TECHNICAL FILE NOTE 4A					
Project	Henthorn Road, Clitheroe			Project No	1677
Contact		Originator	PL	Date	24.03.26

1.0 Introduction

1.1 Ashley Helme Associates (AHA) are appointed by Gladman Developments Ltd (GDL) to provide highways/transport support for a planning application (LPA ref 3/2025/0997/OUT) for up to 115 dwellings on land off Henthorn Road, Clitheroe.

1.2 AHA prepared the following documents to accompany the planning application:

(i) Transport Assessment: ref 1677/3/A, and
(ii) Travel Plan: ref 1677/4/A.

2.0 Lancashire County Council Consultation Response

2.1 Lancashire County Council (LCC) provided a transport and highways consultation response, dated 27 February 2026.

2.2 LCC made comments relating to the following:

(i) Access Arrangements,
(ii) Vehicle Tracking,
(iii) LCWIP/Public Right of Way,
(iv) Sustainability,
(v) Travel Plan,
(vi) Trip Generation,
(vii) Traffic Counts, Traffic Growth & Assessment Years,
(viii) Modelling,
(ix) S106,
(x) Highway Mitigation, and,
(xi) Construction Traffic Management Plan.

3.0 Scope of Technical Note

3.1 This Technical Note has been prepared to respond to comments raised by LCC and follows the same headings as those adopted by LCC in their consultation response for ease of reference.

4.0 Access Arrangements

4.1 North of Henthorn Road

4.1.1 LCC confirm acceptance of the access arrangements to serve the Northern parcel on Henthorn Road. LCC confirm that the emergency access is "*necessary and acceptable*" but have requested visibility splays are shown at the emergency access. The visibility splays requested are 2.4m x 46m based on the recorded 85%ile speed data on Henthorn Road. LCC state:

"A secondary emergency access arrangement is also provided within drawing number 1677/01, revision F, to provide access to the development which sits to the north of Henthorn Road, as well as serving as an emergency access to the Phase 2 development.
The emergency access is 3.75m wide and controlled by knock-down bollards positioned on both sides. The access will require a visibility splay of 2.4m by 46m (based upon recorded speeds) in both directions; this will be achievable within the site boundary and over the newly adopted footway provisions.

4.1.2 Drg No 1677/01/G has been prepared which shows the provision of 2.4m x 46m visibility splays at the emergency access. This addresses the comment raised by LCC.

4.1.3 LCC raise the requirement for a footway on Henthorn Road to extend on the north side of the road to an existing private road where the Ribble Way Public Right of Way is aligned. LCC state:

"On the north side of Henthorn Road, a new footway is proposed that will connect into the existing footway at the junction with Waterfall Gardens. A new footway is proposed for approximately 140m in the other direction until it meets the proposed secondary emergency access arrangement, where it terminates.

However, given the 85th percentile speeds, (32.4 mph Northbound and 32.5mph Southbound) recorded for the visibility splays, at which vehicles travel along Henthorn Road there are pedestrian safety concerns due to the lack of footway provision beyond what is currently proposed. Shared space arrangements are only recommended where vehicle speeds and flows are very low. Given the intensification of vehicle and pedestrian movements, the LHA require 2m footway provisions to be provided along the North side of the entire site frontage up to the private access road, named Ribble Way, within the development framework plan provided. This private access road also features Public Right of Way, FP0301017. The footway shall also feature street lighting provisions along its full length to adoptable standards to be agreed upon as part of the Section 278 works with Lancashire County Council."

4.1.4 Drg No 1677/01/G has been prepared which shows the provision a footway on the north side of Henthorn Road as requested by LCC. The proposed footway measures 2.0m wide and street lighting is to be extended along the length of the footway from its existing termination point to the east. The precise lighting details will be agreed at detailed design.

4.2 South of Henthorn Road

4.2.1 In reference to the proposed access on the south side of Henthorn Road, LCC raise the following with respect to visibility splays:

"The applicant has provided visibility splays at the southern site access with Henthorn Road of 2.4m by 46m in both directions. It is understood that the applicant has offset the visibility splay to the right by 1m, however the LHA is of the opinion that the verge forms part of the adopted highway and, as such, the visibility splay should remain within the highway or the applicant's site without being offset. We ask that this be amended."

4.2.2 Drg No 1677/01/G has been prepared which shows the provision of 2.4m x 46m visibility splay measured to the nearside kerb in both directions. This addresses the comment raised by LCC.

4.3 Traffic Calming

4.3.1 LCC raise comments relating to existing, recorded speeds on Henthorn Road and the requirement for a traffic calming scheme, to comprise road markings and signage. LCC state:

"The data demonstrates that there is a lack of self-compliance of the speed limit on Henthorn Road and subsequently we would request that mitigation measures are provided to address

these concerns. It is understood that the applicant has also included some additional 20mph road marking as part of the site access layout. These measures are welcomed and in addition, a more robust traffic calming scheme is requested, including signing and road markings, which will be required as part of the site's mitigation measures. These shall be undertaken as part of the Section 278 works and subject to technical detail design."

4.3.2 Drg No 1677/01/G has been prepared which shows the provision of 'Slow' markings and 20mph roundels on the carriageway on Henthorn Road. It is proposed that the road markings are complimented by repeater signs along the Site frontage to reinforce the 20mph speed limit on Henthorn Road. The precise details of the traffic calming scheme can be agreed at the detailed design stage but these measures are indicated on the proposed Site access drawing (ref 1677/01/G). This addresses the comments raised by LCC.

5.0 Vehicle Tracking

5.1 Swept path analysis drawings were submitted with the planning application to show a pantechnicon, fire appliance and refuse vehicle turning at the proposed Site access arrangements. LCC have confirmed agreement that the arrangements presented on the drawings submitted with the application (refs 1677/SP/01/A – 03/A) demonstrates:

"…that the tested vehicles are able to negotiate the junction and complete the required turning movements without overrunning footways or encroaching into opposing traffic lanes beyond what would normally be expected for vehicles of this size and the nature of the network."

