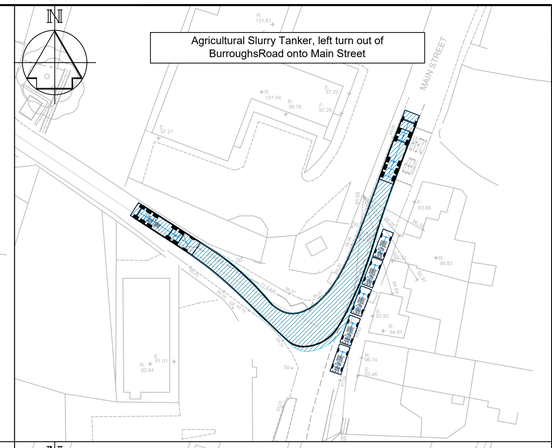
Ref. reference. Rev revision. Suit suitability.

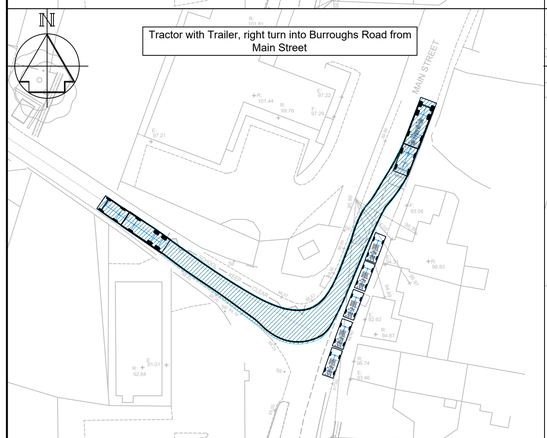
Drawings

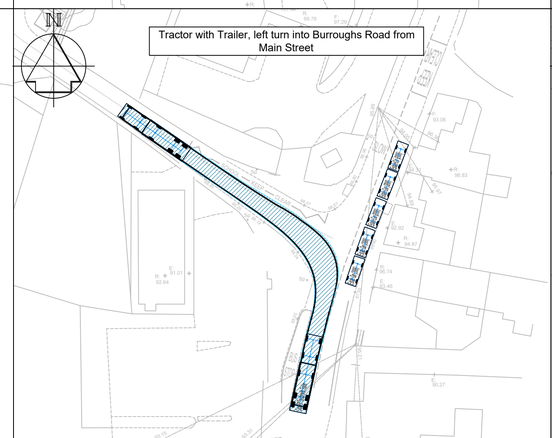


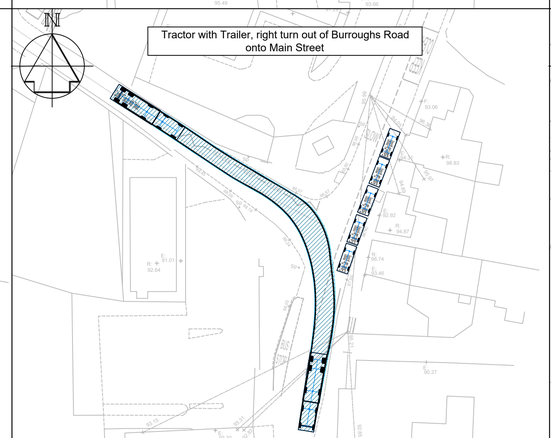


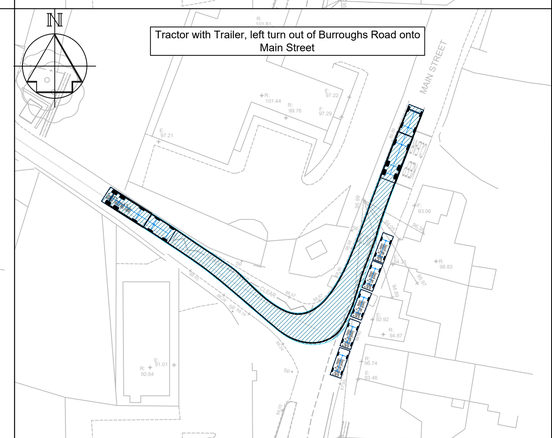


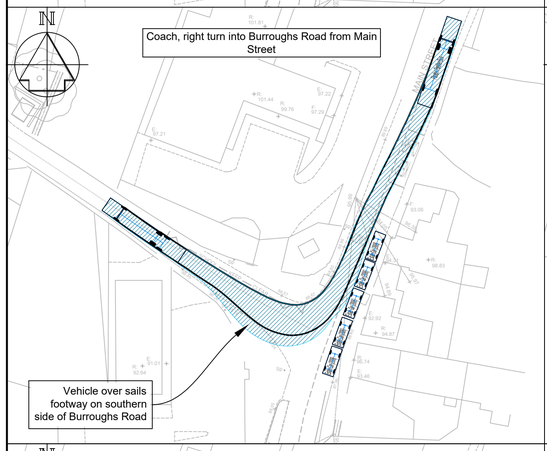


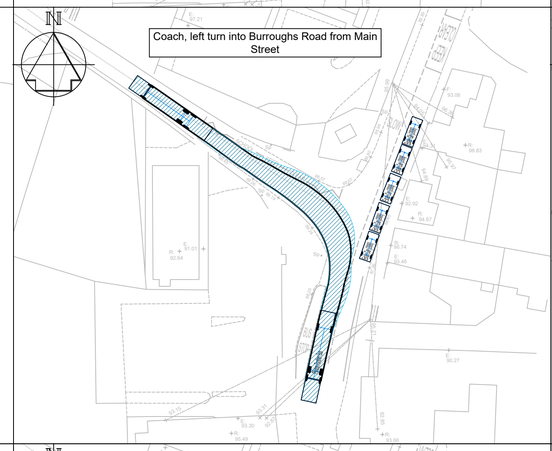


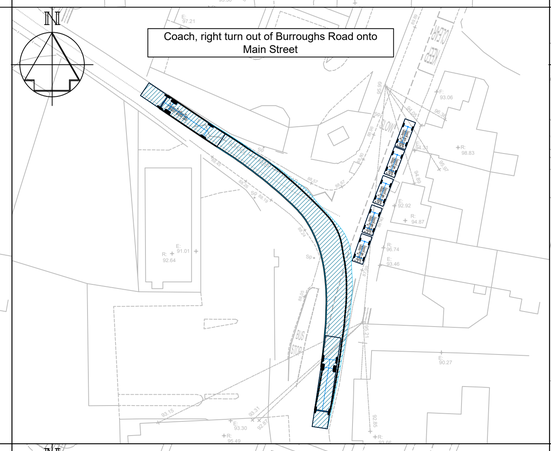


