

Job Name	Cheshunt Football Club
Subject	Transport Note
Ref	18086/N01
Date	5 November 2019

### Introduction

1. KMC is appointed by LW Developments Limited to provide transport advice for the proposed development of Cheshunt Football Club. This note has been prepared in response to a highway objection received by Hertfordshire County Council (HCC) highway authority for application reference 07/18/0514/F. The comments made by HCC can be summarised under the following headings:
  - Pedestrian and cycle movement and access;
  - Refuse vehicle swept path analysis;
  - Accident analysis; and
  - Highway impact assessment.
2. This note responds to each of the comments raised in turn under the above headings.

### Pedestrian and cycle movement and access

3. The HCC response noted that since the application had been submitted, there had been a number of changes to planning policy and guidance. HCC considered that the site layout was not in accordance with the latest planning policy with regards to supporting greater and safer use of sustainable modes of travel. HCC highways also commented that the sustainable travel routes within the site and connections to the wider network were not in accordance with recently published cycle design guidance set out in LTN1/20, which seeks to provide routes that are coherent, direct, comfortable and attractive.
4. The site layout has been revised to address the HCC comments. The updated layout and a Sustainable Access and Movement plan is included within **Appendix A** of this note and the changes can be summarised as follows:
  - Sustainable route provided from the three residential cul-de-sacs to connect to Aldbury Walk;
  - Reconfiguration of car parking around the perimeter of the stadium to provide a coherent, direct, comfortable and attractive footway as well as increased areas of public realm;

- Provision of legible pedestrian crossing points, which are not obstructed by landscaping or car parking;
  - Walkways provided in the commercial car park to provide safe and direct pedestrian routes through the car park to access the commercial use; and
  - Cycle parking relocated to the access points to the site for cyclists off Theobald's Lane.
5. As a result of the changes to the site layout to provide improvements to walk and cycle access, there has been a slight reduction in car parking compared to the application. The application provided for a total of 665 car parking spaces and the revised site layout provides a total of 646 parking spaces.
6. **Table 1** below summarises the revised residential parking provision and demonstrates that it is in accordance with the maximum standards set out in Appendix B of the Broxbourne Local Plan.

Table 1 – Revised Residential Parking Provision

Dwelling	Number of units	Maximum parking standard	Maximum parking provision	Proposed provision
1 bed	53	1.5 / unit	80	335
2 bed	62	2 / unit	124	
3 bed	26	2.5 / unit	65	
4 bed	22	3 / unit	66	
<b>Total</b>			<b>335</b>	

7. **Table 2** below summarises the revised commercial and football parking provision and demonstrates that it is in accordance with the maximum standards set out in Appendix B of the Broxbourne Local Plan.

Table 2 – Revised Commercial and Football Club Parking Provision

Land use	Sqm	Maximum parking standard	Maximum parking provision	Proposed provision
A1	476	1 per 30 sqm	16	311 spaces (i.e. 70% of maximum parking standard to account for sustainable access and linked trips)
A3	286	1 per 5 sqm	57	
B1	1,334	1 per 30 sqm	44	
D1	953	1 per 9 sqm	106	
D2	953	1 per 15 sqm	64	
Clubhouse	2,400	1 per 15 sqm	160	
<b>Total</b>			<b>447</b>	

8. The proposed provision of 646 car parking spaces is in accordance with the maximum parking standards and reflects the sustainable location of the site as well as the likelihood for linked trips between the uses.

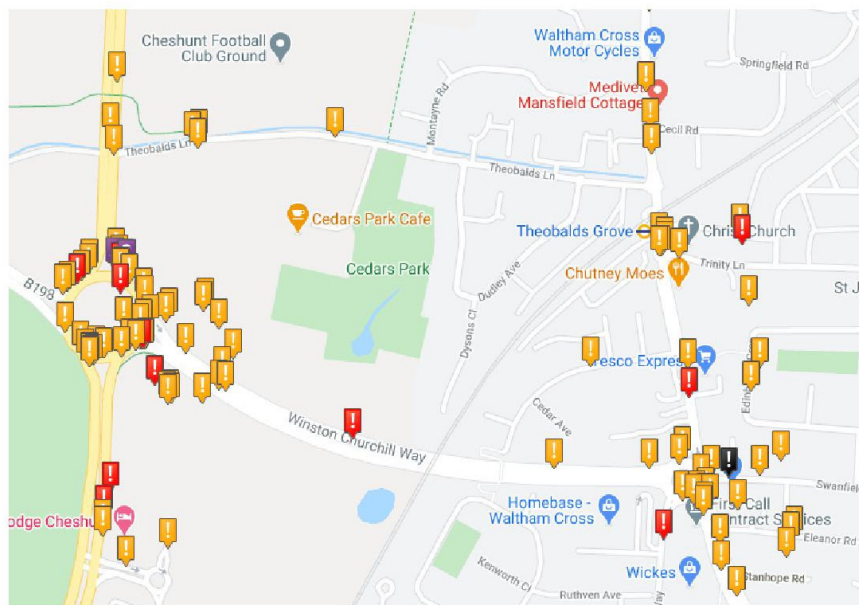
### Refuse swept path analysis

9. HCC requested that swept path analysis is undertaken for the larger refuse vehicle that is used in Hertfordshire. The vehicle that is used is 12.1m in length which has been tracked for the updated layout and is included in **Appendix B** of this note.