5.2 LCC note that the refuse vehicle that needs to be tested is a larger vehicle measuring 11.2m long.

5.3 Drg No 1677/SP/02/B has been prepared for an 11.2m refuse vehicle and is appended to this filenote. The drawing demonstrates that the 11.2m refuse vehicle is able to complete all the turning movements at the proposed Site access without overrunning footways. This addresses the comments raised by LCC.

6.0 Drainage

6.1 LCC note that there is no existing piped highway surface water drainage system and that drainage currently falls to the existing highway verges. LCC request that a piped highway drainage system is introduced, stating:

"Currently, the section of Henthorn Road which sits between the proposed development sites does not feature any piped highway surface water drainage system and instead drains to the highway verges. As such, we request that a piped highway drainage system along Henthorn Road is provided, which should be drained to a suitable internal outfall within the site, given that there are no provisions within the highway. This drainage then must be put forward for adopted by United Utilities under a Section 104 agreement under the Water Industry Act 1991."

6.2 The precise details of kerbed footway and drainage provision on Henthorn Road will be delivered as part of the S278 agreement. This matter will be addressed at the detailed design stage.

7.0 LCWIP/Public Rights of Way

7.1 LCC set out the following with respect to LCWIP/Public Rights of Way:

> *"The LHA are aware that the Public Rights of Ways networks surrounding the site are well used for recreational purposes. Public Right of Way FP0301017 runs around the perimeter of site which sits to the North of Henthorn Road and is not proposed to be connected into the site.*
>
> *Public Right of Way FP0301017 runs through the site to the South of Henthorn Road; detailed design of the connections will need to be submitted for review and condition. The current arrangements may require alterations for the development demands and to ensure that inclusive provisions can be provided.*
>
> *Henthorn Road and the footpaths surrounding the site are identified in the LCWIP (published March 2024) as a primary and secondary routes for walking and cycling. These routes must be protected and provided with low vehicles speeds promoted to ensure they are conducive for such purposes to support highway safety and sustainable travel."*

7.2 The planning application seeks outline permission with all matters reserved except for access. The internal layout of the Site will be subject to future reserved matters determination. The precise details on footpath provision and design of internal roads in the vicinity of the PROW network will be determined at the reserved matters stage.

7.0 Sustainability

7.1 LCC note that the planning inspector for the adjacent site was satisfied that the walking distances to the local convenience store, school and town centre were acceptable in the context of the Site.

7.2 LCC raise the walk distance to a local bus stop on Blakewater Road, opposite Lune Road, and the requirement for a S106 contribution towards the C2 bus service:

> *"The closest bus stop to the site can be found on Blakewater Road, opposite Lune Road, which is approximately 450m from the centre of the Site. The service which runs from the bus stop, service C2, is a subsidised service and as such, developer contributions are required so that it remains viable for future residents.*
> *Should the application gain approval, taking this sum on a pro rata basis, a contribution of £310,000 would be sought to maintain and improve the existing bus service, payable in instalments over a 5 year period commencing with the occupation of the 80th dwelling."*

7.3 LCC state that the sum sought towards the bus service is calculated on a pro rata basis. However, the sum does not relate to previous contributions sought from other phases of development on Henthorn Road. The sum sought towards the bus service is far in excess of the sums sought for earlier phases of development on Henthorn Road. The first phase of development which comprised 110 dwellings provided £200,000 towards the bus service. LCC subsequently adopted a pro-rata increase on this sum for the development for 160 dwellings (3/2019/0999). The sum sought for the 160 dwelling scheme was £291,000.

7.4 The proposed development comprises 115 dwellings and is only a 5 dwelling increase from the first phase of development. Adopting a pro-rata increase, consistent with the previous methodology adopted by LCC, would require a contribution of £209,090. The sum sought by LCC for this application is just over £100,000 more than the pro-rata calculation and hence it is unclear what pro-rata basis has been used to calculate the requested sum.

7.5 The application Site is located 450m (from the Site centroid) to the nearest bus stop. This distance only slightly exceeds the typical 400m distance adopted for a walk distance to a bus stop and hence

there is limited justification for the necessity of a bus diversion to the Site. The CIL test for planning obligations set out that they must be '*necessary to make the development acceptable*'. Similarly, the test requires the planning obligation to be '*fairly and reasonably related in scale and kind*' to the development. There are existing precedents set with earlier phases of residential development on Henthorn Road and hence a pro rata calculation can be made that would present a fair and reasonable approach. Adopting the pro rata calculation from earlier phases would require a contribution of £209,090 towards the bus service. The applicant would be agreeable to this sum.

7.6 LCC confirm that the Bus Services team support the diversion of the service down Henthorn Road and into the Site. LCC require that a suitable bus turning area, with shelter and real time display be introduced. As set out above, a bus diversion to the Site based on a slight exceedance of a 400m walk distance to a bus stop would not be fair and reasonable for the scale of development.

8.0 Travel Plan

8.1 LCC confirm that the TP is considered acceptable:

> *"Subject to the matters detailed above the Travel Plan Framework is considered acceptable to be implemented in accordance with its timetable."*

8.2 LCC request a sum of £6,000 towards Travel Plan Monitoring. The applicant is agreeable to the S106 contribution.

9.0 Transport Assessment

9.1 Trip Generation

9.1.1 LCC confirm agreement to the trip generation methodology and resultant trip generation figures.

9.2 Traffic Counts, Traffic Growth and Assessment Years

9.2.1 LCC confirm that traffic count data, the assessment years including TEMPRO growth, and the proposed development distribution are acceptable.

9.3 Modelling

9.3.1 LCC request that modelling outputs should be expressed in Passenger Car Units (PCU):

> *"When presenting the queuing data within the modelling on the highway network, the Local Highway Authority expects all modelling outputs to be expressed in Passenger Car Units (PCUs) rather than vehicle counts. This ensures that the analysis accurately reflects different vehicle types and their relative impact on capacity."*

9.3.2 The modelling files and tables presented in the TA have been reviewed in response to LCC comments. The modelling files have presented output queues in PCU for all junctions with the exception of SJ7 & SJ8. The labelling of the tables for other junctions was incorrect, stating that queues are 'secs/veh' where it should have stated 'secs/pcu'.

