4. Transportation

4.1 Introduction

4.1.1 Mode Transport Planning have been appointed by Gallagher Estates to prepare constructive representations setting out the highways and transportation package to support the delivery of circa 1,500 dwellings at Home Farm, Sandhills, north of Walsall.

4.1.2 The site is situated in Brownhills and is bordered to the north by the Wyrley and Essington Canal, to the south by the A461 Lichfield Road, to the east by farmland and to the west by existing residential properties which front onto the A452 Chester Road.

4.2 Planning Policy and Guidance

4.2.1 The delivery of residential development in this location has been considered in relation to relevant transportation policies of the Black Country Core Strategy (BCCS), adopted 2011, and the relevant long-term themes of the West Midlands Local Transport Plan 3 (LTP3), covering the period of 2011 to 2026.

4.2.2 The key policies from the BCCS, specifically relating to the delivery of new development, are as follows:

- CSP5 – Transport Strategy;
- HOU2 – Housing Density, Type and Accessibility;
- TRAN1 – Priorities for the Development of the Transport Network;
- TRAN2 – Managing Transport Impacts of New Development;
- TRAN4 – Creating Coherent Networks for Cycling and Walking; and
- TRAN5 – Influencing the Demand for Travel and Travel Choices.

4.2.3 The key themes from the West Midlands LTP3, specifically relating to the delivery of new development are as follows:

- Long Term Theme 1: Regeneration, thriving centres, corridors and gateways;
- Long Term Theme 3: Modal Transfer and the Creation of Sustainable Travel Patterns; and
- Long Term Theme 6: Improved Local Accessibility and Connectivity.

4.2.4 The long-term themes of the West Midlands LTP3 aim to reduce reliance on the private car in favour of more sustainable modes of transport for many journey purposes.

4.2.5 Any transportation submissions to support a forthcoming planning application would be prepared in line with the Department for Transports (DfT's) Guidance on Transport Assessment (GTA) with reference to DfT circular 02/2013 (The Strategic Road Network and the Delivery of Sustainable Development) where traffic impacts are envisaged on the strategic highway network.

4.3 Local Highway Network and Access Options

4.3.1 The site is bordered by the A452 Chester Road to the west and the A461 Lichfield Road to the south. The A452 Chester Road and the A461 Lichfield Road form a traffic signal controlled junction at the southern corner of the site.

4.3.2 The A461 Lichfield Road provides a linkage to Walsall to the south-west of the site and to the A5 Watling Street to the north-east of the site. The A5 Watling Street links to the M6 toll via junctions T5, T6 and T7, to the M6 at junction 12 and to the M42 at junction 10.

4.3.3 The A452 Chester Road provides a linkage into Brownhills and the A5 Watling Street to the north of the site and to Sutton Coldfield, Erdington to the south. The A452 Chester Road also provides linkages to Great Barr and West Bromwich via the A4041 Queslett Road. The A452 Chester Road also links to the M6 at junction 5 and also at junction 6, via the A38 Aston Expressway. The A38 Aston Expressway provides a direct route into the centre of Birmingham.

4.3.4 In line with policy TRAN2 of the BCCS the traffic impacts of the development proposals will be considered in relation to existing conditions on the surrounding highway network and where necessary appropriate mitigation measures will be provided to counter any forecast adverse impacts directly attributable to the development proposals.

4.3.5 The extent of the off-site highways study area will be agreed in consultation with Walsall Council (WC) and the Highways England (HE) as part of any forthcoming planning application. As an absolute minimum, it is envisaged that the highways impact of the development will need to be considered at the A461 Lichfield Road/A452 Chester Road traffic signal controlled junction.

4.3.6 Vehicular access to the site will be provided via two points, the first will be formed with the A452 Chester Road and the second will be formed with the A461 Lichfield Road. Indicative sketch layouts of the site access proposals are shown on drawings **P32-3351-PS-001 Rev A** and **P32- 3351-PS-002 Rev A.**

4.3.7 It should be noted that the access drawings (appended) are preliminary in nature and are indicative layouts only; they will ultimately be subject to further assessment and design iterations, subject to consultation with, and approval from, the Local Highway Authority. Further assessment/design of the accesses will be subject to the following:

- Acquisition of highway boundary plans;

- Updated (more recent) traffic survey data; and
- Further consideration of the driveway accesses along Lichfield Road (in vicinity of the proposed signalised junction).