## Updated accident analysis

10. The Transport Assessment that was prepared to support the application included a summary of personal injury collision data (PIC) for the 5 years period up to the end of June 2017. HCC has requested that up to date PIC data is assessed to determine if there are any accident issues within the study area.
11. The original study area for the accident analysis in the Transport Assrsment included the following links and junctions:
  - Link: Theobalds Lane in the vicinity of the site from the A10 to the High Street junction;
  - Junction: Crossbrook Street / Theobalds Lane – mini roundabout junction;
  - Junction: Theobalds Lane / A10 southbound – left in left out junction;
  - Junction: High Street / Swanfield Road / Monarchs Way / Sturlas Way / A121 Winston Churchill Way roundabout;
  - Junction: A10 Great Cambridge Road / A121 / B198 Ellis Way roundabout; and
  - Junction: Theobalds Lane / B176 High Street / Trinity Lane – double mini roundabout.
12. Accident data for the most recent 5 year period has been sought from the Crashmap database, which summarises the Personal Injury Collisions (PICs) for the surrounding highway network. **Figure 1** below summarises the PIC data.

Figure 1 – Personal Injury Collisions (PICs) for latest 5 years



13. Table 3 below summarises the updated PIC data for the junctions and links within the study area. The numbers in brackets are the PICs that were assessed as part of the Transport Assessment.

Table 3 – Updated PIC data for latest 5 years (2015 – 2019)

Link / Junction	Number and Severity of PICs		
	Slight	Serious	Fatal
Theobalds Lane	4 (4)	0 (0)	0 (0)
Crossbrook St /Theobalds Lane	0 (2)	0 (3)	0 (0)
A10 / Theobalds Lane	1 (3)	0 (0)	0 (0)
A121/ High Street / Swanfield Rd	13 (17)	0 (0)	1 (0)
A10 / A121 / B198	60 (100)	6 (7)	0 (0)
Theobalds Lane / B176 / Trinity Lane	6 (6)	0 (0)	0 (0)

14. The table shows that the most recent PICs within the area are either the same number and severity as previously assessed in the Transport Assessment or have reduced with the only exception being a fatality in the vicinity of the A121/High Street/Swanfield Road roundabout, which occurred in December 2018. The fatality occurred in dark and wet conditions and involved a vehicle colliding with pedestrian, who was fatally injured.
15. It is considered that the same conclusions can be reached as within the Transport Assessment and that there are no inherent road safety deficiencies in the highway network in the vicinity of the site.

### Highway impact assessment

16. HCC commented that the highway capacity assessment within the original Transport Assessment needs updating with updated traffic count data.
17. It should be noted that the development of the site forms Policy CH7 of the adopted Broxbourne Local Plan, which was recently subject to highways modelling and consultation. It is therefore not considered necessary to update the previously agreed junction modelling.

### Conclusions

18. The site layout has been updated to reflect the HCC comments in order to provide safe and legible routes within the site for walking and cycling.
19. Swept path analysis has been undertaken to demonstrate that the site can be served by a 12.1m refuse vehicle.
20. Updated accident analysis has been provided and demonstrates that the same conclusions can be reached as within the Transport Assessment and that there are no inherent road safety deficiencies in the highway network in the vicinity of the site.
21. In conclusion, it is considered that the HCC comments have been addressed and that there are no reasons why the application should be refused on highway grounds.