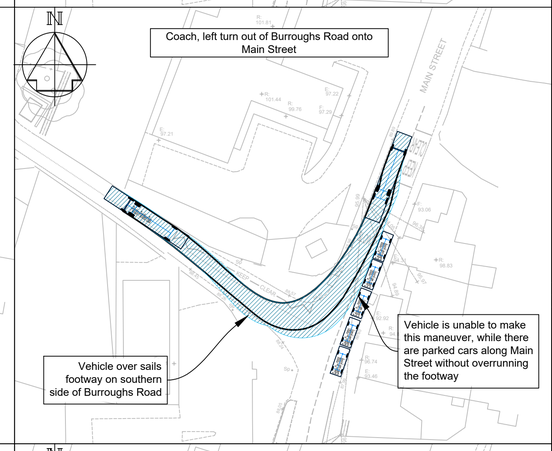


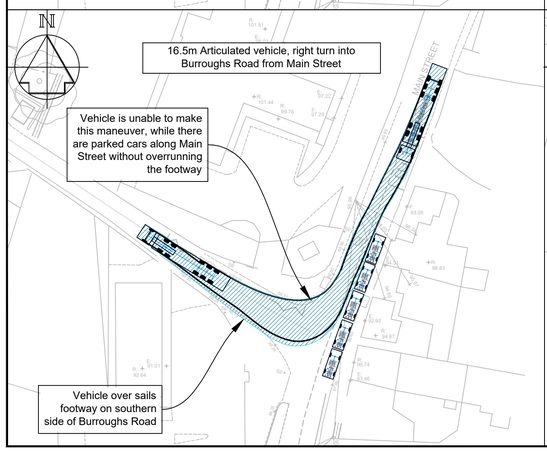


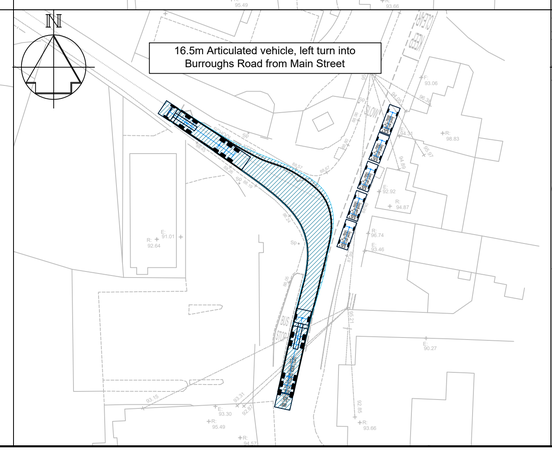


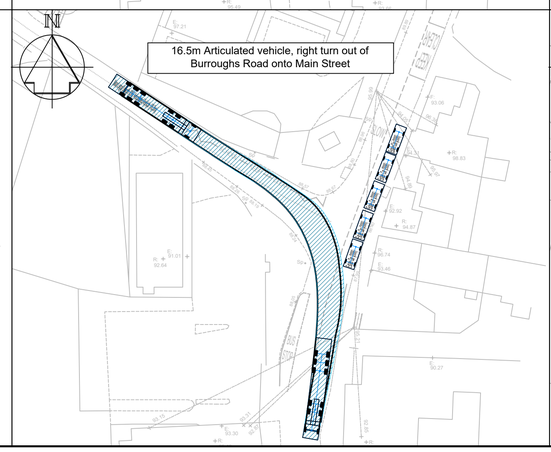


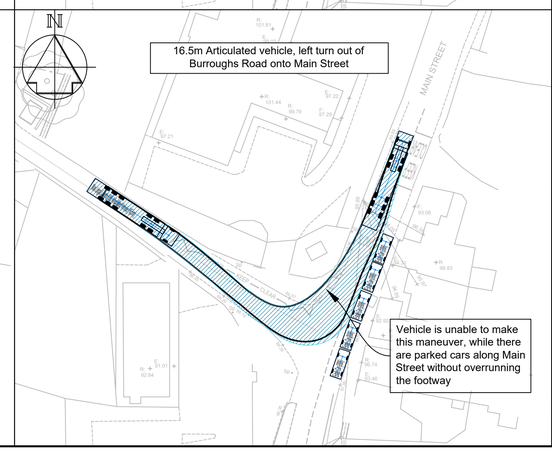












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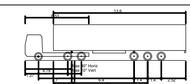
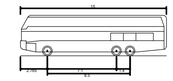