9.3.3 The models have been re-run to ensure output queues are displayed as PCU and the modelling tables have been updated accordingly with appropriate labelling changed. For clarity, the only modelling results that required updating to PCU output queues were at SJ7 & SJ8. The modelling results only showed minor changes in a few cases, with queues increasing by no more than 0.1.

9.3.4 The revised tables are appended to this filenote. The updated modelling and tables addresses LCC comments.

9.3.5 LCC have reviewed the modelling at each study junction. LCC note that no modelling has been undertaken at SJ2 – 4 as these junctions are not on the primary desire line and are minor residential side roads. The approach was accepted previously and is again agreed with LCC.

9.3.6 LCC confirm that modelling undertaken at the following junctions is acceptable:

Ref	Junction
SJ5	Henthorn Road/Bawdlands
SJ6	Henthorn Road/Eshton terrace/Thorn Street (subject to mitigation scheme on Drg No 1677/12/A)
SJ7	Station Road/Parsons Lane
SJ8	Lowergate / Moor Lane / Woone Lane
SJ9	Castle View / Parson Lane
SJ10	Greenacre Street / Woone Lane / Eshton Terrace
SJ11	Whalley Road / Greenacre Street
SJ12	Primrose Road / A671 Whalley Road

9.3.7 LCC have confirmed agreement to the mitigation scheme at SJ6 (Drg No 1677/12/A).

9.3.8 LCC have requested that modelling be undertaken at SJ1 Lancaster Drive/Edisford Road. The model used for the assessment adopts the same parameters as was previously adopted and agreed for planning application reference 3/2019/0999.

9.3.9 The modelling has been undertaken for:

2024 Count,
2031 & 2036 Base, and,
2031 & 2036 With Development.

9.3.10 The traffic flows used for each scenario are included in TA ref 1677/3/A and are as follows:

2024 Count	Figure B1, Appendix B,
2031 Base	Figure B2, Appendix B,
2036 Base	Figure B3, Appendix B,
2031 With Development	Figure B6, Appendix B,
2036 With Development	Figure B7, Appendix B.

9.4 SJ1: Queue Survey and Model Validation

9.4.1 Review of the SJ1 queue survey data collected in 2024 shows that:

APPROACH	MEAN SPOT QUEUE (Vehs)	
	AM	PM
Lancaster Drive	0.3	0.5
Edisford Road	0.0	0.0

9.4.2 The queue survey confirms that small queues were recorded on the 5-minute interval marks. This means that any queues that form within the 5-minute interval period are clearing. The survey results provide clear evidence that SJ1 is presently operating in an **acceptable** manner.

9.4.3 The PICADY model that was constructed for the 3/2019/0999 planning application is adopted for this assessment. The model was agreed with LCC. The results of the validation exercise are presented in Table TN4/1. A review of Table TN4/1 shows that PICADY model of SJ1 correlates well with the recorded queues. It is concluded that the PICADY model is suitable to test the traffic impact of the proposed development in years 2031 and 2036.

9.5 SJ1: 2031 and 2036 Modelling Assessment

9.5.1 Table TN4/2 presents the results of the PICADY modelling for S1 for years 2031 and 2036.

9.5.2 Review of Table TN4/2 shows that the existing SJ1 priority-controlled junction is predicted to operate with a high degree of spare capacity and with negligible queues/delays in the 2031 AM & PM peak hour Base situations. Table TN4/2 shows that the addition of traffic generated by the proposed development has no perceptible effect on the performance of the junction in year 2031.

9.5.3 Similarly, the PICADY modelling confirms that the existing SJ1 priority-controlled junction is predicted to operate with a high degree of spare capacity and with negligible/small queues/delays in the 2036 AM & PM peak hour Base situations. Table TN4/2 shows that the addition of traffic generated by the proposed development does not materially alter the performance of the junction in year 2036.

9.5.4 It is concluded that the traffic impact of the proposed development at SJ1 in assessment years 2031 and 2036 is acceptable.

10.0 S106

10.1 LCC confirm the S106 contribution required to mitigate the impact of the proposed development. The S106 contributions are:

(i)	Travel Plan support	£6,000
(ii)	Bus contribution	£310,000
(iii)	PROW improvements	TBC

10.2 The applicant is agreeable to the S106 sum sought for TP support. The sum sought towards the bus service is addressed earlier in this filenote. The applicant is willing to make a S106 contribution towards the bus service but this must be *'fair and reasonable' and 'necessary to make the development acceptable'*. The sum sought by LCC does not relate to previous pro rata calculations and hence the applicant seeks an alternative sum of £209,090 which does meet the pro rata calculation.

10.3 LCC have provided no sums sought towards PROW improvements at this stage.

11.0 Highway Mitigation

11.1 LCC set out mitigation required on Henthorn Road, Edisford Road and at SJ6 Henthorn Road/Eshton Terrace/Thorn Street. The measures required on Henthorn Road are shown on Drg No 1677/01/G.

11.2 The mitigation at SJ6 is shown on Drg No 1677/12/A.

11.3 The requirement for a zebra crossing was raised and conditioned for other residential phases of development. If this is not delivered by other phases, the applicant is agreeable to the provision of the zebra crossing and this can be secured by condition.

12.0 Construction Traffic Management

12.1 LCC request that construction traffic is limited to a temporary construction access on Henthorn Road rather than via Ingleton Crescent. The application is agreeable to this approach.

Tables

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Lancaster Drive	0.3	0.6	0.5	0.5
Edisford Road	0.0	0.1	0.0	0.2

Notes:
1. AHA queue survey 22.06.21,
2. Average spot queue observed over peak hour period,
3. Refer Figure TN3/1 for 2021 traffic count flows.