4.3.8 A high-level appraisal of site access junction capacity has been undertaken using average vehicle only trip rates from the TRICS database for houses privately owned situated within the West Midlands region. The calculated trip rates and resultant traffic generated by the development proposals are summarised in **Tables 4.1** and **4.2** below.

Table 4.1: TRICS Trip Rates (per dwelling)

Time Period	Arrivals	Departures	Two-Way
08:00-09:00 (AM Peak)	0.184	0.449	0.633
17:00-18:00 (PM Peak)	0.437	0.265	0.702

Table 4.2: Traffic Generation (1,500 dwellings)

Time Period	Arrivals	Departures	Two-Way
08:00-09:00 (AM Peak)	276	674	950
17:00-18:00 (PM Peak)	656	398	1053

4.3.9 Baseline traffic flows (2009) for the A452 Chester Road and the A461 Lichfield Road have been obtained from Mott MacDonald and these have been growthed to 2023 levels (five years post registration of a planning application, assuming a submission during 2018).

4.3.10 The development traffic has been distributed assuming a 60:40 split between access points, with the bias towards the A461 Lichfield Road access, and proportionally in line with the direction of travel on either the A452 Chester Road or the A461 Lichfield Road, obtained from the Mott MacDonald traffic count data. The results of the analysis are summarised in **Table 4.3** and **Table 4.4**.

Table 4.3: Priority Access with A452 Chester Road – 2023 Base + Development Scenario

Arm	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
Site Access	0.80	4	0.84	4
A452 Chester Road	0.12	1	0.27	1

Table 4.4: Signal Access with A461 Lichfield Road – 2023 Base + Development Scenario

Arm	AM Peak		PM Peak	
	DoS	Queue	DoS	Queue
Site Access (Left Turn)	70%	6	77%	4
Site Access (Right Turn)	73%	6	81%	5
A461 Lichfield Road (S)	76%	17	84%	22
A461 Lichfield Road (N)	68%	13	69%	10

4.3.11 The results summarised in **Tables 4.3** and **4.4** indicate that both potential site accesses are forecast to work within acceptable capacity parameters.

4.3.12 The access strategy provides a bias towards a main access junction formed with the A461 Lichfield Road. It has also been concluded that given the RFC/DoS forecast for the current access designs options, that should any further development be brought forward, that an additional point of access would likely be required in order to accommodate additional traffic demands.

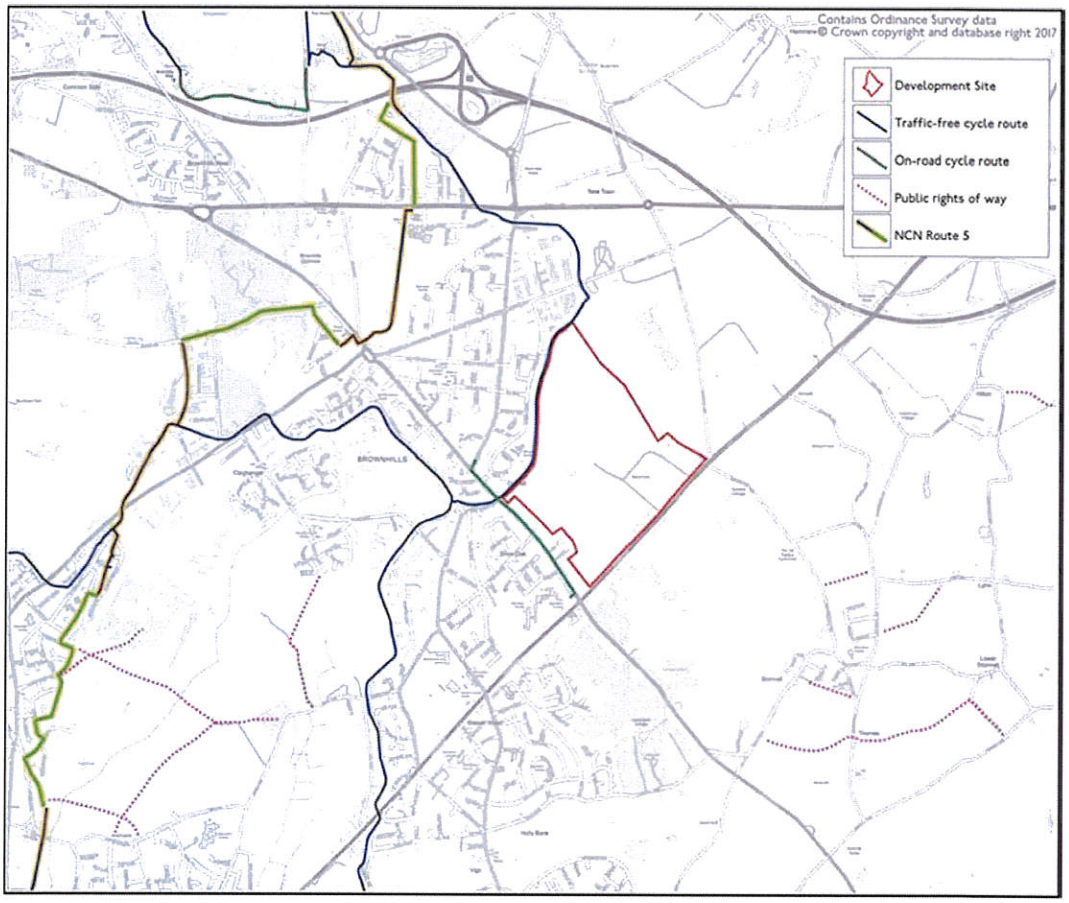
4.3.13 Given the length of available site frontage with the A461 Lichfield Road, it is also considered that a roundabout option may also offer a potential site access solution, subject to further capacity and design checks.