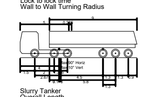
Max Legal Length (UK) Articulated Vehicle (16.5m)

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
Kerb to Kerb Turning Radius	6.530m



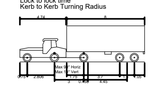
Plaxton Panther Bus

Overall Length	15.000m
Overall Width	2.500m
Overall Body Height	4.157m
Min Body Ground Clearance	0.397m
Track Width	2.500m
Lock to lock time	5.00s
Wall to Wall Turning Radius	12.500m



Slurry Tanker

Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	2.704m
Min Body Ground Clearance	0.419m
Track Width	2.450m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.670m



Copy Of Tractor with Trailer

Overall Length	12.806m
Overall Width	2.750m
Overall Body Height	3.703m
Min Body Ground Clearance	0.438m
Max Track Width	2.520m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	5.400m

Estate Car

Overall Length	4.845m
Overall Width	1.792m
Overall Body Height	1.424m
Min Body Ground Clearance	0.189m
Max Track Width	1.655m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	4.950m

REV	DESCRIPTION	DRN	CHK	APP	DATE
P01	FIRST ISSUE	SP	LT	CH	20.05.26

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Architect/Client/Contractor

LAGAN HOMES

Project

RATBY PHASES
3 & 4 OUTLINE

Drawing Title

VEHICLE TRACKING
BURROUGHS ROAD
MAIN STREET

Drawing Status

FOR INFORMATION

	Name	Date	
Drawn	S. PAOLI	20.05.26	Status Code S2
Designed	S. PAOLI	20.05.26	Scale 1:500
Eng Chk	L. Thomas	20.05.26	Revision P01
Approved	C. Holloway	20.05.26	

Drawing No.

109003 - PEF - ZZ - XX - DR - TP - 00027

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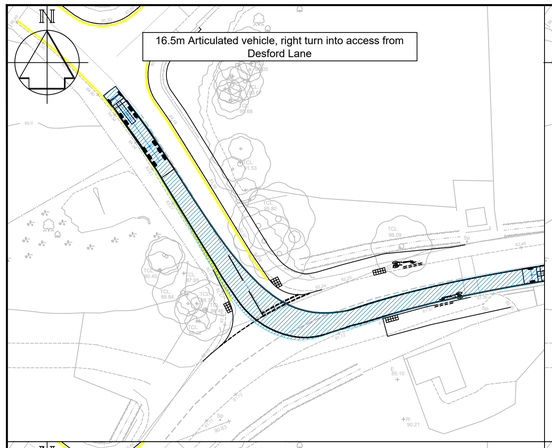