## Appendix A

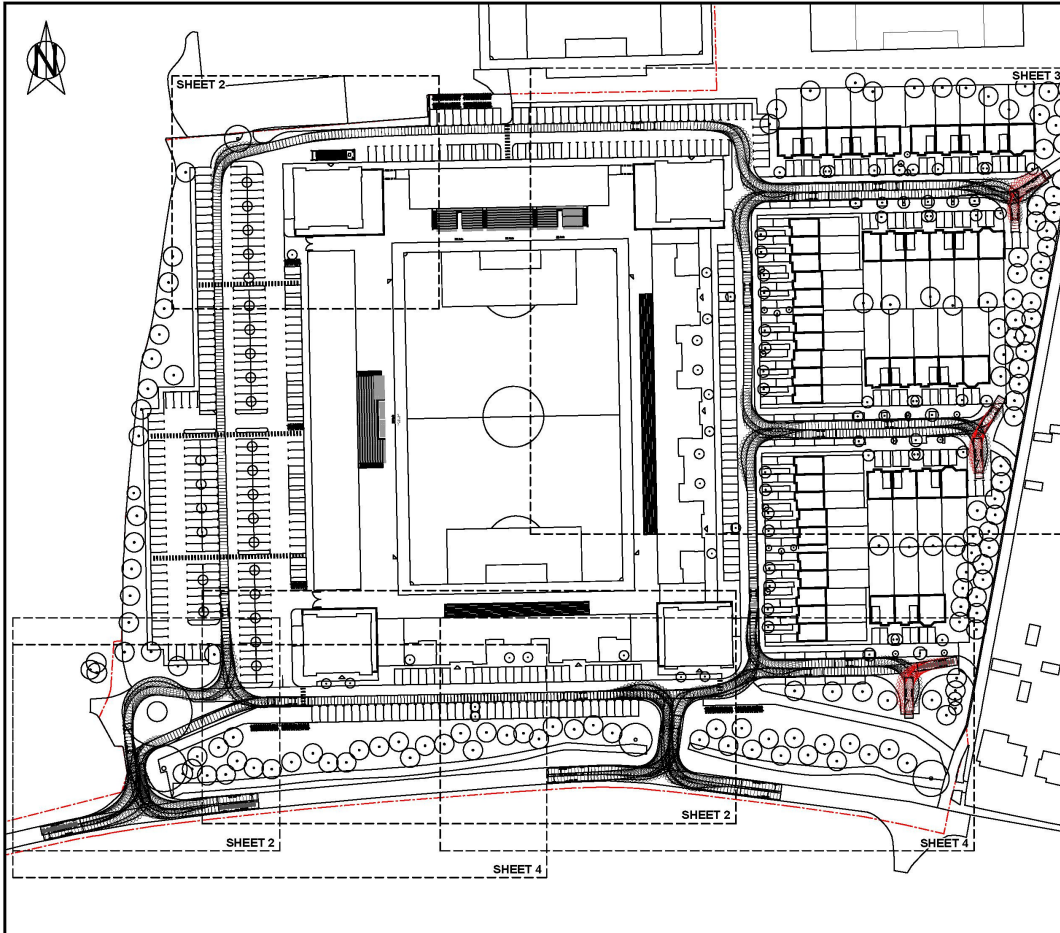


**LEGEND:**

- STADIUM ACCESSWAYS
- PEDESTRIAN CROSSING
- PEDESTRIAN ROUTE
- PEDESTRIAN/BICYCLE ROUTE



## Appendix B



- NOTES:**
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**Hertfordshire CC Standard Refuse Vehicle (12.1m Mercedes Eonic 3233L 8x4)**

Overall Length	12.100m
Overall Width	2.490m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to Lock Time	4.00s
Wall to Wall Turning Radius	11.250m

- FORWARD MOVEMENTS**  
(design speed - 5kph)
- REVERSE MOVEMENTS**  
(design speed - 2.5kph)

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Project: Cheshunt Football Club

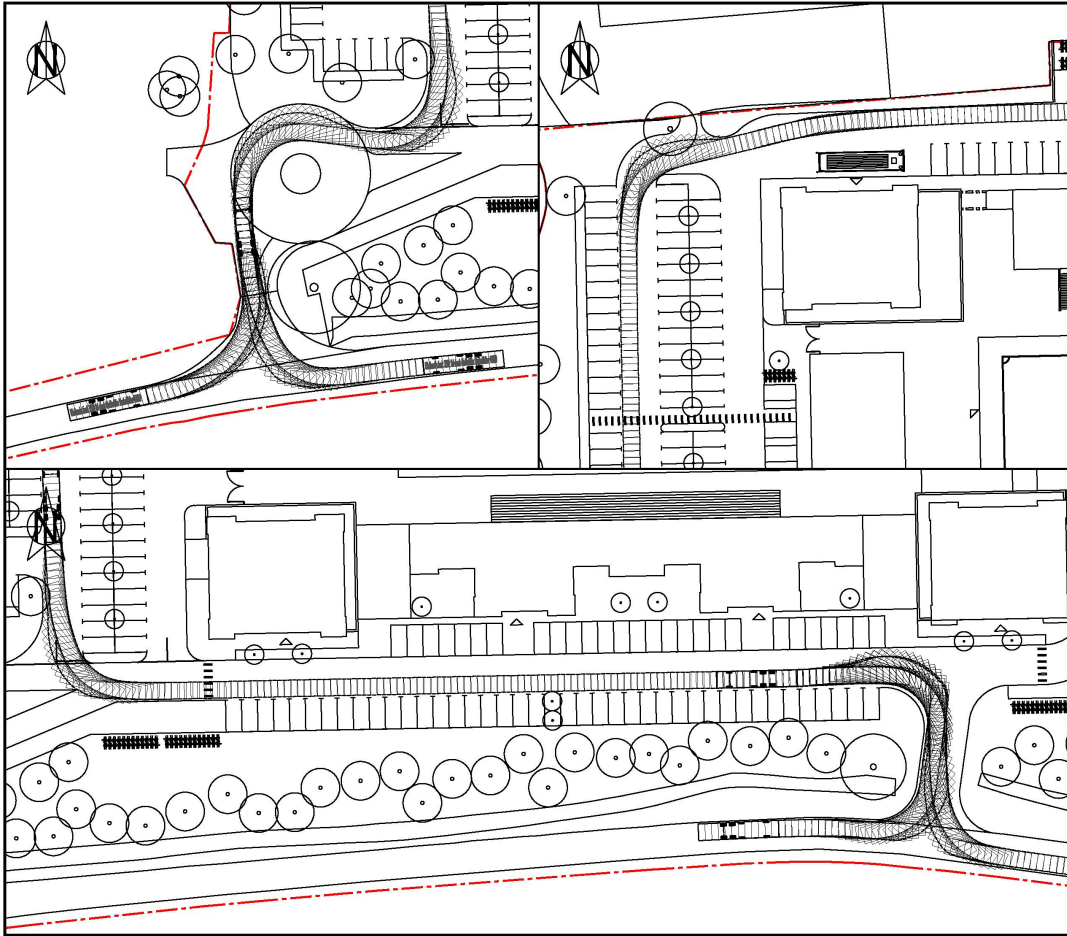
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Drawing Ref: KMC18086 / TR01(1)