4.4 Sustainable Accessibility

Pedestrian Connectivity

4.4.1 The existing pedestrian and cycle infrastructure network in the area surrounding the site is illustrated on **Figure 4.1** overleaf.

Figure 4.1: Existing Pedestrian & Cycle Facilities



4.4.2 There are no Public Rights of Way (PROW) which cross or abut the site. The A452 Chester Road and A461 Lichfield Road both benefit from existing footways on both sides of the carriageway. These link with other footways on adjoining roads, thereby providing a network of footways throughout the surrounding area.

4.4.3 BCCS policy TRAN1 describes how all new developments will address the transport network and provide adequate access for all modes, including walking, cycling and public transport. BCCS policy TRAN4 also describes how new developments should have good walking and cycling links to public transport nodes and interchanges. The internal highway layout of the development proposals will provide pedestrian facilities that will link with those on the existing highway network surrounding the site. The main trip attractors for those on foot are generally situated to the north and west of the site and accordingly improvements to pedestrian crossing facilities on the A452 Chester Road may be required to facilitate east-west movements.

Cycling Connectivity

4.4.4 The existing cycle route provision in the area surrounding the site is illustrated on **Figure 4.1**. The nearest cycle route to the site runs along the towpath on the southern side of the Wyrley and Essington Canal. From this route, it is possible to access National Cycle Route 5 when travelling northbound, and routes through Brownhills and Walsall Wood southbound.

4.4.5 National Cycle Route 5 is a long-distance cycle route, which routes into Birmingham City Centre, and runs to the extents of Bangor and Reading.

4.4.6 BCCS policy TRAN4 describes how new developments should have good walking and cycling links to public transport nodes and interchanges and how all new development should provide cycle parking. The nearest cycle route to the site runs along the towpath on the southern side of the Wyrley and Essington Canal. The canal abuts the northern boundary of the site and presents a key opportunity to provide linkages between the site and the existing cycling network.