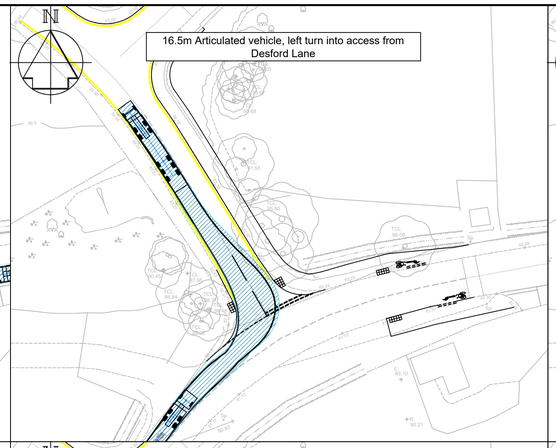

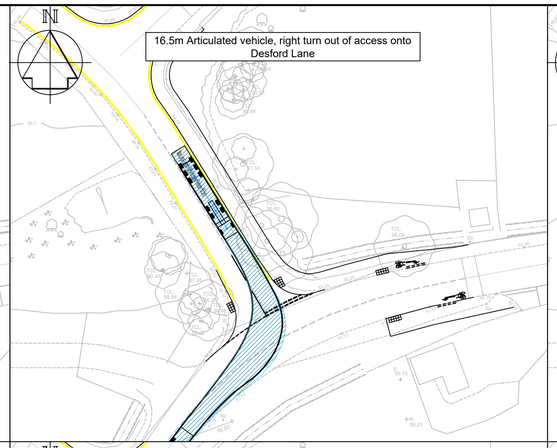

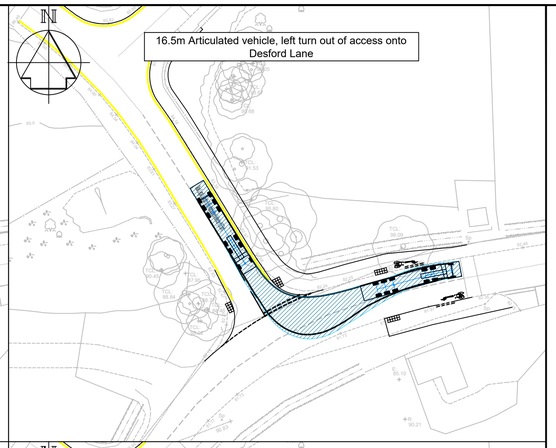

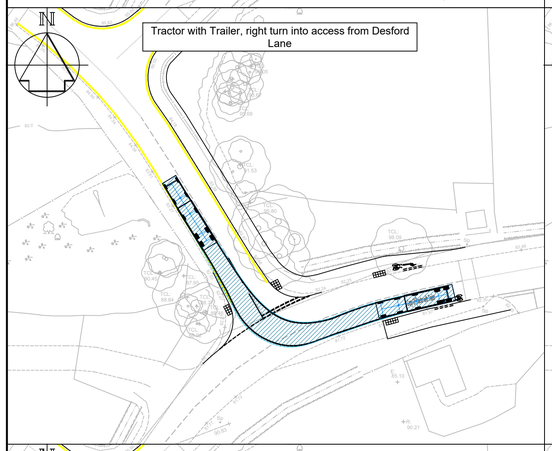

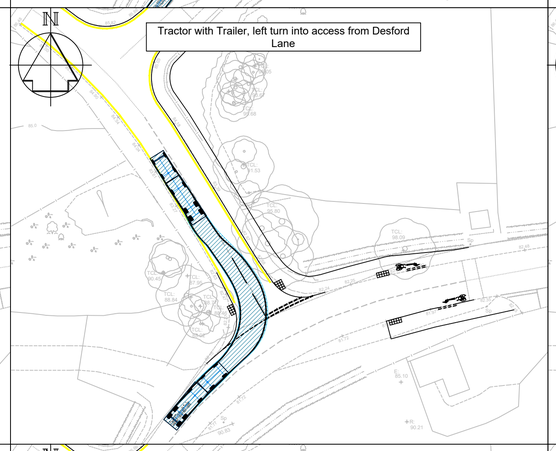

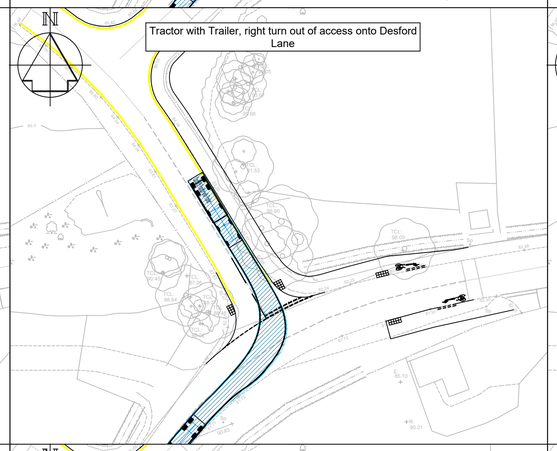

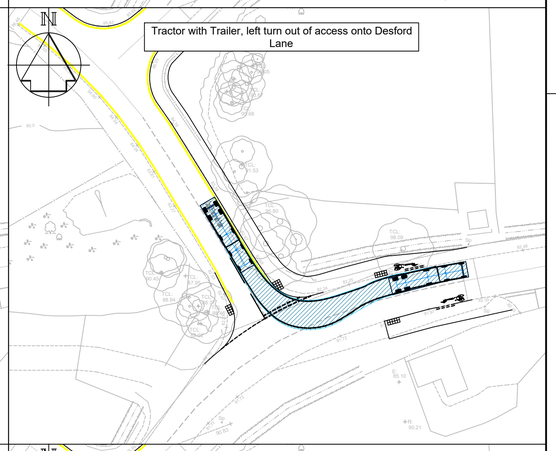

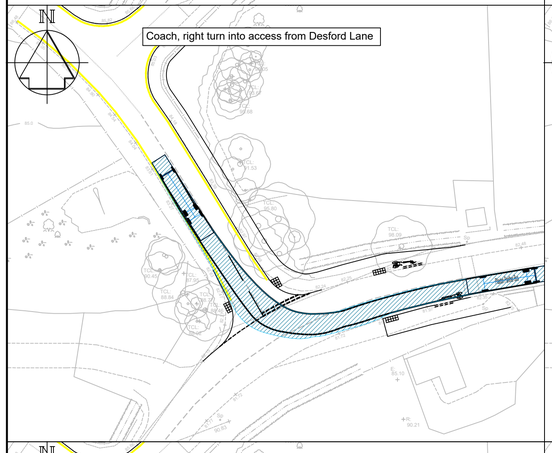

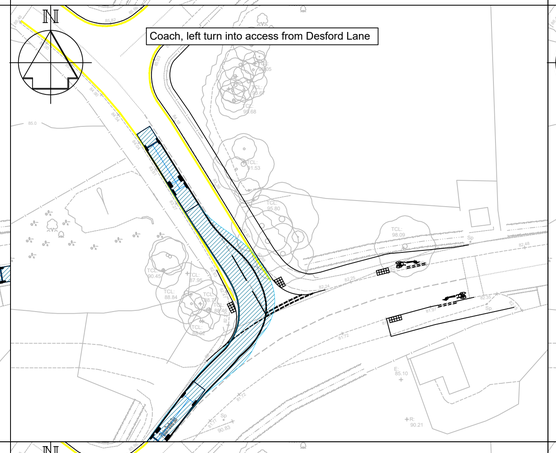

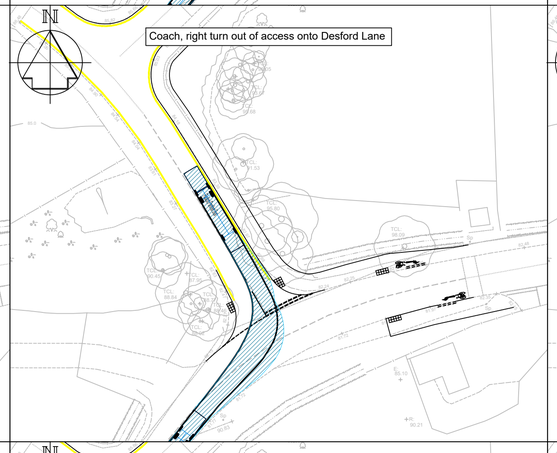

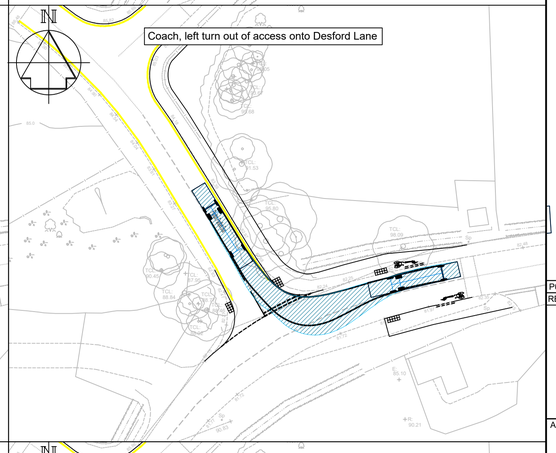

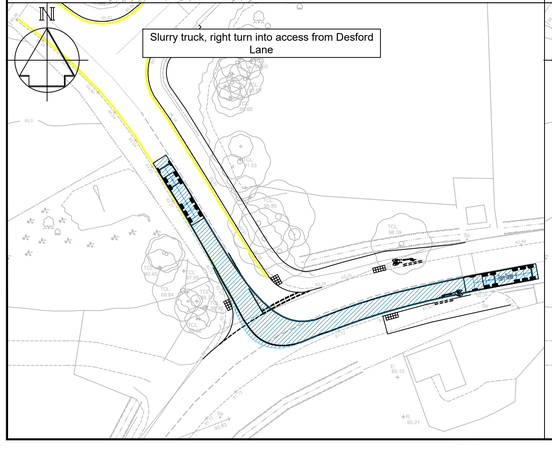

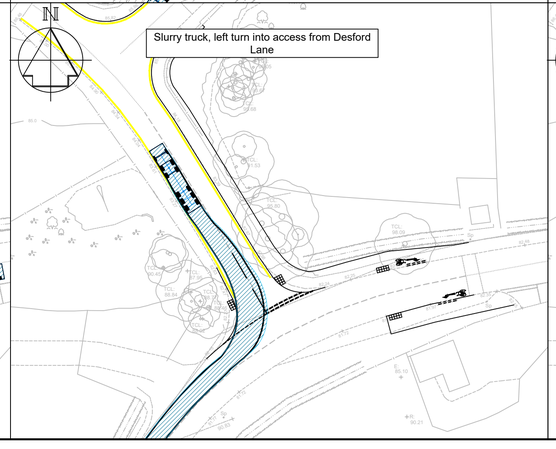

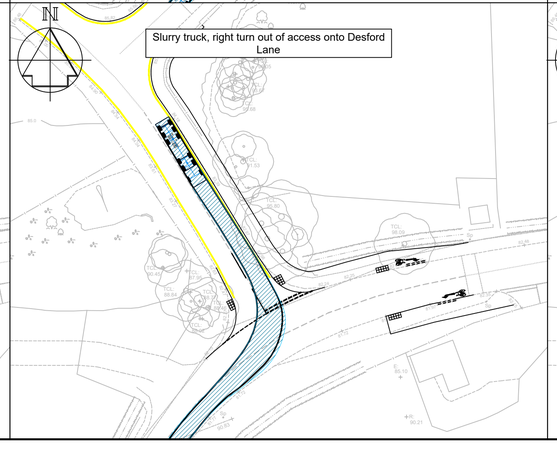

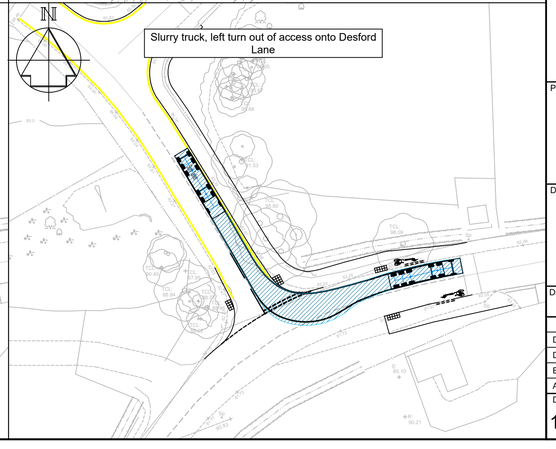

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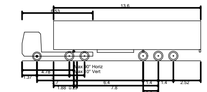
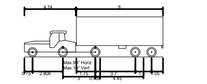
G9. ALL TRACKING HAS BEEN UNDERTAKEN AT 15KPH



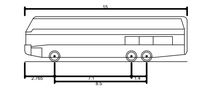
Max Legal Length (UK) Articulated Vehicle (16.5m)

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
Kerb to Kerb Turning Radius	6.330m



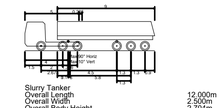
Copy Of Tractor with Trailer

Overall Length	12.806m
Overall Width	2.750m
Overall Body Height	3.702m
Min Body Ground Clearance	0.438m
Max Track Width	2.520m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	5.400m



Plaxton Panther Bus

Overall Length	15.000m
Overall Width	2.500m
Overall Body Height	4.157m
Min Body Ground Clearance	0.397m
Track Width	2.500m
Lock to lock time	5.00s
Wall to Wall Turning Radius	12.500m



Slurry Tanker

Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	2.704m
Min Body Ground Clearance	0.418m
Track Width	2.450m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.670m

REV	DESCRIPTION	DRN	CHK	APP	DATE
P01	FIRST ISSUE	SP	LT	CH	20.05.26

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Architect/Client/Contractor

LAGAN HOMES

Project

RATBY PHASES
3 & 4 OUTLINE

Drawing Title

LARGE VEHICLE TRACKING
OF DESFORD LANE

Drawing Status

FOR INFORMATION

	Name	Date	Status Code
Drawn	S. PAOLI	20.05.26	S2
Designed	S. PAOLI	20.05.26	Scale 1:500
Eng Chk	L. Thomas	20.05.26	Revision P01
Approved	C. Holloway	20.05.26	

Drawing No.

