

Built Group Ltd

Moss Green Close, Huyton

July 2021

Transport Statement

VN211935

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Contents

1	Introduction	3
	Summary of the Proposals	3
	Scope of Report	3
	Report Structure	3
2	Site Location and Existing Transport Conditions	5
	Site Location	5
	Surrounding Highway Network	5
	Highway Safety Record	6
	Summary	6
3	Accessibility Audit	8
	Walking	8
	Cycling	9
	Public Transport – Bus and Rail	10
	Minimum Accessibility Standard Assessment (MASA)	12
	Summary	12
4	Development Proposals	14
	Proposals	14
	Access	14
	Parking	14
	Summary	14
5	Traffic Impact	15
	Overview	15

Forecast Development Traffic Flows 15

Summary..... 15

6 Summary and Conclusion..... 16

Summary..... 16

Conclusion 17

Drawings

VN211935-TR105 – Refuse Vehicle Swept Path Assessment

Appendices

- Appendix A – Completed MASA
- Appendix B – Proposed Site Layout Plan
- Appendix C – TRICS Report

1 Introduction

- 1.1 Vectos have been commissioned by Built Group Ltd on behalf of Livv Housing Group to produce a Transport Statement (TS) to consider highways and transport issues related to a planning application for a proposed residential development of ten houses at Moss Green Close in Huyton. The scheme would deliver an extension to the existing Moss Green Close cul-de-sac which is located within the Huyton area of Merseyside.
- 1.2 Whilst the proposed development is relatively small in scale, this TS has been prepared to assist the local planning and highway authority (Knowsley Metropolitan Borough Council – KMBC) in the positive determination of the planning application.
- 1.3 As part of the pre-application stage Vectos have contacted the KMBC Waste & Recycling Management Team for feedback in relation to the requirements for refuse collection and to help inform the associated strategy and proposed site layout.

Summary of the Proposals

- 1.4 The proposal is for the construction of ten new three-bed houses on currently vacant land at the western end of Moss Green Close. Car parking would also be provided as part of the proposed residential development.
- 1.5 Access will be via the existing Moss Green Close cul-de-sac which is accessed via Huyton House Road to the south.

Scope of Report

- 1.6 This TS will consider the following:
- The site and the local transport conditions;
 - Access to the site by sustainable modes of transport;
 - Proposed access, servicing and car and cycle parking arrangements;
 - The proposed trip generation associated with the site; and
 - Assessment of the anticipated effects of the development traffic upon the surrounding highway network.

Report Structure

- 1.7 The remainder of the report is structured as follows:
- Section 2 considers the site location and baseline transport conditions in the vicinity of the site, including a review of the highway safety record.

- Section 3 provides an audit of the accessibility of the site by sustainable transport modes including reference to the KMBC Minimum Accessibility Standard Assessment (MASA).
- Section 4 details the development proposals including access, servicing, car and cycle parking provision.
- Section 5 provides an assessment of the forecast trip generation of the development.
- Section 6 provides a summary and conclusion.

2 Site Location and Existing Transport Conditions

Site Location

- 2.1 The site comprises vacant land at the western end of the Moss Green Close cul-de-sac in the Huyton area of Merseyside. The location of the site is shown in Figure 2.1.