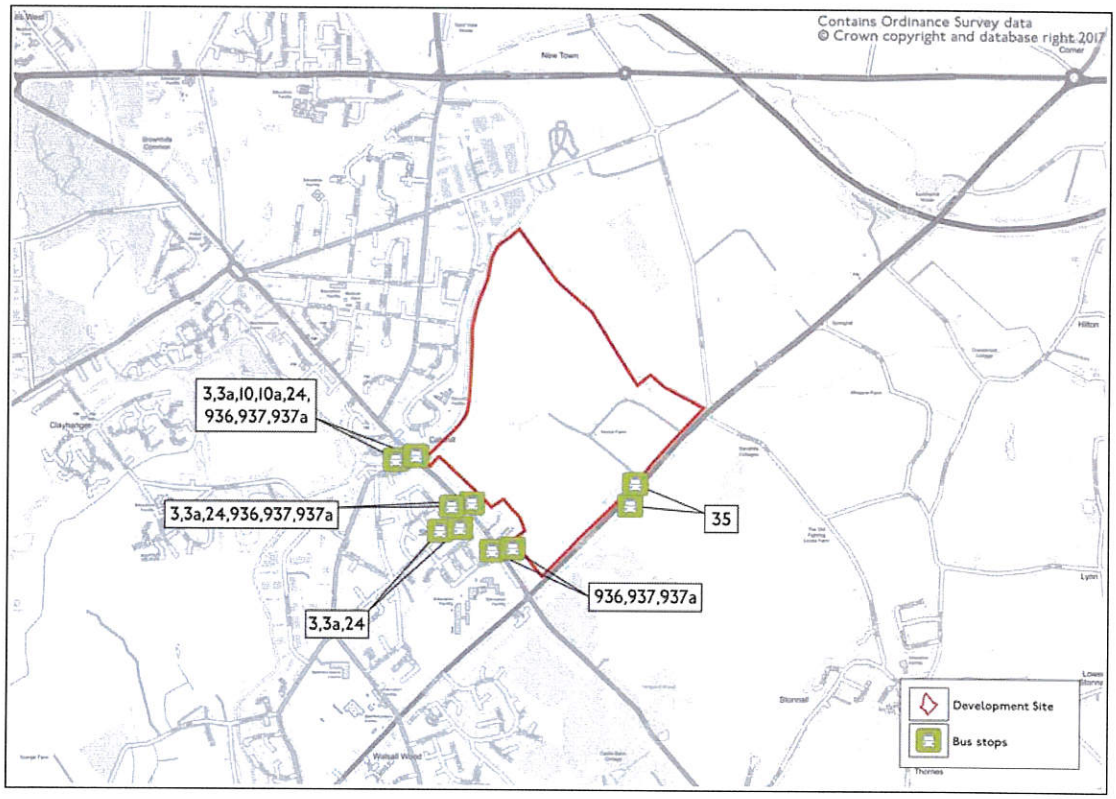
4.4.7 Within the site boundary primary roads will include shared foot/cycleway facilities with cyclists expected to share the carriageway with other road users on lower order roads.

4.5 Public Transport

4.5.1 The nearest bus stops to the site are situated on the A452 Chester Road and the A461 Lichfield Road. These stops are shelter type bus stops and benefit from timetable information. The stops on the A452 Chester Road nearest to the proposed site access point serve the 3/3a, 10/10a, 24, 936 and the 937/937a services. The stops on the A461 Lichfield Road additionally serve the service number 35.

4.5.2 The service numbers 3/3a, 10/10A, 24, 35, 936, 937/937a operate within the vicinity of the site; **Figure 4.2**, overleaf, illustrates the location of bus stops and services that stop within close proximity, ultimately serving the site.

Figure 4.2: Bus Service Accessibility



4.5.3 The frequencies of these bus services are summarised in **Table 4.5**.

Table 4.5: Summary of Bus Service Frequency

No.	Bus Route	Frequency	
		Mon-Sat	Sunday
3/3a	Cannock - Brownhills - Walsall	4 per hour	Hourly
10/10a	Walsall - Burntwood via Brownhills	Every 20mins	Every 20mins
24	Catshill - Walsall Wood via Brownhills	Hourly	No Service
35/35a	Walsall - Lichfield via Aldridge, Druids Heath	Hourly	Hourly
936	Birmingham, Lower Bull Street - Brownhills West	Every 20mins (AM&PM)	No Service
937	Birmingham - Brownhills via Kingstanding	Every 30mins	No Service
937a	Birmingham, Lower Bull Street - Brownhills	Hourly (PM)	Hourly

4.5.4 The level of combined bus service frequency in the area immediately surrounding the site is high and it is not considered to be necessary to provide increased service frequencies as a result of the development proposals. Any required improvements would simply serve to increase accessibility to bus services for all dwellings. Opportunity exists to explore the diversion of existing bus services into the site using a diversionary loop in order to deliver this.

4.5.5 There is opportunity to bring forward smaller parcels of development via a single point of access without investment in significant volumes of public transport infrastructure given that bus services already run along both the A461 Lichfield Road and the A452 Chester Road. This would likely involve relocation of existing bus stops in order to maximise accessibility to the development proposals.