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Client:  
LW Developments Ltd

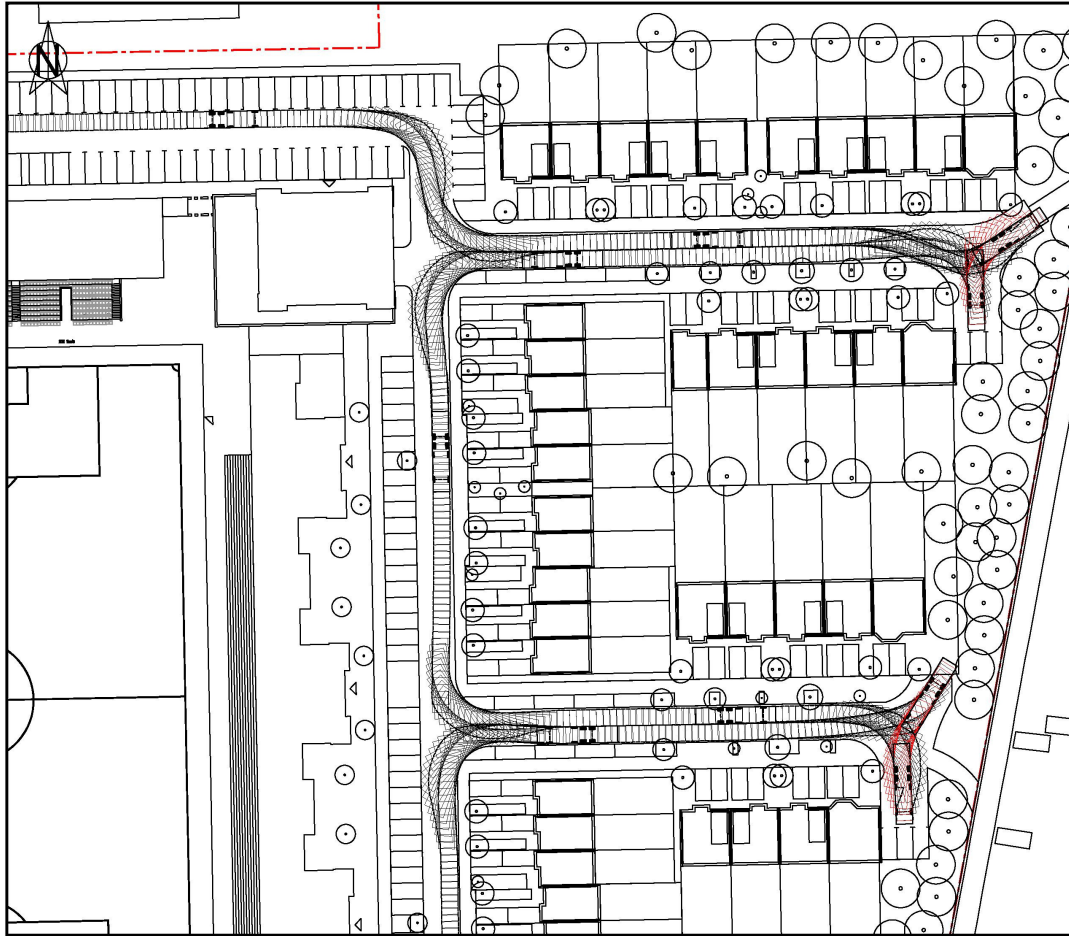
Project:  
Cheshunt Football Club

Drawing Title:  
Vehicular Swept Paths Analysis using  
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Sheet 2 of 8: Clockwise Route

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1:500	Aprd	KMcM	Date	05.11.2020