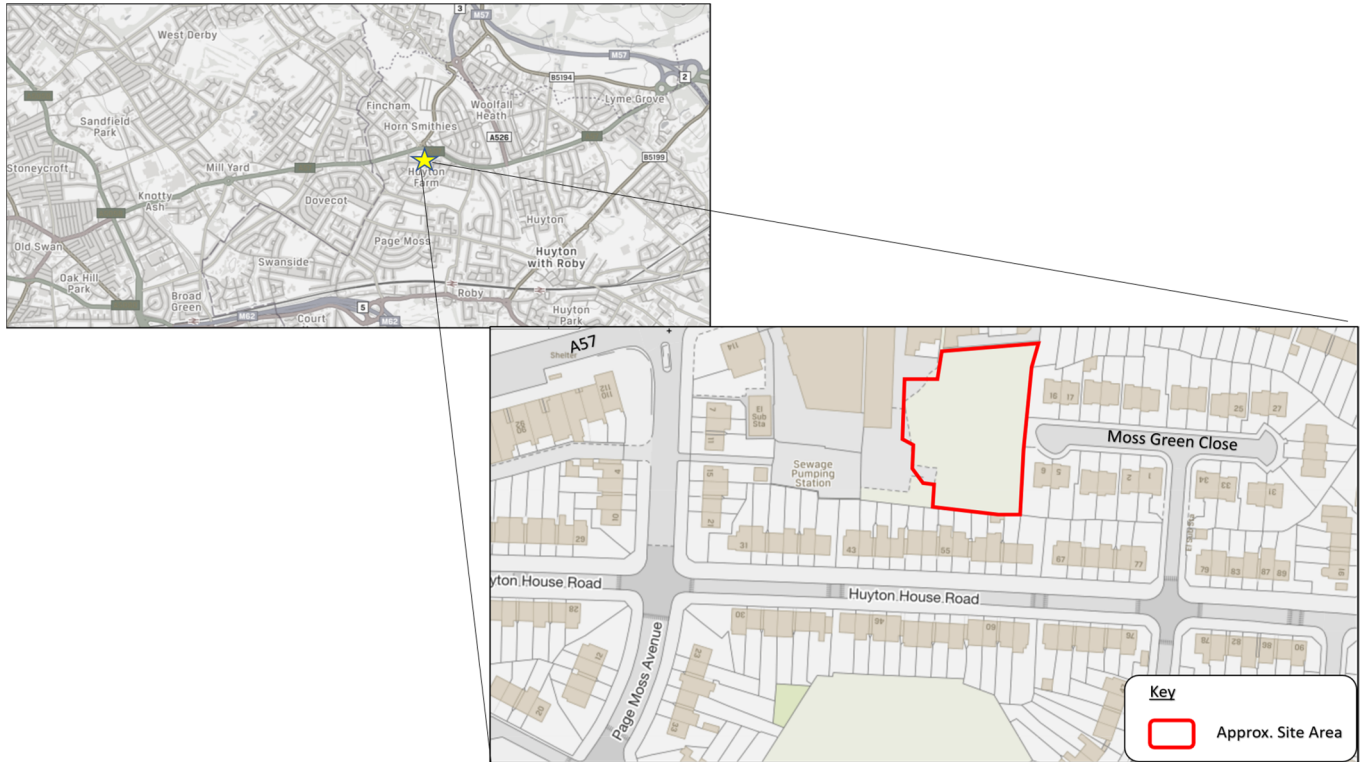


Figure 2.1: Site Location Plan

- 2.2 It can be seen from Figure 2.1 that the site lies within an established residential area and just to the south of the A57 Liverpool Road, which is a primary arterial route to Liverpool City Centre to the west, and also provides access to the M57 at Junction 2 approximately 2km to the east of the site, and further east it runs into Warrington.
- 2.3 The site is generally surrounded by residential land uses to the south and east, with some commercial land uses, including food retail, also present to the north and west, fronting the A57.

Surrounding Highway Network

- 2.4 Access to the site is via Moss Green Close which is a residential cul-de-sac leading off the northern side of Huyton House Road. Moss Green Close widens out to 6.5m in width, with 2.0m wide footways along both sides of the carriageway. It is subject to a 20mph speed limit and there is a speed table traffic calming feature at the junction with Huyton House Road, and also elevated carriageway ramp features internally to help enforce low vehicle speeds.

- 2.5 There are no parking restrictions along Moss Green Close and some on-street parking appears to occur within the cul-de-sac, although it is noted that the dwellings are generally provided with off-street driveway parking.
- 2.6 There is a small turning area at each end of the street to assist vehicle turns however the turning areas are not large enough to accommodate a large refuse vehicle turning manoeuvre.
- 2.7 Huyton House Road is subject to a 20mph speed limit within a 20mph Zone and is also a traffic calmed residential road running east to west through the area. It provides connections to the A57 via Page Moss Avenue to the west, and Lincombe Road to the east. The Page Moss Avenue junction with the A57 is an all-movement signal junction, whilst the Lincombe Road junction with the A57 is a left in left out only arrangement with the westbound carriageway due to the presence of the central reserve. The A57 is subject to a 40mph speed limit in the vicinity of the site and is three lanes in each direction.
- 2.8 To the south, the network of residential streets leads towards Pilch Lane and the M62 Junction 5.

Highway Safety Record

- 2.9 A review of the road accident data has been undertaken with reference to the CrashMap online database for the most recent five-year period for which data is available (2016 – 2020). The accident plot from Crashmap is shown in Figure 2.2.