4.5.6 The nearest railway stations to the site are Walsall Railway Station and Shenstone Railway Station, which are approximately 4.6 miles southeast and approximately 2.45 miles east of the site, respectively. Many of the bus services operating within the vicinity of the site also stop at St Paul's Bus Station in Walsall, which is a short three to four-minute walk to Walsall Railway Station; providing an opportunity to change between modes.

4.5.7 From these railway stations, it is possible to access Birmingham New Street directly on a frequency of every 15-minutes from Walsall railway station, and approximately every 20-minutes from Shenstone railway station. From Birmingham New Street, it is possible to travel onwards towards major UK destinations such as London, Glasgow and Cardiff including other destinations en-route.

4.5.8 It is possible also to access Walsall Railway Station via NCN route 5 (an approximate 30-minute cycle), which can be accessed from the site via the Wyrley and Essington Canal Cycle route, enabling travel between the site and the local railway stations possible via a range of modes of transport.

4.5.9 Walsall Railway Station does not have a car park, however does has 10 cycle storage spaces. Shenstone Railway Station has 20 car parking spaces, with 2 accessible spaces available for blue badge holders. It does not currently have any cycle storage spaces available.

4.6 Local Amenities

4.6.1 Policy TRAN2 of the BCCS sets out accessibility standards for new development, highlighting particular amenities and desirable journey tome distances to them via walking/public transport.

4.6.2 For the purposes of this analysis we have assumed that the development will have a density of between 35-45 dwellings per hectare, will provide less than 25% flats and will provide a high amount of housing suited to families. Those amenities of interest

and the indicative journey times to them are summarised in **Table 4.6**.

Table 4.6 Summary of BCCS Accessibility Standards

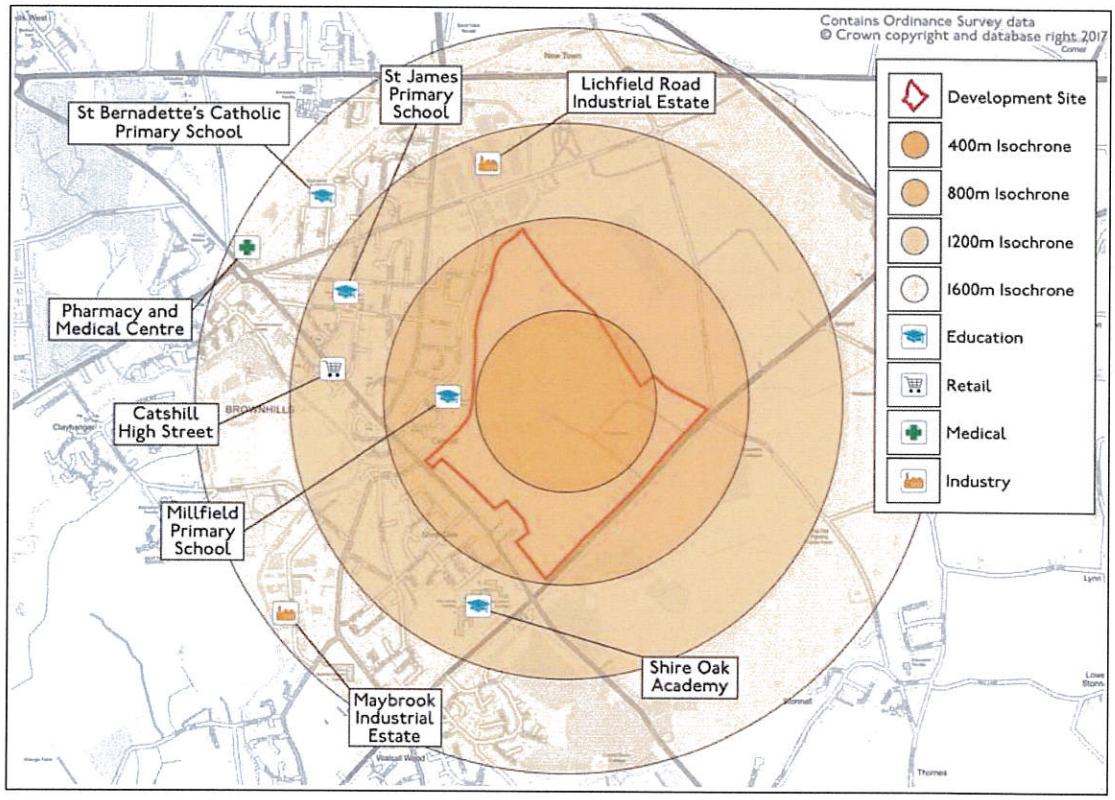
Land Use	Accessibility
Employment – Strategic Centre or other Employment Centre	30 mins (walk/public transport)
Health – Doctors Surgery or Walk-in Centre	15 mins (walk/public transport)
Fresh Food – Centre or Food Store	15 mins (walk/public transport)
Education – Primary School	10 mins (walk only)
Education – Secondary School	20 mins (walk/public transport)