Drawing Ref:  
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Track Width	2.490m
Lock to Lock Time	4.00s
Wait to Wall Turning Radius	11.250m

**FORWARD MOVEMENTS**  
(design speed - 5kph)

**REVERSE MOVEMENTS**  
(design speed - 2.5kph)

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Client:  
LW Developments Ltd

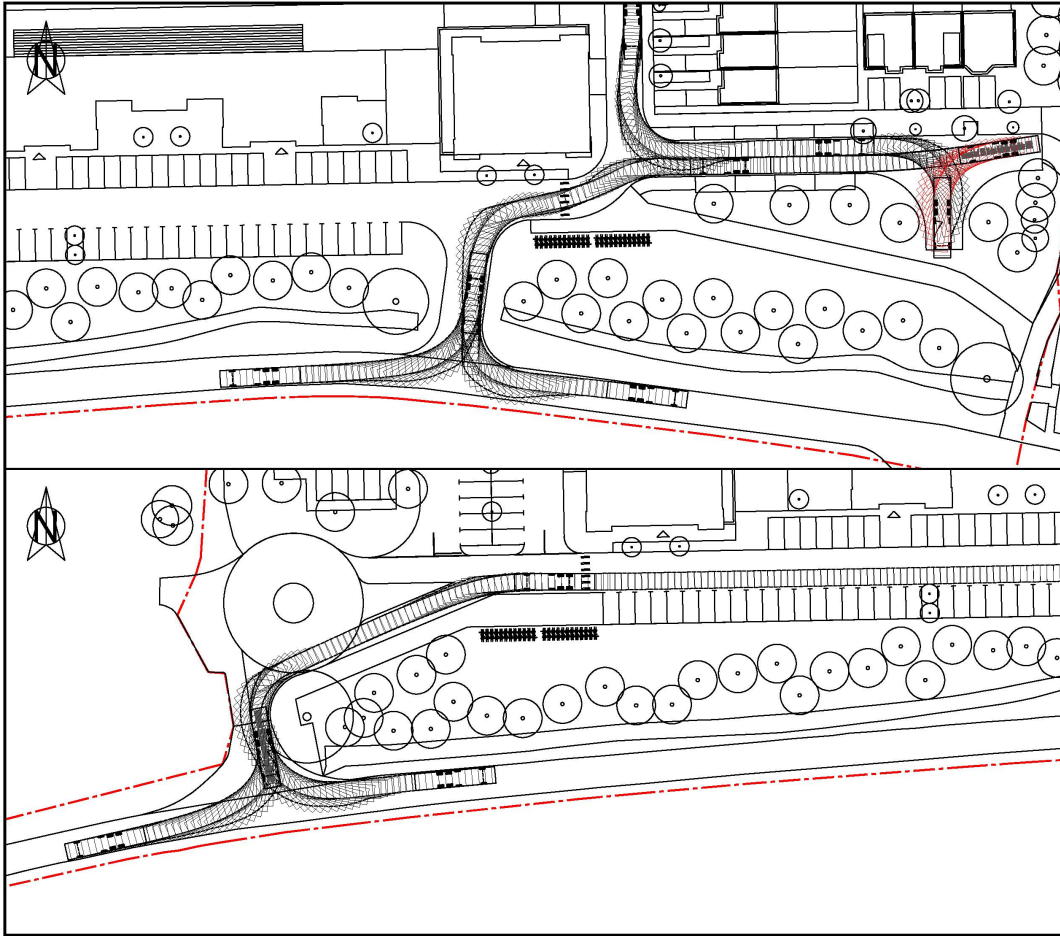
Project:  
Cheshunt Football Club

Drawing Title:  
Vehicular Swept Paths Analysis using Hertfordshire CC Standard Refuse Vehicle Sheet 3 of 8: Clockwise Route

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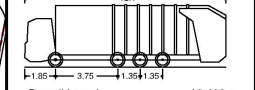
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Track Width	2.490m
Lock to Lock Time	4.00s
Wall to Wall Turning Radius	11.250m

**FORWARD MOVEMENTS**  
(design speed - 5kph)

**REVERSE MOVEMENTS**  
(design speed - 2.5kph)

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Issue Status					
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Client: LW Developments Ltd

Project: Cheshunt Football Club

Drawing Title: Vehicular Swept Paths Analysis using Hertfordshire CC Standard Refuse Vehicle Sheet 4 of 8: Clockwise Route