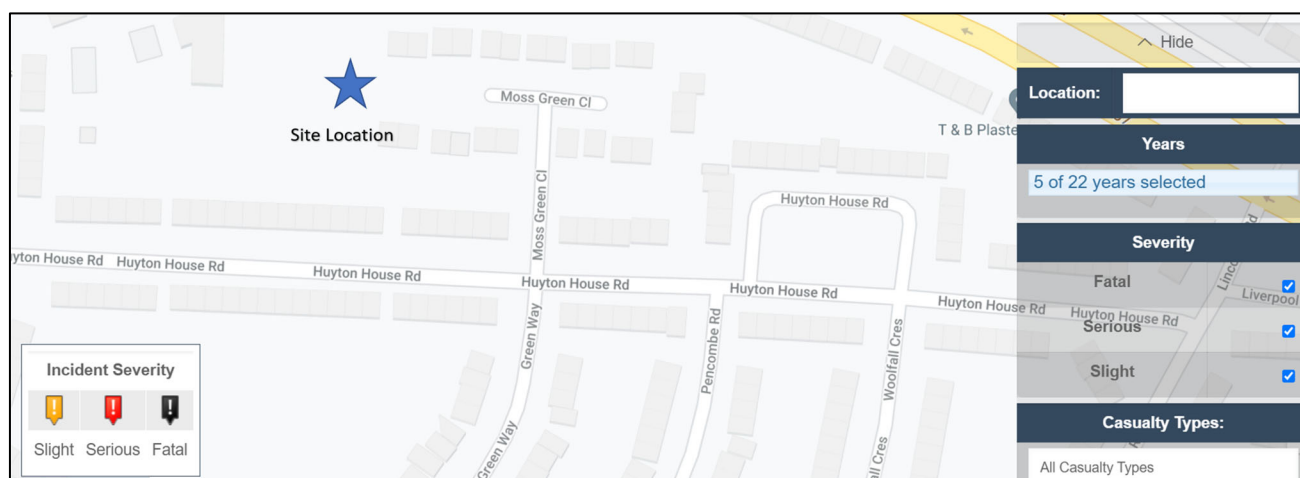


Figure 2.2: Accident Location Plot

- 2.10 It can be seen from Figure 2.2 that there have been no recorded accidents along Moss Green Close or the adjoining section of carriageway along Huyton House Road. The accident record does therefore not indicate any highway safety issue that would be materially affected by the development proposals.

Summary

- 2.11 The site comprises vacant land at the western end of the Moss Green Close cul-de-sac in the Huyton area of Merseyside. The site is generally surrounded by residential land uses to the south and east, with some commercial land uses, including food retail, also present to the north and west, fronting the A57.

- 2.12 The surrounding highway network has been reviewed and the site is well located in relation to the existing highway network, with suitable access via Moss Green Close and the A57 arterial route into Liverpool City Centre easily accessible.
- 2.13 A review of highway safety has been undertaken via reference to accident records in Crashmap, and it is concluded that the adjacent roads have a good accident record and there are no highway safety concerns that would arise from the development proposals.

3 Accessibility Audit

Walking

- 3.1 Guidelines produced by the Institution of Highways of Transportation (IHT) within their document entitled 'Guidelines for Providing for Journeys on Foot', state that the preferred maximum walking distance for developments to town centres is 800m. The same document also identifies a distance of 2km as being a 'preferred maximum' distance for commuting, school and sight-seeing journeys, whilst 400m is the preferred maximum for access to a bus stop and 1.2km a preferred maximum for a number of other facilities.
- 3.2 There are numerous amenities and facilities within a reasonable walking distance of the site, and some of these are summarised in Table 3.1.

Local Amenity / Facility	Approximate Walk Distance from Site
Westbound bus stop on A57	400m
Trinity Anglican/Methodist Church	450m
Eastbound bus stop on A57	460m
Farmfoods food store	460m
Convenience Store	470m
Jubilee Park	480m
Park View Academy	490m
McDonalds	500m
Costa Coffee	500m
Lidl	510m
The Old Bank Pub	630m
North Huyton Dental Practice	680m
Cornerways Medical Centre	680m
Dinas Lane Medical Centre	680m
Davey's Chemist	690m
Dovecote Primary School	1,000m
Roby Park Primary and Nursery	1,000m
Roby Rail Station	1,600m

Table 3.1: Selected Local Amenities Walk Distances

- 3.3 The site is therefore very well located to encourage everyday trips to be made on foot, being within walking distance of a wide range of key amenities and facilities.

- 3.4 The pedestrian infrastructure in the vicinity of the site is considered to be of a good standard, with 2m wide street lit footways on Moss Green Close and tactile paving with dropped kerbs around the junction with Huyton House Road. In addition, the raised table feature at the Moss Green Close / Huyton House Road junction and traffic calming measures in the wider area will facilitate low vehicle speeds and provide a safer environment for pedestrians and cyclists. Continuous footway connections are available to the surrounding area, with controlled crossing facilities across the A57 at the junction with Page Moss Avenue and three further controlled crossings to the east up to the junction with Lincombe Road.
- 3.5 The internal site layout will integrate footways with the existing footways that are provided along Moss Green Close.

Cycling

- 3.6 It is generally accepted that the bicycle is an effective mode for short trips of up to 3 to 5 miles (5 - 8km). A 5km cycle catchment from the site would equate to a journey of around 25 minutes at a leisurely cycle speed of 12km per hour. This catchment represents the lower threshold of the potential cycle catchment of the site, and includes large residential areas such as Knotty Ash, Woolfall Heath, Huyton, Roby, Swanside, Broadgreen, Childwall Stockbridge Village and Huyton Quarry.