Table TN4/1 PICADY VALIDATION SJ1 Lancaster Drive/Edisford Road

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Lancaster Drive	0.37	0.6	12.49	0.31	0.5	12.49
Edisford Road	0.06	0.1	5.34	0.12	0.2	5.71
2031 Base, Existing Junction Geometry						
Lancaster Drive	0.41	0.7	13.43	0.34	0.5	13.44
Edisford Road	0.07	0.1	5.32	0.14	0.3	5.74
2031 With Development, Existing Junction Geometry						
Lancaster Drive	0.45	0.8	14.34	0.36	0.6	13.88
Edisford Road	0.07	0.1	5.34	0.15	0.3	5.81
2036 Base, Existing Junction Geometry						
Lancaster Drive	0.43	0.8	14.12	0.37	0.6	14.11
Edisford Road	0.08	0.1	5.32	0.15	0.3	5.75
2036 With Development, Existing Junction Geometry						
Lancaster Drive	0.43	0.8	14.12	0.34	0.5	12.43
Edisford Road	0.08	0.1	5.32	0.14	0.3	5.48

Notes:
1. Refer Drg No 1677/02 for existing junction geometry,
2. Refer Figure B1, Appendix B of TA (ref 1677/3/A) for 2024 traffic flows,
3. Refer Figure B2, Appendix B of TA (ref 1677/3/A) for 2031 Base traffic flows,
4. Refer Figure B6, Appendix B of TA (ref 1677/3/A) for 2031 With Development traffic flows,
5. Refer Figure B3, Appendix B of TA (ref 1677/3/A) for 2036 Base traffic flows,
6. Refer Figure B7, Appendix B of TA (ref 1677/3/A) for 2036 With Development traffic flows.

Table TN4/2 PICADY RESULTS SJ1 Lancaster Drive/Edisford Road

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Henthorn Road	0.6	0.5	0.2	0.3
Bawdlands	0.0	0.5	0.0	0.5

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.1 PICADY VALIDATION SJ5 Henthorn Road/ Bawdlands

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Henthorn Road left	0.01	0.0	6.05	0.01	0.0	6.21
Henthorn Road right	0.32	0.5	14.27	0.22	0.3	13.15
Bawdlands	0.25	0.5	6.06	0.23	0.5	6.92
2031 Base, Existing Junction Geometry						
Henthorn Road left	0.01	0.0	6.26	0.01	0.0	6.39
Henthorn Road right	0.36	0.5	15.54	0.24	0.3	14.17
Bawdlands	0.27	0.6	6.18	0.26	0.5	7.11
2031 With Development, Existing Junction Geometry						
Henthorn Road left	0.01	0.0	6.45	0.01	0.0	6.49
Henthorn Road right	0.39	0.6	16.60	0.26	0.4	14.71
Bawdlands	0.28	0.6	6.16	0.27	0.6	7.16
2036 Base, Existing Junction Geometry						
Henthorn Road left	0.01	0.0	6.43	0.01	0.0	6.54
Henthorn Road right	0.38	0.6	16.56	0.26	0.4	14.93
Bawdlands	0.29	0.7	6.28	0.28	0.6	7.25
2036 With Development, Existing Junction Geometry						
Henthorn Road left	0.01	0.0	6.56	0.01	0.0	6.65
Henthorn Road right	0.41	0.7	17.38	0.28	0.4	15.54
Bawdlands	0.29	0.7	6.21	0.28	0.6	7.30

Notes:
1. Refer Drg No 1677/06 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.2 PICADY RESULTS SJ5 Henthorn Road/ Bawdlands

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Thorn Street (W)	0.1	0.2	0.1	0.2
Henthorn Road (S)	0.3	1.5	0.2	0.4
Thorn Street (E)	0.6	0.7	1.7	1.9
Henthorn Road (N)	0.0	0.0	0.2	0.0

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.3 PICADY VALIDATION SJ6 Henthorn Road/Thorn Street

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Thorn Street (W)	0.14	0.2	11.19	0.19	0.2	10.24
Henthorn Road (S)	0.61	1.5	16.37	0.28	0.4	9.18
Thorn Street (E)	0.42	0.7	11.25	0.67	1.9	17.74
Henthorn Road (N)	0.01	0.0	6.08	0.01	0.0	5.30
2031 Base, Existing Junction Geometry						
Thorn Street (W)	0.16	0.2	11.75	0.20	0.3	10.67
Henthorn Road (S)	0.67	1.9	18.85	0.30	0.4	9.57
Thorn Street (E)	0.47	0.9	12.25	0.73	2.5	21.25
Henthorn Road (N)	0.01	0.0	6.10	0.01	0.0	5.26
2031 With Development, Existing Junction Geometry						
Thorn Street (W)	0.17	0.2	12.86	0.21	0.3	10.96
Henthorn Road (S)	0.80	3.5	29.94	0.34	0.5	10.25
Thorn Street (E)	0.52	1.1	13.90	0.78	3.2	25.65
Henthorn Road (N)	0.01	0.0	6.29	0.01	0.0	5.26
2036 Base, Existing Junction Geometry						
Thorn Street (W)	0.17	0.2	12.11	0.22	0.3	10.97
Henthorn Road (S)	0.70	2.2	20.84	0.31	0.5	9.85
Thorn Street (E)	0.49	1.0	12.91	0.76	2.9	24.39
Henthorn Road (N)	0.01	0.0	6.10	0.01	0.0	5.24
2036 With Development, Existing Junction Geometry						
Thorn Street (W)	0.17	0.2	12.86	0.22	0.3	11.26
Henthorn Road (S)	0.80	3.5	29.76	0.36	0.5	10.54
Thorn Street (E)	0.52	1.1	13.92	0.82	3.9	30.11
Henthorn Road (N)	0.01	0.0	6.29	0.01	0.0	5.23

Notes:
1. Refer Drg No 1677/06 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.4 PICADY RESULTS SJ6 Henthorn Road/Thorn Street

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
B6243 Parsons Lane (E)	0.0	0.4	0.3	0.5
B6243 Parsons Lane (W)	0.7	1.7	0.0	0.7
Station Road	0.0	0.5	0.0	1.2

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.5 ARCADY VALIDATION SJ7 Station Road/Parsons Lane