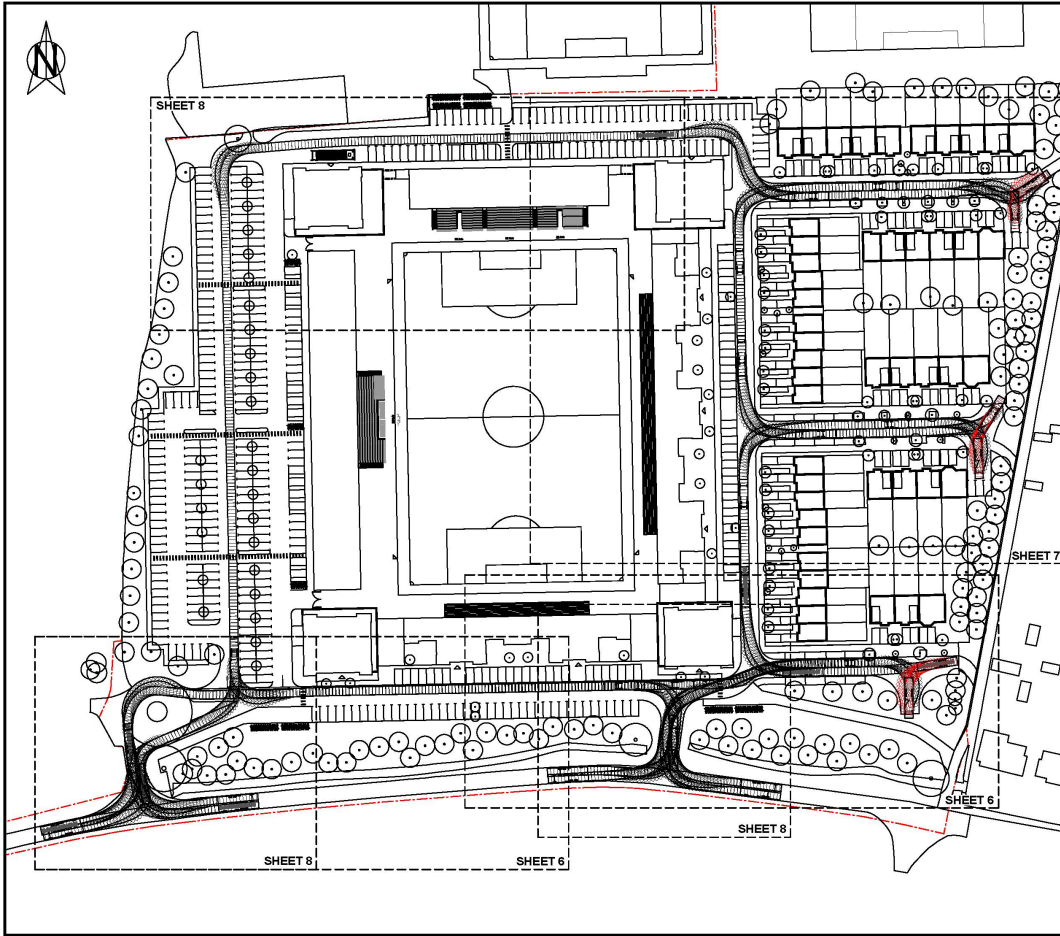
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Drawn: DW  
Apr  
KMCM

Checked: KMCM  
Date: 05.11.2020

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**Hertfordshire CC Standard Refuse Vehicle (12.1m Mercedes Eonic 3233L 8x4)**

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Overall Width	3.750m
Overall Body Height	3.749m
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Track Width	2.490m
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Wall to Wall Turning Radius	11.250m

**FORWARD MOVEMENTS**  
(design speed - 5kph)

**REVERSE MOVEMENTS**  
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REV	DATE	DESCRIPTION	DRN	CHKD	APPD
Issue Status					
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Client: LW Developments Ltd