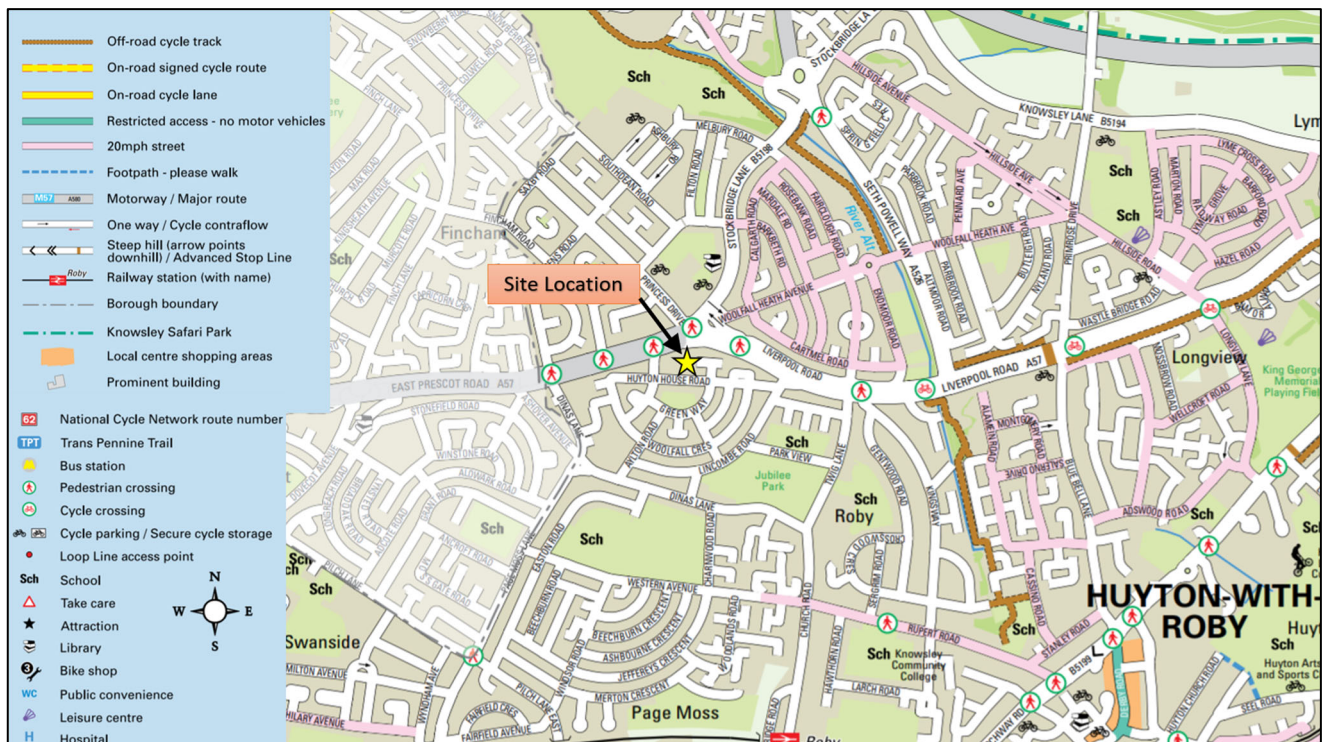


Figure 3.1: Extract from Knowsley Cycle Map (2017)

- 3.7 It can be seen from Figure 3.1 that there is an off-road cycle track to the east of the site that runs alongside the A57, and there are off-road connections north and south from the A57. There are Advanced Stop Lines (ASL) for cyclists provided at the approaches to the signalised junctions on the A57 in the vicinity of the site to assist with giving road cyclists better priority on these routes. The

surrounding residential streets are subject to a 20mph speed limit, helping to create a more cycle-friendly environment.

- 3.8 Roby Rail Station is within a circa eight-minute cycle journey and there are eight cycle hoops provided at the station.
- 3.9 The site is therefore considered to be suitably accessible by cycle.

Public Transport – Bus and Rail

- 3.10 Guidance published by the IHT ‘Planning for Public Transport in Developments’ recommends that the maximum distance to a bus stop from new development should be 400m – roughly equating to a five-minute walk assuming an average walk speed of 80m per minute.
- 3.11 The nearest bus stops are located circa 400m from the site on the A57. The stops on the A57 are served by numerous bus services, and an extract from the Liverpool bus map is shown in Figure 3.2.