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
B6243 Parsons Lane (E)	0.27	0.4	5.68	0.34	0.5	7.07
B6243 Parsons Lane (W)	0.63	1.7	11.66	0.41	0.7	7.19
Station Road	0.34	0.5	6.28	0.54	1.2	8.70
2031 Base, Existing Junction Geometry						
B6243 Parsons Lane (E)	0.29	0.4	5.99	0.37	0.6	7.74
B6243 Parsons Lane (W)	0.68	2.1	13.60	0.44	0.8	7.66
Station Road	0.37	0.6	6.55	0.58	1.4	9.56
2031 With Development, Existing Junction Geometry						
B6243 Parsons Lane (E)	0.30	0.4	6.05	0.39	0.7	8.05
B6243 Parsons Lane (W)	0.71	2.4	14.89	0.46	0.8	7.84
Station Road	0.38	0.6	6.63	0.60	1.5	10.00
2036 Base, Existing Junction Geometry						
B6243 Parsons Lane (E)	0.31	0.5	6.20	0.40	0.7	8.24
B6243 Parsons Lane (W)	0.71	2.5	15.21	0.46	0.9	7.99
Station Road	0.39	0.7	6.72	0.61	1.5	10.18
2036 With Development, Existing Junction Geometry						
B6243 Parsons Lane (E)	0.31	0.5	6.26	0.41	0.7	8.57
B6243 Parsons Lane (W)	0.74	2.8	16.82	0.48	0.9	8.19
Station Road	0.39	0.7	6.81	0.63	1.7	10.68

Notes:
1. Refer Drg No 1677/07 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.6/A ARCADY RESULTS SJ7 Station Road/Parsons Lane

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Moor Lane (S)	0.0	0.5	0.1	0.5
Woone Lane	1.4	1.3	0.3	0.8
Moor Lane (N)	0.1	0.3	0.0	0.4

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.7 ARCADY VALIDATION SJ8 Moor Lane/Woone Lane

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Moor Lane (S)	0.34	0.5	5.63	0.33	0.5	5.35
Woone Lane	0.57	1.3	8.70	0.43	0.8	6.51
Moor Lane (N)	0.24	0.3	6.91	0.29	0.4	6.74
2031 Base, Existing Junction Geometry						
Moor Lane (S)	0.37	0.6	5.86	0.36	0.5	5.56
Woone Lane	0.62	1.6	10.17	0.47	0.9	7.16
Moor Lane (N)	0.27	0.4	7.38	0.32	0.5	7.18
2031 With Development, Existing Junction Geometry						
Moor Lane (S)	0.37	0.6	5.86	0.36	0.6	5.56
Woone Lane	0.67	2.0	11.45	0.49	1.0	7.45
Moor Lane (N)	0.29	0.4	7.75	0.34	0.5	7.48
2036 Base, Existing Junction Geometry						
Moor Lane (S)	0.39	0.7	6.04	0.37	0.6	5.71
Woone Lane	0.66	1.9	11.40	0.50	1.0	7.65
Moor Lane (N)	0.29	0.4	7.70	0.34	0.5	7.51
2036 With Development, Existing Junction Geometry						
Moor Lane (S)	0.39	0.7	6.03	0.37	0.6	5.71
Woone Lane	0.70	2.3	13.03	0.52	1.1	7.96
Moor Lane (N)	0.31	0.5	8.12	0.36	0.6	7.83

Notes:
1. Refer Drg No 1677/08 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.8/A ARCADY RESULTS SJ8 Moor Lane/Woone Lane

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Castle View	0.3	0.2	0.3	0.2
Parsons Lane	0.5	0.3	0.9	0.6

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.9 PICADY VALIDATION SJ9 Castle View/Parsons Lane

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Castle View	0.15	0.2	9.54	0.18	0.2	11.03
Parsons Lane	0.12	0.3	5.43	0.22	0.6	4.93
2031 Base, Existing Junction Geometry						
Castle View	0.17	0.2	10.07	0.21	0.3	11.74
Parsons Lane	0.13	0.3	5.41	0.25	0.7	4.97
2031 With Development, Existing Junction Geometry						
Castle View	0.17	0.2	10.28	0.21	0.3	11.98
Parsons Lane	0.13	0.3	5.41	0.26	0.7	4.94
2036 Base, Existing Junction Geometry						
Castle View	0.18	0.2	10.41	0.22	0.3	12.26
Parsons Lane	0.14	0.3	5.40	0.27	0.8	5.00
2036 With Development, Existing Junction Geometry						
Castle View	0.18	0.2	10.63	0.22	0.3	12.51
Parsons Lane	0.14	0.3	5.40	0.28	0.8	4.98

Notes:
1. Refer Drg No 1677/09 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.10 PICADY RESULTS SJ9 Castle View/Parsons Lane

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Eshton Terrace	0.0	0.2	0.2	0.3
Woone Lane (S)	0.3	0.2	0.3	0.1
Greenacre Street	0.0	0.2	0.2	0.2

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.11 PICADY VALIDATION SJ10 Woone Lane/Eshton Terrace/Greenacre Street

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Woone Lane (N)	0.00	0.0	0.00	0.00	0.0	0.00
Eshton Terrace	0.11	0.2	4.98	0.14	0.3	5.65
Woone Lane (S)	0.15	0.2	10.46	0.11	0.1	9.62
Greenacre Street	0.09	0.2	5.58	0.10	0.2	4.73
2031 Base, Existing Junction Geometry						
Woone Lane (N)	0.00	0.0	0.00	0.00	0.0	0.00
Eshton Terrace	0.13	0.3	5.09	0.16	0.4	5.70
Woone Lane (S)	0.16	0.2	11.00	0.12	0.1	10.10
Greenacre Street	0.10	0.2	5.71	0.11	0.3	4.75
2031 With Development, Existing Junction Geometry						
Woone Lane (N)	0.00	0.0	0.00	0.00	0.0	0.00
Eshton Terrace	0.15	0.4	5.01	0.16	0.4	5.67
Woone Lane (S)	0.17	0.2	11.26	0.12	0.1	10.35
Greenacre Street	0.11	0.2	5.73	0.12	0.3	4.69
2036 Base, Existing Junction Geometry						
Woone Lane (N)	0.00	0.0	0.00	0.00	0.0	0.00
Eshton Terrace	0.14	0.4	5.07	0.17	0.4	5.71
Woone Lane (S)	0.18	0.2	11.39	0.13	0.1	10.47
Greenacre Street	0.11	0.2	5.69	0.12	0.3	4.72
2036 With Development, Existing Junction Geometry						
Woone Lane (N)	0.00	0.0	0.00	0.00	0.0	0.00
Eshton Terrace	0.16	0.4	4.99	0.17	0.4	5.70
Woone Lane (S)	0.18	0.2	11.71	0.13	0.2	10.74
Greenacre Street	0.11	0.3	5.71	0.13	0.3	4.66