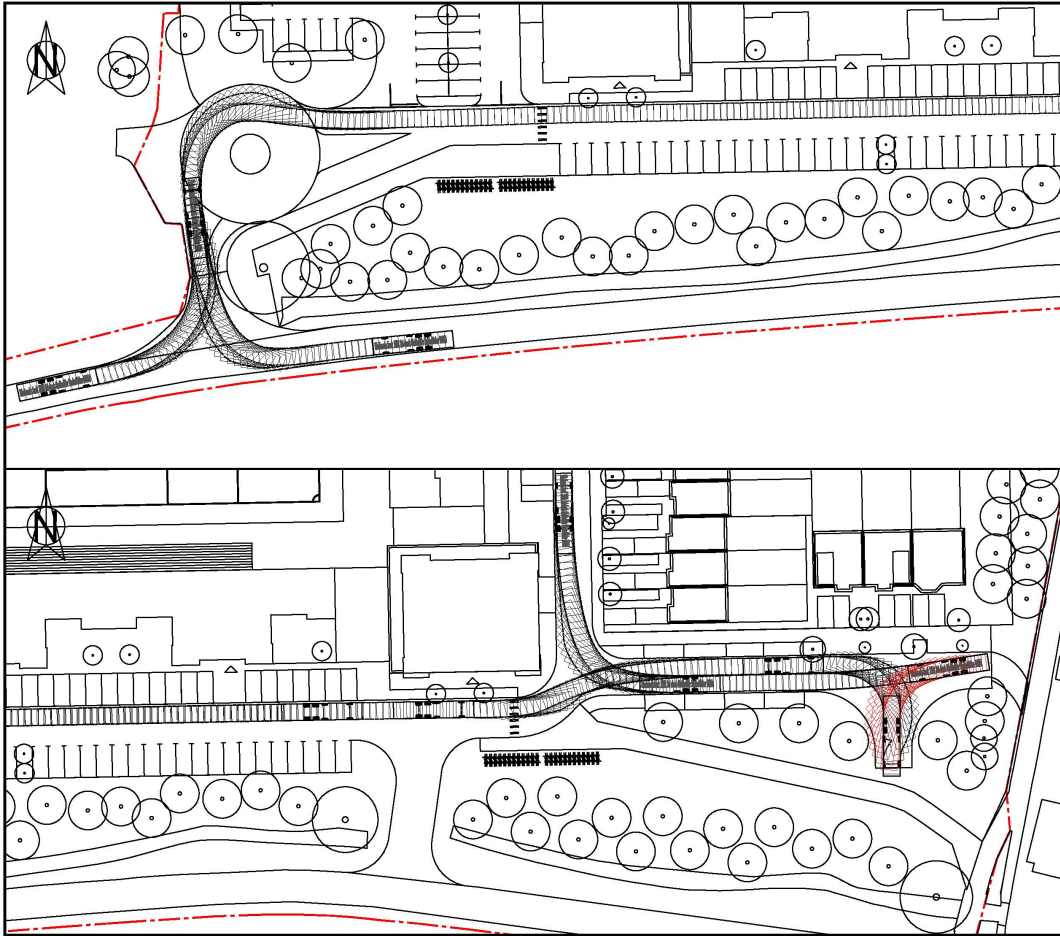
Project: Cheshunt Football Club

Drawing Title: Vehicular Sweep Paths Analysis using Hertfordshire CC Standard Refuse Vehicle Sheet 5 of 8: Anti-clockwise Route

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Drawing Ref: KMC18086 / TR01(5)

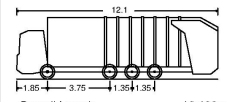




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Track Width	2.490m
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Wall to Wall Turning Radius	11.250m

**FORWARD MOVEMENTS**  
(design speed - 5kph)

**REVERSE MOVEMENTS**  
(design speed - 2.5kph)

REV	DATE	DESCRIPTION	DRN	CHKD	APPD

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Project: Cheshunt Football Club

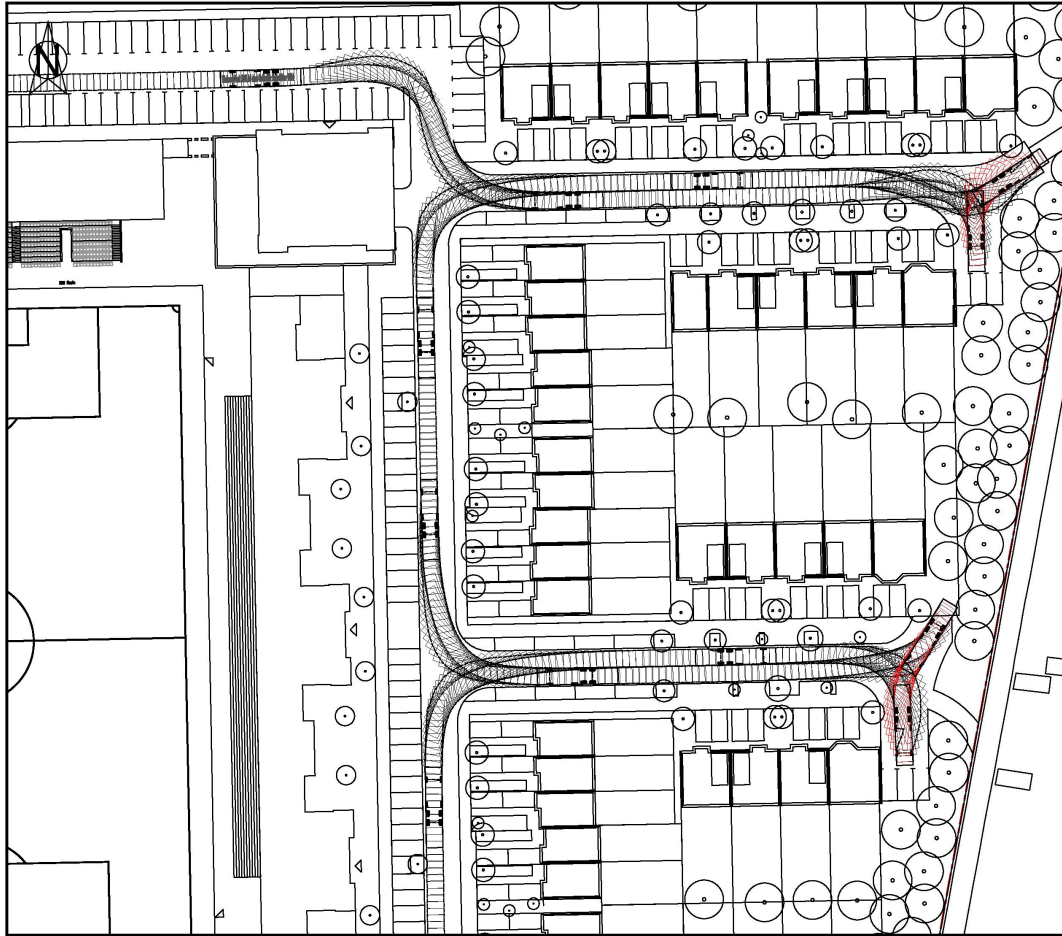
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Drawing Ref: KMC18086 / TR01(6)	Rev:
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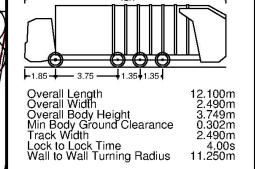