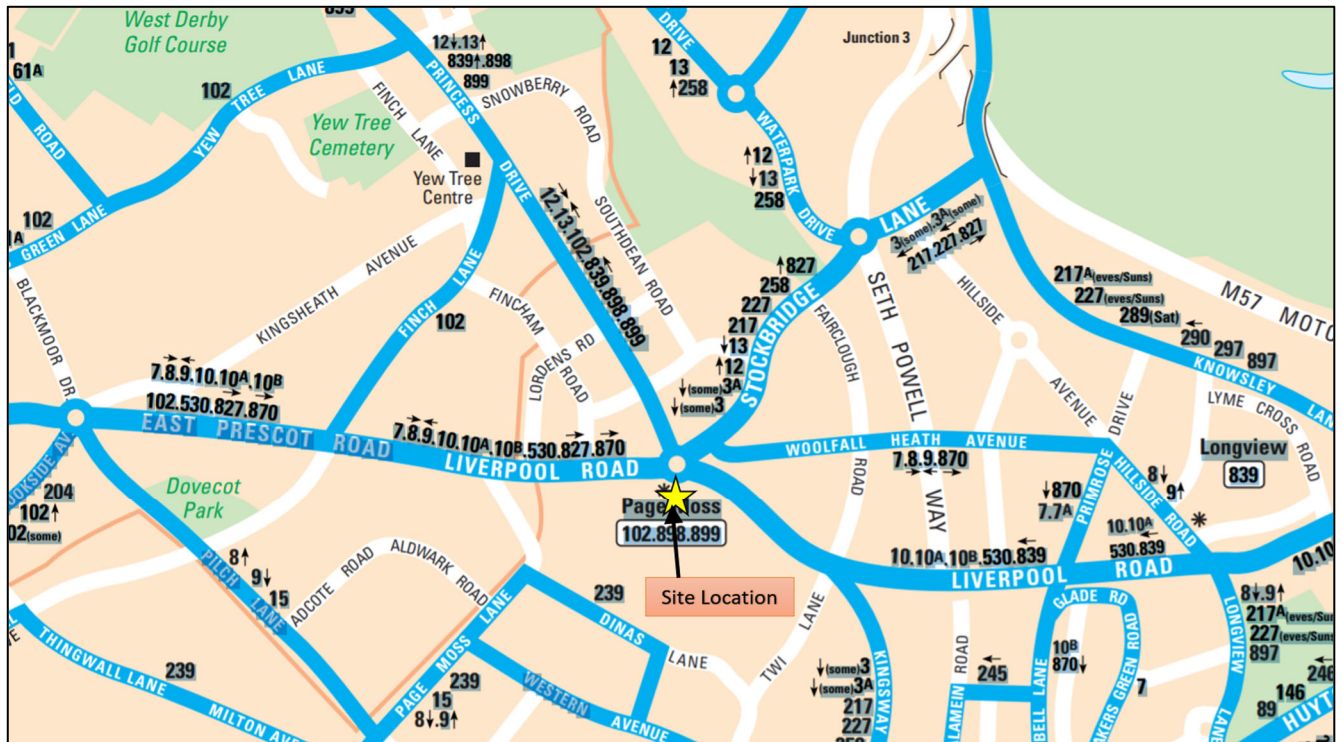


Figure 3.2: Extract from Liverpool Bus Map

- 3.12 The A57 Liverpool Road is clearly a well served bus route linking the area to Liverpool City Centre and the wider Merseyside area, and the public bus services available from these stops are summarised in Table 3.2.

Service	Route	Typical Frequency
7	Liverpool ONE Bus Station – Warrington Bus Interchange	30 minutes
8/9	Queen Square Bus Station - Huyton Circular	30 minutes
10	Queen Square Bus Station – St Helens Bus Station	20 minutes
10 A	Liverpool ONE Bus Station – St Helens Bus Station	6 minutes
10 B	Queen Square Bus Station – Huyton	10 minutes
530	Liverpool City Centre – Knowsley Safari Park	Wednesdays and Fridays during some school holidays only
827	Old Swan – Kirkby Admin	One service on weekdays

Table 3.2: Summary of Public Bus Services from A57 Liverpool Road

- 3.13 It can be seen from Table 3.2 that the bus services available from the A57 Liverpool Road provide connections to a wide range of local destinations including Liverpool City Centre and Liverpool ONE, Warrington, Huyton and St Helens. There are several services providing frequent connections up to every 6 minutes, and bus routes 7 and 10 also run on Saturday and Sunday and the 8/9 on Saturdays in addition to weekdays.
- 3.14 The bus stops on Liverpool Road provide a boarding kerb, a shelter with seating and timetable information.
- 3.15 The closest rail station to the site is Roby Rail Station, which is located around a 1,600m walk distance away. This is an acceptable walk distance to rail stations according to the IHT document 'Guidelines for Providing for Journeys on Foot'. Direct connections are provided to many local and regional destinations including Liverpool Lime Street, Wigan North Western and Manchester Oxford Road.
- 3.16 Travel by bus and rail therefore represents a feasible option for journeys to and from the site which will help to facilitate sustainable and active travel amongst future residents.

Minimum Accessibility Standard Assessment (MASA)

- 3.17 A MASA has been carried out to provide an indication of the site's accessibility using the Council's accessibility tool. The completed MASA is provided at Appendix A with a summary provided in **Table 3.3**.

	Walking	Cycling	Public Transport	Vehicle Access / parking
Target Score (medium residential development in 'other urban' location)	4	3	5	1
Actual Score	4	4	3	1

Table 3.3: MASA Summary

- 3.18 Table 3.3 shows that the site scores well for the MASA, meeting or exceeding the target score in all but the public transport categories. Whilst the public transport score is below the target of 5, as detailed in this section, the site is considered to be highly accessible by public transport with frequent bus services available from the A57 Liverpool Road around 400m from the site and rail services available from Roby Station to the south of the site. The existing bus infrastructure on Liverpool Road has been found to be of a good standard. Given these facts and the small scale of the development proposals, it would not be necessary for a contribution to be made to public transport to make the development acceptable in planning terms.