109003 - PEF - ZZ - XX - DR - TP - 00026

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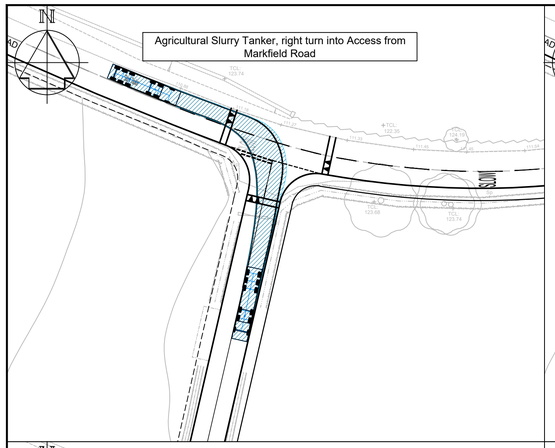

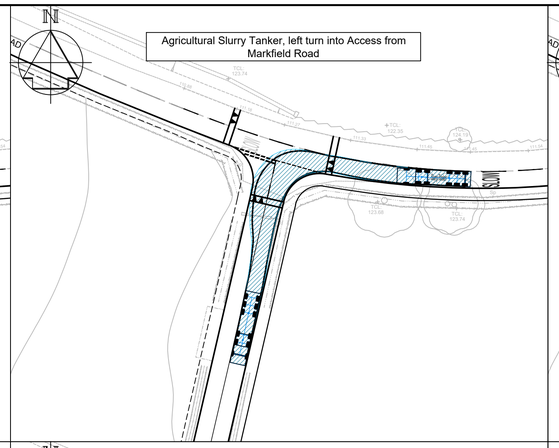

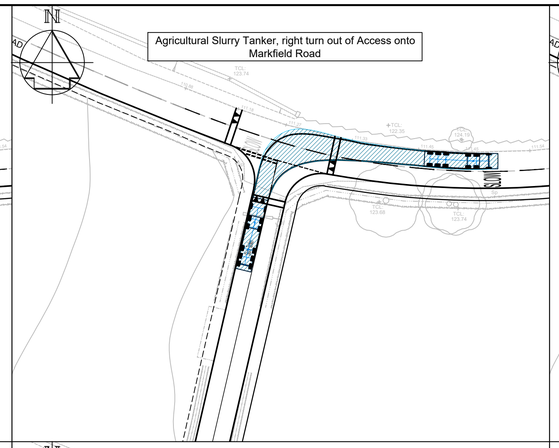

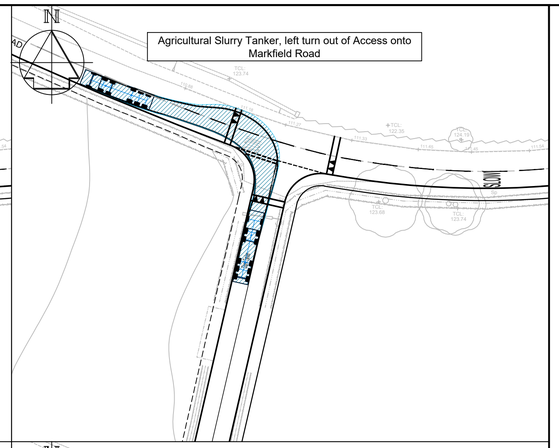

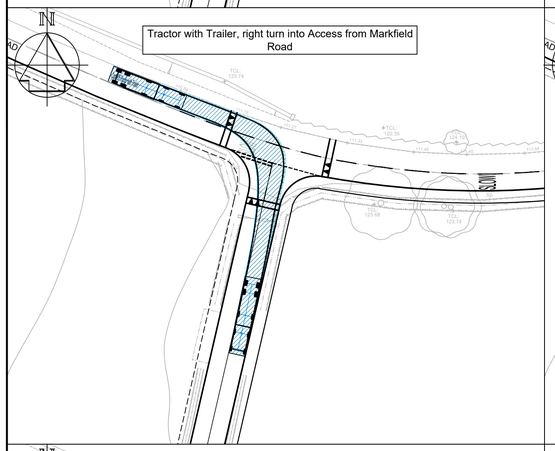

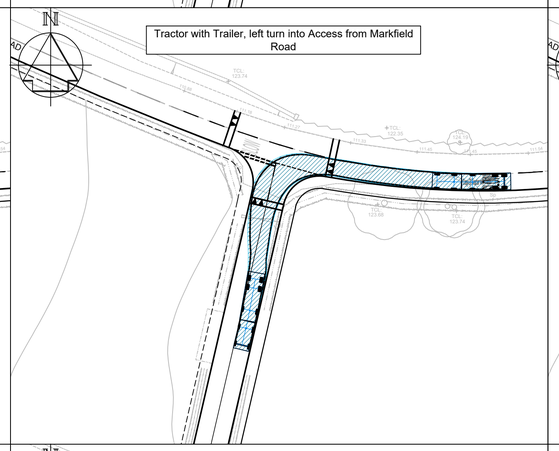

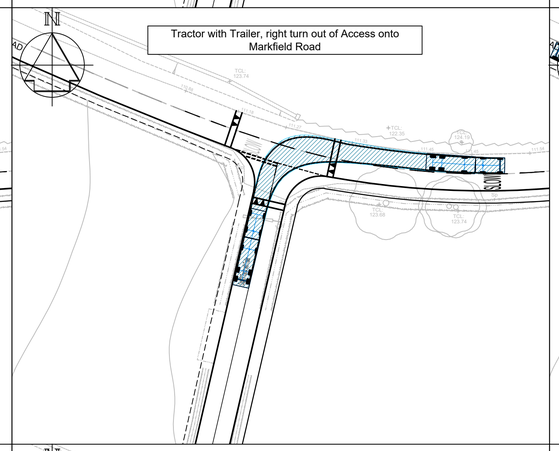

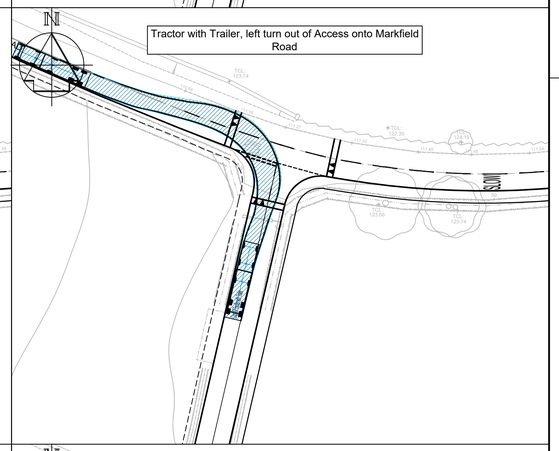

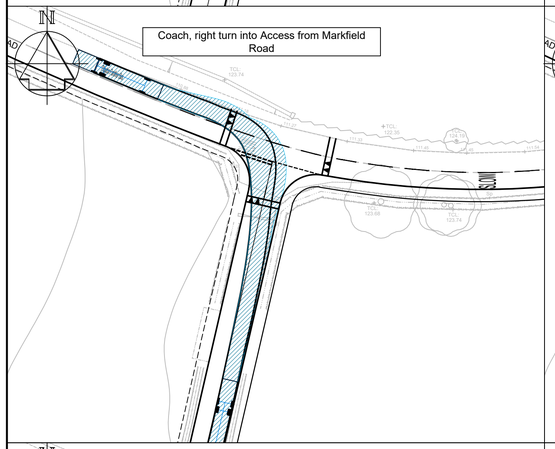

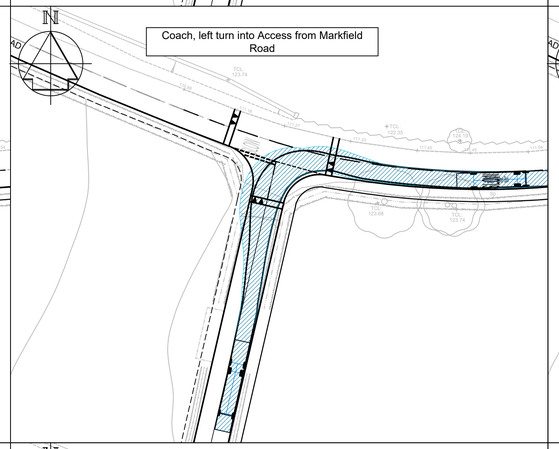

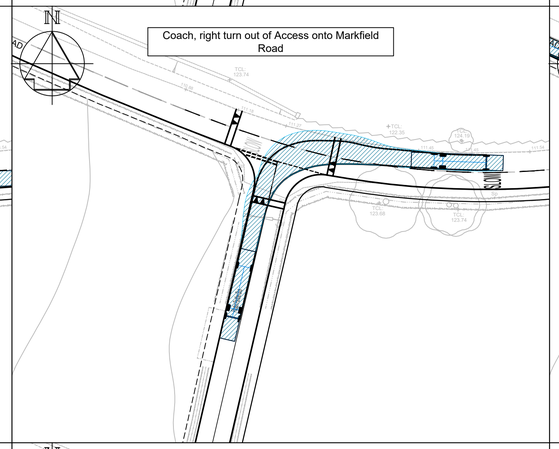

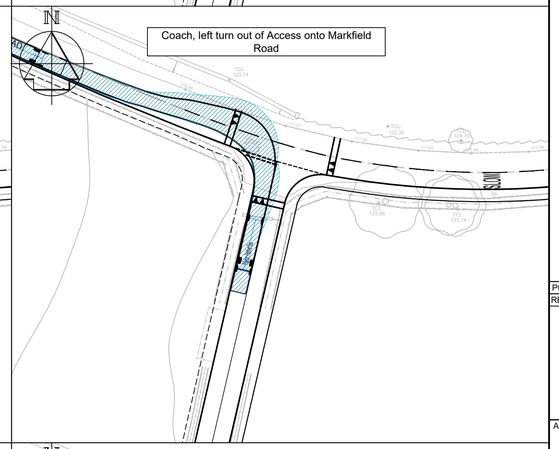

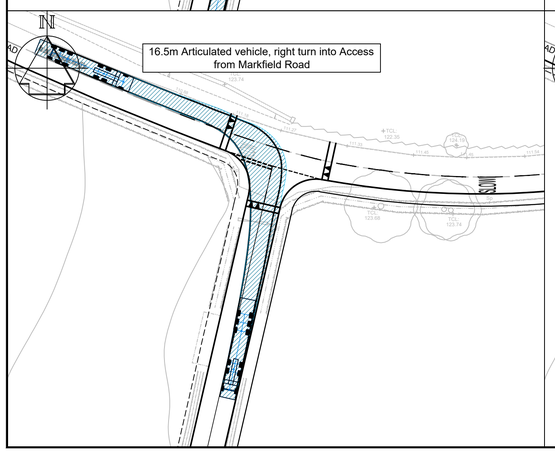

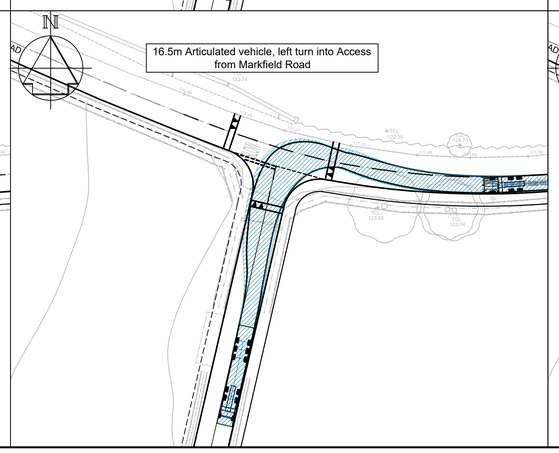

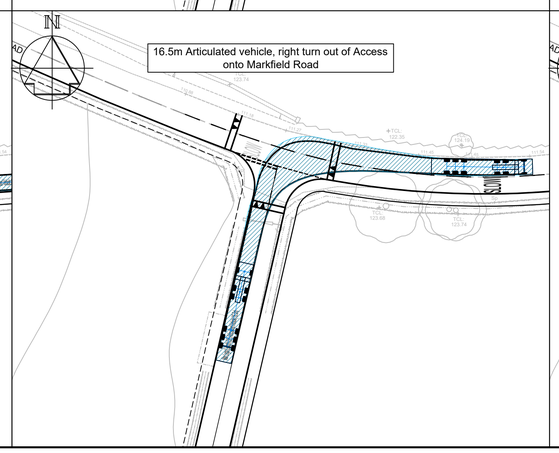

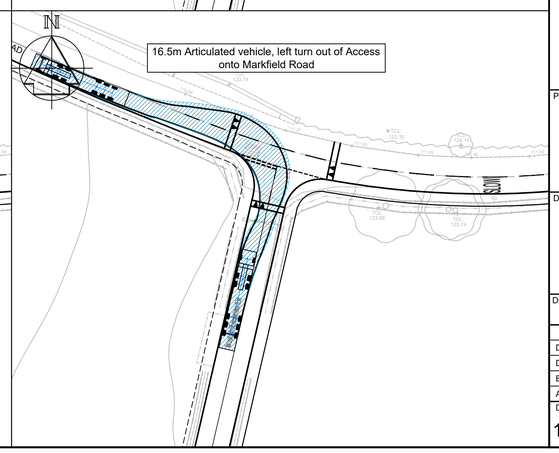

GENERAL NOTES