Notes:
1. Refer Drg No 1677/10 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.12 PICADY RESULTS SJ10 Woone Lane/Eshton Terrace/Greenacre Street

MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
	OBSERVED	MODELLED	OBSERVED	MODELLED
Greenacre Street	0.0	0.0	0.0	0.0
Whalley Road (N)	0.3	0.9	0.2	2.3
Whalley Road (S)	0.0	0.6	0.0	0.6

Notes:
1. AHA queue survey 05.11.24,
2. Average spot queue observed over peak hour period,
3. Refer Figure B1, Appendix B for 2024 traffic count flows.

Table 9.13 PICADY VALIDATION SJ11 Whalley Road/Greenacre Street

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Greenacre Street	0.00	0.0	0.00	0.00	0.0	0.00
Whalley Road (N)	0.37	0.9	8.49	0.57	2.3	10.36
Whalley Road (S)	0.36	0.6	2.95	0.39	0.6	2.95
2031 Base, Existing Junction Geometry						
Greenacre Street	0.00	0.0	0.00	0.00	0.0	0.00
Whalley Road (N)	0.41	1.1	8.70	0.63	3.3	11.42
Whalley Road (S)	0.38	0.7	3.07	0.42	0.7	3.11
2031 With Development, Existing Junction Geometry						
Greenacre Street	0.00	0.0	0.00	0.00	0.0	0.00
Whalley Road (N)	0.42	1.2	8.68	0.66	3.9	12.23
Whalley Road (S)	0.39	0.7	3.10	0.42	0.7	3.15
2036 Base, Existing Junction Geometry						
Greenacre Street	0.00	0.0	0.00	0.00	0.0	0.00
Whalley Road (N)	0.43	1.2	8.84	0.67	4.1	12.46
Whalley Road (S)	0.41	0.7	3.17	0.44	0.8	3.21
2036 With Development, Existing Junction Geometry						
Greenacre Street	0.00	0.0	0.00	0.00	0.0	0.00
Whalley Road (N)	0.45	1.4	8.83	0.70	5.0	13.59
Whalley Road (S)	0.41	0.7	3.19	0.44	0.8	3.25

Notes:
1. Refer Drg No 1677/11 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.14 PICADY RESULTS SJ11 Whalley Road/Greenacre Street

MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
	RFC	QUEUE (pcu)	DELAY (secs/pcu)	RFC	QUEUE (pcu)	DELAY (secs/pcu)
2024 Count, Existing Junction Geometry						
Access Road	0.03	0.0	11.76	0.03	0.0	10.50
A671 Whalley Road (N)	0.21	0.7	5.03	0.19	0.6	5.64
Primrose Road	0.68	1.9	37.15	0.52	1.1	25.36
A671 Whalley Road (S)	0.01	0.0	3.91	0.00	0.0	3.34
2031 Base, Existing Junction Geometry						
Access Road	0.03	0.0	12.73	0.01	0.0	12.77
A671 Whalley Road (N)	0.25	0.8	5.07	0.23	0.8	5.61
Primrose Road	0.79	3.1	56.37	0.52	1.0	27.07
A671 Whalley Road (S)	0.01	0.0	3.80	0.00	0.0	3.29
2031 With Development, Existing Junction Geometry						
Access Road	0.03	0.0	12.74	0.01	0.0	13.03
A671 Whalley Road (N)	0.25	0.9	5.01	0.24	0.8	5.59
Primrose Road	0.60	1.4	33.79	0.54	1.1	28.80
A671 Whalley Road (S)	0.01	0.0	3.81	0.01	0.0	3.27
2036 Base, Existing Junction Geometry						
Access Road	0.03	0.0	13.46	0.01	0.0	13.47
A671 Whalley Road (N)	0.27	1.0	5.13	0.26	0.9	5.65
Primrose Road	0.87	4.5	79.91	0.56	1.2	31.40
A671 Whalley Road (S)	0.01	0.0	3.74	0.01	0.0	3.22
2036 With Development, Existing Junction Geometry						
Access Road	0.03	0.0	14.01	0.02	0.0	13.47
A671 Whalley Road (N)	0.28	1.0	5.08	0.26	0.9	5.63
Primrose Road	0.91	5.7	97.81	0,59	1.4	34.11
A671 Whalley Road (S)	0.01	0.0	3.74	0.01	0.0	3.20

Notes:
1. Refer Drg No 1677/12 for existing junction geometry,
2. Refer Figure B2 for 2031 Base traffic flows,
3. Refer Figure B3 for 2036 Base traffic flows,
4. Refer Figure B6 for 2031 With Development traffic flows,
5. Refer Figure B7 for 2036 With Development traffic flows.

Table 9.15 PICADY RESULTS SJ12 Primrose Road/Whalley Road

Drawings

N

Notes:

1. Do not scale from this drawing
2. This drawing is copyright and may not be copied or given to a third party without written authority from Ashley Helme Associates Ltd
3. Subject to detailed design
4. Based upon digitised OS plan and topographical survey

Key:

- 2.4m x 46m visibility splay
- Proposed kerbline
- Proposed road markings
- Existing road markings
- Tactile paving

Introduce 20mph speed roundel on carriageway. Introduce repeater signs along development frontage on Henthorn Road. Precise details to be agreed with LHA at detailed design stage.

Introduce Slow markings on carriageway

2m wide access path with 1m hedge removal on either side

PROPOSED PHASE 3 NORTHERN ACCESS

3.75m wide footway/cycleway. Can be used as emergency access for Phase 3 North Site and Phase 2. Controlled by knock-down bollards.

PROPOSED PHASE 3 SOUTHERN ACCESS

Introduce 20mph speed roundel on carriageway. Introduce repeater signs along development frontage on Henthorn Road. Precise details to be agreed with LHA at detailed design stage.