Summary

- 3.19 The site is very well located to facilitate everyday trips by foot, being within walking distance of a wide range of key amenities and facilities. The pedestrian infrastructure in the vicinity of the site is of a good standard and those using the site will benefit from this provision. The existing controlled crossing facilities on the A57 Liverpool Road will facilitate safe crossing of this main road. The surrounding residential streets are subject to a 20mph speed limit, helping to create a more cycle-friendly environment and there are off-road cycle facilities provided along the A57 to the east of the site.
- 3.20 The site is within a short walk of bus stops on Liverpool Road, and services provide direct connections to a wide range of destinations including Liverpool City Centre, Warrington, St Helens and Huyton. Roby Rail Station lies around 1.6km to the south of the site, providing links to destinations further afield such as Manchester and Wigan as well as Liverpool. Travel by bus and rail therefore represents a feasible option for journeys to and from the site, which will help to facilitate sustainable and active travel amongst future residents.
- 3.21 A MASA has been undertaken for the site, in line with KMBC's requirements, and the site scores well for all areas. Whilst the public transport score is below the target of 5, as detailed in this section, the site is considered to be highly accessible by public transport with frequent bus services available from Liverpool Road around 400m from the site, and rail services available from Roby Station to the south of the site. The existing bus infrastructure on Liverpool Road has been found to be of a good

standard. Given these existing conditions and provision along with the small scale of the residential development proposals, it would not be necessary for a contribution to be made to public transport to make the development acceptable in planning terms.

4 Development Proposals

Proposals

- 4.1 The planning application is to be made in detail and seeks permission for a residential development of ten new three-bedroom houses. Car parking will be provided within the curtilage of each plot. A copy of the proposed site layout plan is provided at Appendix B to this report.

Access

- 4.2 The development will comprise a circa 30m westward extension of the existing Moss Green Close cul-de-sac and access will therefore be taken via this road. The extension to the road will be constructed to be consistent with the existing road and footway widths on Moss Green Close.
- 4.3 A turning head will be provided at the western end of the road, sufficient to accommodate a refuse vehicle turn to enable the vehicle to enter and exit the development in forward gear, as demonstrated in drawing VN211935-TR105. This will help to minimise the need for reversing by the KMBC refuse collection team.
- 4.4 A 2m footway will be provided adjacent to the carriageway on both sides of the road.

Parking

- 4.5 Car parking for the houses will be provided within the curtilage of each plot. The relevant parking standards are those contained within the Knowsley Borough Council 'Ensuring A Choice of Travel Supplementary Planning Document' and are reproduced below.

		District and Local Centre (Maximum)
C3 Dwelling Houses	2-3 bed	2 spaces

Table 4.1: KMBC Parking Standards

- 4.6 Car parking will be provided in line with these standards with two spaces per dwelling.
- 4.7 The houses will benefit from secure rear gardens, which will provide each dwelling with the flexibility for residents to accommodate the storage of a bike.

Summary

- 4.8 The planning application is to be made in detail and seeks permission for a residential development of ten new three-bedroom houses. The development will comprise a circa 30m westward extension of the existing Moss Green Close cul-de-sac and access will therefore be taken via this road.
- 4.9 A turning head will be provided at the western end of the road, sufficient to accommodate a refuse vehicle turn.
- 4.10 Car parking will be provided in accordance with the KMBC car parking standards.

5 Traffic Impact

Overview

- 5.1 Having established that the development site is highly accessible by modes of transport other than the private car, the following section of this report will discuss the potential traffic generation of the proposals as well as providing an assessment of the general impact on the local highway network.

Forecast Development Traffic Flows

- 5.2 The development proposals will consist of ten houses.
- 5.3 To establish the peak hour vehicular trip rates for the proposed residential use reference has been made to the latest TRICS database (7.8.2) searching for housing sites of similar scale.
- 5.4 The TRICS output is summarised below in Table 5.1 and provided in full at Appendix C.

	Vehicles – Trip Rates			Trip Forecasts (10 dwellings)		
	Arr	Dep	2 way	Arr	Dep	2 way
AM Peak	0.198	0.389	0.587	2	4	6
PM Peak	0.244	0.122	0.366	2	1	4

Table 5.1: Forecast Peak Hour Vehicle Trips

- 5.5 It can be seen from Table 5.1 that the proposed residential development is forecast to generate a total of six trips in the weekday morning peak hour and four in the evening peak hour. In the morning peak this averages at an additional vehicle trip every 10 minutes and in the evening peak one every fifteen minutes. As such, the development is not expected to give rise to any perceptible change in the operation of the local highway network.

Summary

- 5.6 A trip forecasting exercise for the proposed development has been undertaken based upon TRICS trip rates. This has demonstrated that the proposals are expected to generate just six vehicle trips in the weekday morning peak hour and four in the evening peak hour, and this will have no perceptible effect upon the operation of the local highway network.
- 5.7 It is therefore concluded that the vehicle trips expected to be generated by the development can be safely accommodated on the surrounding highway network.