G1. DO NOT SCALE THIS DRAWING.

G2. ANY DIMENSIONAL DISCREPANCIES SHOULD BE NOTIFIED TO THE ENGINEER IMMEDIATELY.

G3. ALL DIMENSIONS ARE IN MILLIMETRES - (mm)
ALL LEVELS ARE IN METRES - (m) AND ARE ABOVE ORDNANCE DATUM AT NEWLYN, CORNWALL UNLESS NOTED OTHERWISE.

G4. NORTH SHOWN INDICATIVE ONLY

G5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT; SPECIFICATIONS; DRAWINGS; DETAILS AND OTHER DESIGN INFORMATION.

G6. ALL DRAWINGS AND WRITTEN MATERIAL CONTAINED WITHIN, CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE ENGINEER AND MAY NOT BE DUPLICATED, USED, REPRODUCED OR DISCLOSED WITHOUT WRITTEN CONSENT OR EXPRESS PERMISSION FROM THE ENGINEER.

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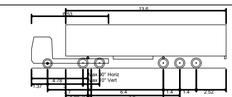

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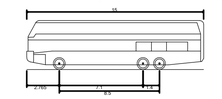

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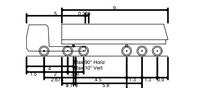

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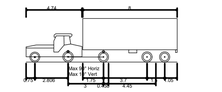

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Email: pfnottingham@pellfrischmann.com
www.pellfrischmann.com

Architect/Client/Contractor

LAGAN HOMES

Project

RATBY PHASES
3 & 4 OUTLINE

Drawing Title

LARGE VEHICLE TRACKING OF ACCESS ALONG MARKFIELD ROAD

Drawing Status

FOR INFORMATION

	Name	Date	Status Code
Drawn	S. PAOLI	26.05.26	S2
Designed	S. PAOLI	26.05.26	Scale 1:500
Eng Chk	L. Thomas	26.05.26	Revision P01
Approved	C. Holloway	26.05.26	

Drawing No.

109003 - PEF - ZZ - XX - DR - TP - 00028

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