Widen Henthorn Road carriageway to 5.5m. Extent of widening approximately 150m

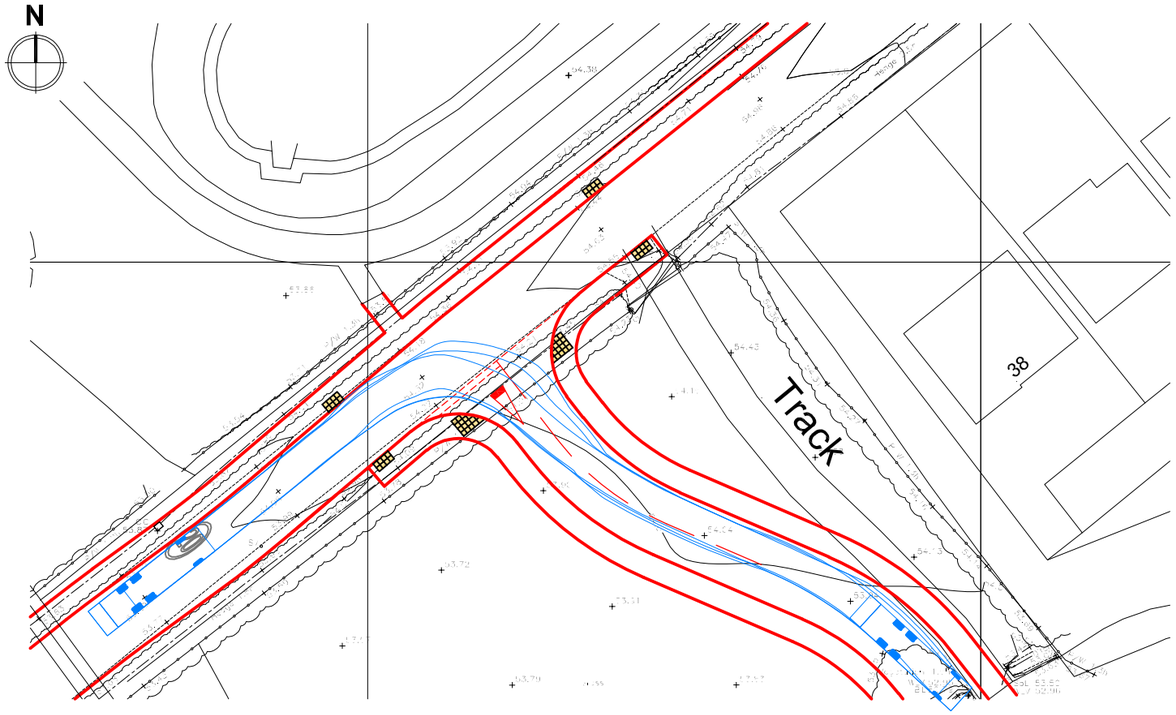
Introduce 2.0m wide footway between Site and Ribble Way. Footway to be constructed within site land/adopted highway. Street lighting to be extended from existing termination point to the east to cover the length of the proposed footway. Precise details to be agreed at detailed design stage