6 Summary and Conclusion

Summary

- 6.1 Vectos have been commissioned by Built Group Ltd on behalf of Livv Housing Group to produce a TS report to consider highways and transport issues related to a planning application for a proposed residential development of ten houses at Moss Green Close in Huyton. The scheme would deliver an extension to the existing Moss Green Close cul-de-sac which is located within the Huyton area of Merseyside.
- 6.2 The site comprises vacant land at the western end of the Moss Green Close cul-de-sac in the Huyton area of Merseyside. The site is generally surrounded by residential land uses to the south and east, with some commercial land uses, including food retail, also present to the north and west, fronting the A57.
- 6.3 The surrounding highway network has been reviewed and the site is well located in relation to the existing highway network, with suitable access via Moss Green Close and the A57 arterial route into Liverpool City Centre easily accessible. A review of highway safety has been undertaken via reference to accident records in the Crashmap database, and it is concluded that there are no highway safety concerns that would arise from the development proposals.
- 6.4 The site is very well located to facilitate everyday trips by foot, being within walking distance of a wide range of key amenities and facilities. The pedestrian infrastructure in the vicinity of the site is of a good standard and those using the site will benefit from this provision. The existing controlled crossing facilities at Liverpool Road in the vicinity of the site will facilitate safe crossing of this road. The surrounding residential streets are subject to a 20mph speed limit, helping to create a more cycle-friendly environment and there are off-road cycle facilities provided along the A57 to the east of the site.
- 6.5 The site is within a short walk of bus stops on Liverpool Road, and services provide direct connections to a wide range of destinations including Liverpool City Centre, Warrington, St Helens and Huyton. Roby Rail Station lies around 1.6km to the south of the site, providing links to destinations further afield such as Manchester and Wigan as well as Liverpool. Travel by bus and rail therefore represents a feasible option for journeys to and from the site, which will help to facilitate sustainable and active travel amongst future residents.
- 6.6 A MASA has been undertaken for the site, in line with KMBC's requirements, and the site scores well for all areas. Whilst the public transport score is below the target of 5, as detailed in this TS, the site is considered to be highly accessible by public transport with frequent bus services available from Liverpool Road around 400m from the site and rail services available from Roby Station to the south of the site. The existing bus infrastructure on Liverpool Road has been found to be of a good standard. Given these existing conditions and provision along with the small scale of the residential development proposals, it would not be necessary for a contribution to be made to public transport to make the development acceptable in planning terms.

- 6.7 The planning application is to be made in detail and seeks permission for a residential development of ten three-bedroom houses. The development will comprise a circa 30m westward extension of the existing Moss Green Close cul-de-sac and access will therefore be taken via this road.
- 6.8 A turning head will be provided at the western end of the road, sufficient to accommodate a large refuse vehicle turn to enable entry and exit to the site in forward gear.
- 6.9 Car parking will be provided in accordance with the KMBC car parking standards.
- 6.10 A trip forecasting exercise for the proposed development has been undertaken based upon TRICS trip rates. This has demonstrated that the proposals are expected to generate just six vehicle trips in the weekday morning peak hour and four in the evening peak hour, and this will have no perceptible effect upon the operation of the local highway network.
- 6.11 It is therefore concluded that the vehicle trips expected to be generated by the development can be safely accommodated on the surrounding highway network.

Conclusion

- 6.12 It is concluded that the proposed residential development at Moss Green Close in Huyton is in accordance with national and local transport policies and is acceptable in highways and transport terms.

Appendices

Appendix A

Completed MASA

MASA – Moss Green Close, Huyton

A – Access on Foot			
Location	Is the site within 800m of a district or local centre?	Yes (2 points)	Local and District Centres just to the north within 800m.
Internal Layout	Does circulation and access inside the site reflect direct, safe and easy to use pedestrian routes for all, with priority given to pedestrians when they have to cross roads or cycle routes?	Yes (1 point)	There are clear and direct pedestrian access points leading to the front doors.
External Layout	Are there barriers between site and local facilities or housing, which restrict pedestrian access?	No (1 point)	There is good footway provision leading to the district centre to the north and controlled crossings on the A57.
	Min Score Required	4	
	Actual Score	4	

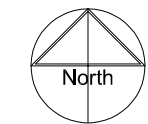
B – Access by Cycle			
Location	Is the site within 1500m of a district or local centre?	Yes (2 points)	Local and District Centres just to the north within 800m.
Internal Layout	Does the circulation and access inside the site reflect direct, safe cycle routes, with priority given to cyclists where they meet motor vehicles?	Yes (1 point)	Convenient access for cyclists will be provided linking to the cycle store for the apartments.
External Layout	Is the development within 400m of an existing or proposed designated cycle route and / or proposes to create a link to a cycle route or develop a route?	No (-1 point)	Approximately 800m from a designated cycle route.
Other	Development includes shower facilities and lockers for cyclists	Yes (1 Points)	Residents would have their own bathrooms.
	Min Score Required	3	
	Actual Score	4	

C – Access by Public Transport			
Location and access to public transport	Is the site within a 200m walk of a bus stop and / or 400m of a rail station	No (0 points)	Nearest bus stops around 400m walk from site.
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations	No (1 point)	There is good footway provision leading to the bus stops on Liverpool Road and controlled crossings.
Frequency	High (4 buses / hr) Medium (2 or 3 buses / hr) Low (less than 2 / hr)	High (2 points)	Over 4 buses per hour from the stops on Liverpool Road.
Other	Contribution to bus stops	0 point	
	Min Score Required	5	
	Actual Score	3	

Criteria	Description	Score	Justification
D – Vehicle Access and Parking			
Parking	The off-street parking provided is as advised for the development type.	Yes (1 point)	Parking in accordance with policy.
	The off-street parking is less than 75% of the amount for that development type or shares parking provision with another development)	No (0 points)	
	Min Score Required	n/a	
	Actual Score	N/A	