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REV	DATE	DESCRIPTION	DRN	CHKD	APPD

Issue Status:  
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 CONSTRUCTION  
 AS BUILT  
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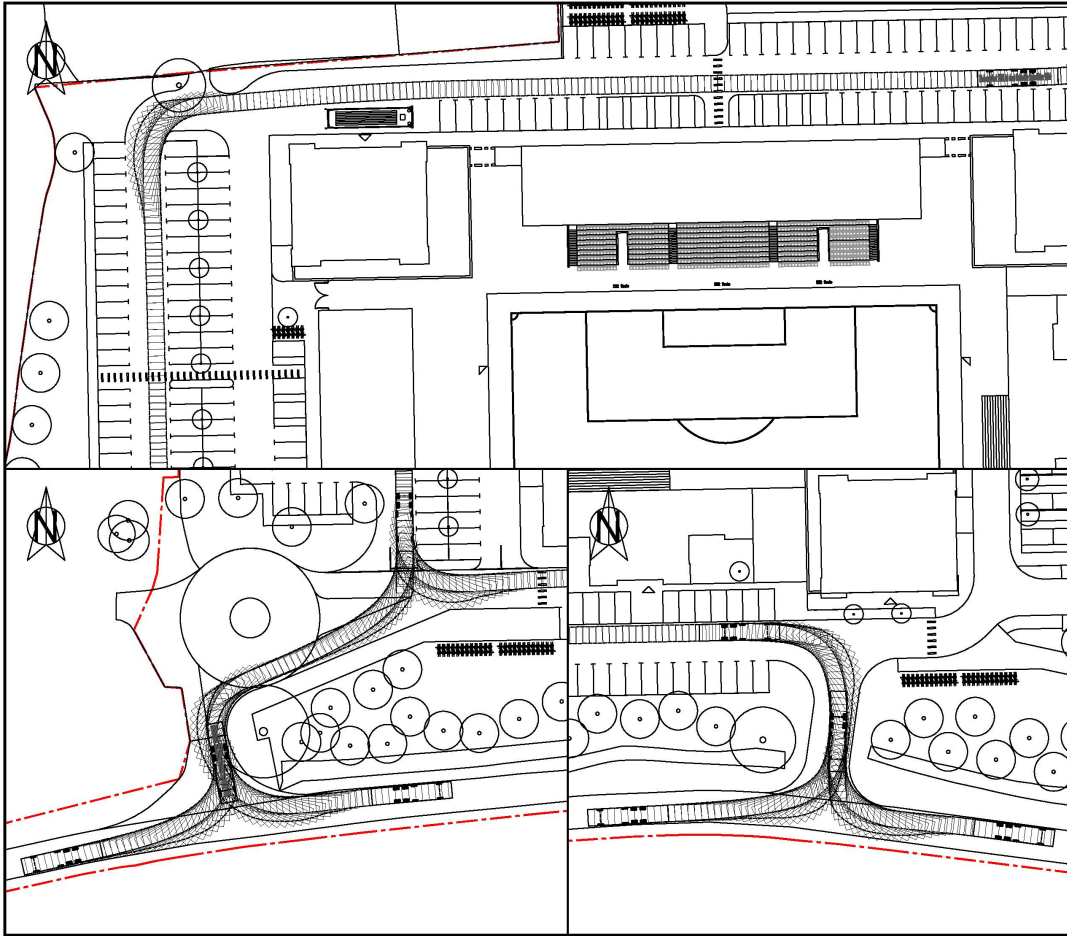
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Drawing Title:  
Vehicular Swept Paths Analysis using  
Hertfordshire CC Standard Refuse Vehicle  
Sheet 7 of 8: Anti-clockwise Route

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Issue Status

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Drawing Title:  
Vehicular Swept Paths Analysis using Hertfordshire CC Standard Refuse Vehicle Sheet 8 of 8: Anti-clockwise Route

Scale: GP A3	Drawn: DW	Checked: KMcM
1:500	Apr 2020	Date: 05.11.2020

Drawing Ref: KMC18086 / TR01(8)

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