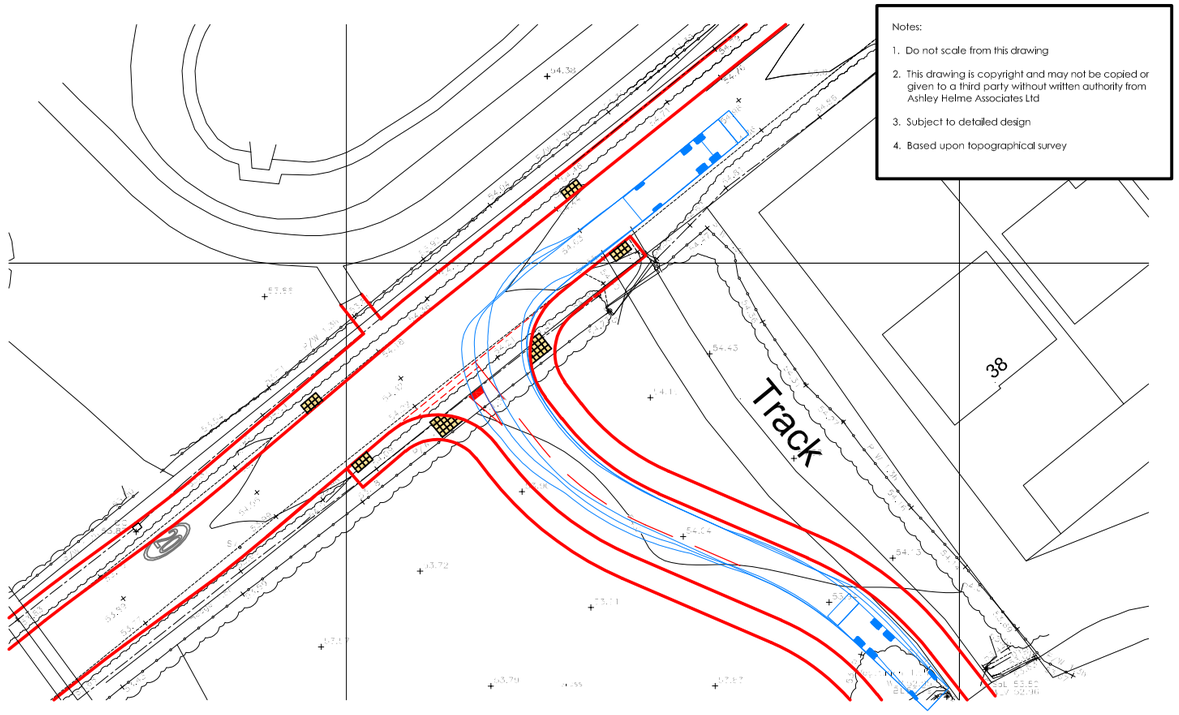
Ribble Way PROW

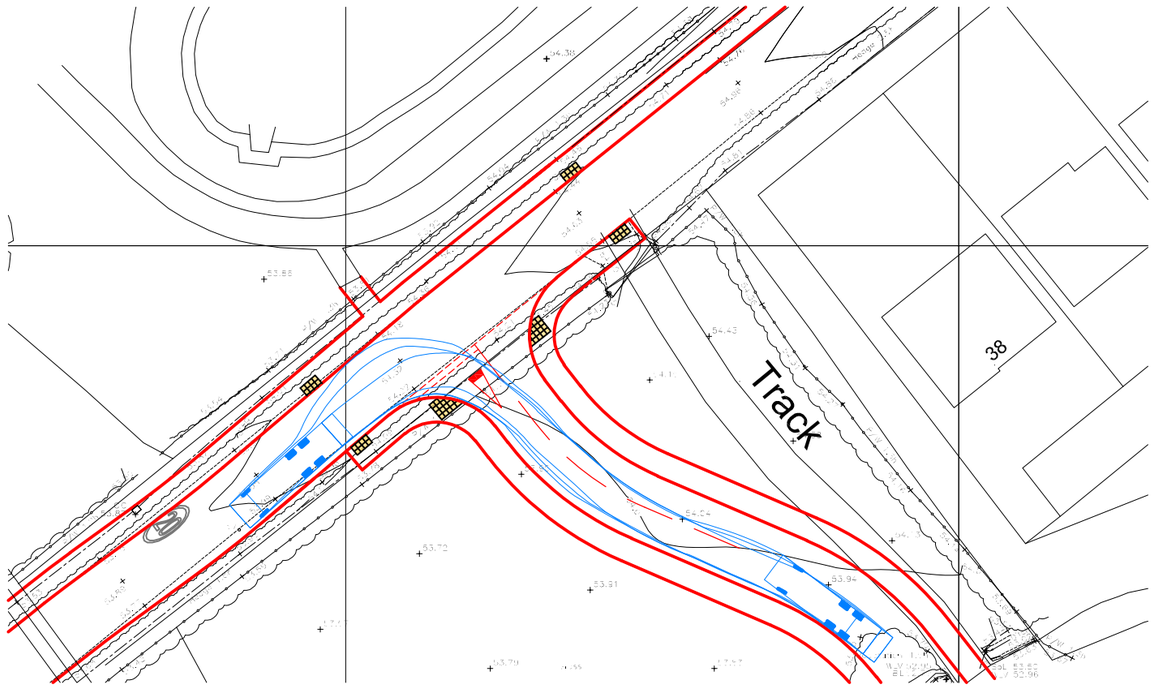
Introduce 20mph speed roundel on carriageway. Introduce repeater signs along development frontage on Henthorn Road. Precise details to be agreed with LHA at detailed design stage.

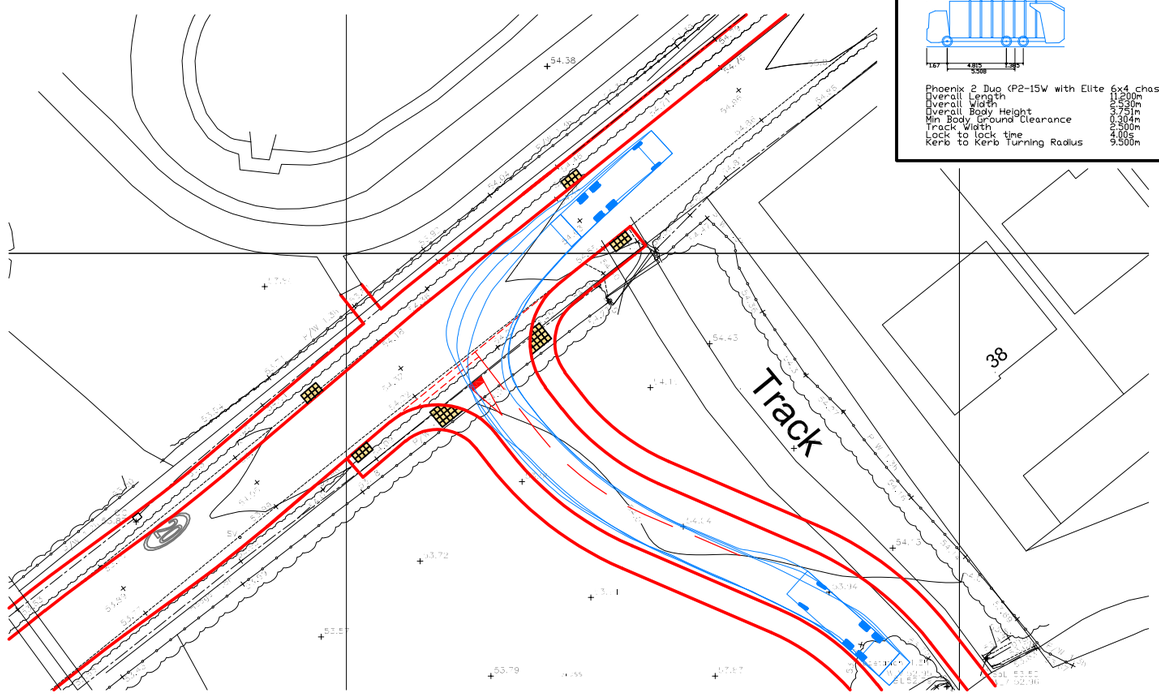
Introduce Slow markings on carriageway

Project: HENTHORN ROAD, CLITHEROE	Title: PROPOSED ACCESS ARRANGEMENTS	Drg No: 1677/01	Rev: G	ASHLEY HELME ASSOCIATES
Client: GLADMAN DEVELOPMENTS		Date: MARCH 2026	Scale: 1:500@A2	Telephone 0161 972 0552 · Email aha@ashleyhelme.co.uk · Website www.ashleyhelme.co.uk · Address 76 Washway Road, Sale, Manchester, M33 7RE









Project: HENTHORN ROAD, CLITHEROE	Title: SWEPT PATH ANALYSIS: REFUSE VEHICLE	Drawing No: 1677/SP/02	Rev: B
Client: GLADMAN DEVELOPMENTS		Date: MARCH 2026	Scale: 1:500@A3

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