Appendix B

Proposed Site Layout Plan



- KEY
- Shared surface road/ 2m wide footpath all to adoptable standards. Coloured chippings in asphalt & Marshall's Keykerb
 - 450mm sq slabs to front of dwellings, 600mm sq at rear, natural grey concrete
 - Rowlawn turf to rear gardens
 - 600mm ht Buxus sempervirens 'Suffruticosa' hedging
 - Black Macadam to driveways
 - 1.8m conc post /timber panel fence incl. 300mm gravel bd
 - 2.4m conc post /timber panel fence incl. 300mm gravel bd



Level 2
architects

Project Moss Green Close, Huyton		
Title Proposed Landscaping Plan 10no. 3 bed Houses		
Scale 1:400	Drawing 414-1-PLN-003	Rev #
PLANNING		

Appendix C

TRICS Report

Calculation Reference: AUDIT-715001-210701-0732

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	MS MERSEYSIDE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days

Primary Filtering selection:

Parameter: No of Dwellings
 Actual Range: 10 to 18 (units:)
 Range Selected by User: 5 to 20 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 09/09/20

Selected survey days:

Monday	2 days
Wednesday	4 days
Thursday	2 days
Friday	1 days

Selected survey types:

Manual count	8 days
Directional ATC Count	1 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	6

Selected Location Sub Categories:

Residential Zone	9
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Secondary Filtering selection:

Use Class:

C3	9 days
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Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	3 days
15,001 to 20,000	2 days
25,001 to 50,000	1 days

Secondary Filtering selection (Cont.):

Population within 5 miles:

25,001 to 50,000	2 days
50,001 to 75,000	2 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	3 days

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	3 days

Travel Plan:

No	9 days
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PTAL Rating:

No PTAL Present	9 days
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LIST OF SITES relevant to selection parameters

1	MS-03-A-03 BEMPTON ROAD LIVERPOOL OTTERSPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 15 Survey date: FRIDAY 21/06/13	DETACHED	MERSEYSIDE	Survey Type: MANUAL
2	NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 16/09/15	DETACHED HOUSES	NORFOLK	Survey Type: MANUAL
3	NF-03-A-10 HUNSTANTON ROAD HUNSTANTON Edge of Town Residential Zone Total No of Dwellings: 17 Survey date: WEDNESDAY 12/09/18	MIXED HOUSES & FLATS	NORFOLK	Survey Type: DIRECTIONAL ATC COUNT
4	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 10/05/17	TERRACED HOUSES	NORTH YORKSHIRE	Survey Type: MANUAL
5	SF-03-A-05 VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone Total No of Dwellings: 18 Survey date: WEDNESDAY 09/09/15	DETACHED HOUSES	SUFFOLK	Survey Type: MANUAL
6	SH-03-A-06 ELLESMERE ROAD SHREWSBURY Edge of Town Residential Zone Total No of Dwellings: 16 Survey date: THURSDAY 22/05/14	BUNGALOWS	SHROPSHIRE	Survey Type: MANUAL
7	TW-03-A-02 WEST PARK ROAD GATESHEAD Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 16 Survey date: MONDAY 07/10/13	SEMI-DETACHED	TYNE & WEAR	Survey Type: MANUAL
8	VG-03-A-01 ARTHUR STREET BARRY Edge of Town Residential Zone Total No of Dwellings: 12 Survey date: MONDAY 08/05/17	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN	Survey Type: MANUAL
9	WK-03-A-02 NARBERTH WAY COVENTRY POTTERS GREEN Edge of Town Residential Zone Total No of Dwellings: 17 Survey date: THURSDAY 17/10/13	BUNGALOWS	WARWICKSHIRE	Survey Type: MANUAL

Vectos (North) Limited 4th Floor, Oxford Place, 61 Oxford St Manchester

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	15	0.084	9	15	0.237	9	15	0.321
08:00 - 09:00	9	15	0.198	9	15	0.389	9	15	0.587
09:00 - 10:00	9	15	0.084	9	15	0.183	9	15	0.267
10:00 - 11:00	9	15	0.206	9	15	0.145	9	15	0.351
11:00 - 12:00	9	15	0.160	9	15	0.221	9	15	0.381
12:00 - 13:00	9	15	0.252	9	15	0.229	9	15	0.481
13:00 - 14:00	9	15	0.198	9	15	0.176	9	15	0.374
14:00 - 15:00	9	15	0.176	9	15	0.168	9	15	0.344
15:00 - 16:00	9	15	0.275	9	15	0.275	9	15	0.550
16:00 - 17:00	9	15	0.206	9	15	0.145	9	15	0.351
17:00 - 18:00	9	15	0.244	9	15	0.122	9	15	0.366
18:00 - 19:00	9	15	0.260	9	15	0.206	9	15	0.466
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.343			2.496			4.839

Parameter summary

Trip rate parameter range selected: 10 - 18 (units:)
 Survey date range: 01/01/13 - 09/09/20
 Number of weekdays (Monday-Friday): 9
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

Contact

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