4.6.3 **Figure 4.3**, overleaf, illustrates key local amenities and employment areas plotted in relation to concentric isochrones representing 400m, 800m, 1,200m and 1600m journey distances radiating from the site. These isochrones represent approximate journey times from the site for those on foot where 400m represents a five-minute journey on foot, 800m represents a ten-minute journey on foot and 1,200m represents a 15-minute journey on foot and 1,600m represents a 20-minute journey on foot. The 1,200m isochrones also represents an approximate 5-minute journey by bicycle.

4.6.4 The isochrones show that many local amenities are accessible within reasonable walking and cycling distances from the site including:

- Schools – Millfield Primary School, St James' Primary School, St Bernadette's Catholic Primary School, Shire Oak Academy;
- Pharmacies/Medical Centres – The Park View Centre;
- High Street – Catshill High Street; and
- Employment – Lichfield Road Industrial Estate, Maybrook Industrial Estate.

Figure 4.3: Walking Isochrones & Key Amenities



4.6.5 Walsall town centre is also located 4.6 miles southwest of the site's vicinity; with the town centre containing a wide array of amenities ranging from supermarkets to public houses.

4.6.6 Walsall Bus Service Map also indicates that a variety of bus services run past, or close to these local amenities, thereby making access to amenities possible by a range of modes of transport.

4.6.7 **Figure 4.3** shows that many of the core amenities specified in the BCCS are within acceptable walking distances to/from the site. The level of bus accessibility from the site is good and would provide improved journey times to many facilities. Public transport journey time modelling will be undertaken (using VISOGRAPHY or similar) to support the development proposals as part of a planning application and to demonstrate the level of accessibility to key amenities afforded by public transport.

4.7 Travel planning and smarter choices

4.7.1 Policy TRAN5 of the WCCS considers influencing the demand for travel and travel choices. Specifically, in relation to new development the use of maximum parking standards in conjunction with promoting and implementing smarter choices to help to reduce the need to travel are discussed. Policy CSP5 also supports this stance.

4.7.2 Accordingly, the development proposals will be supported by a robust Travel Plan that will seek to promote alternatives to the use of the private car. The Travel Plan will be prepared in line with the following national best practice policy documents:

- DfT – *Making Residential Travel Plans Work* (2005); and
- DCLG/DfT – *Good Practice Guidance: Delivering Travel Plans through the Planning Process* (2009).

4.7.4 The existing modal shift for journeys to work from Aldridge North and Walsall Wood ward as surveyed in the 2011 Census is summarised in **Table 4.7**. The development proposals would be expected to attract a similar if not better level of sustainable transport use for journeys to work as part of the Travel Plan proposals.

Table 4.7: Summary of Existing Modal Shift (Aldridge North and Walsall Wood Ward)

Mode of Transport	Modal Split (%)
Work Mainly at or from Home	3.96%
Underground, Metro, Light Rail, Tram	0.05%
Train	0.93%
Bus, Minibus or Coach	7.33%
Taxi	0.20%
Motorcycle, Scooter or Moped	0.50%
Driving a Car/Van	73.93%
Passenger in a Car/Van	5.75%
Bicycle	1.22%
On Foot	5.77%
Other Method of Travel to Work	0.37%
Total	**100.00%**

Source: www.neighbourhoodstatisitics.co.uk

4.8 **Summary of Discussions with Walsall MBC**

4.8.1 A meeting was held at Walsall Council (WC) offices on 13th December 2013: with Kevin Gannon, David Burrows and Steve Griffiths, in summary:

- WBC welcomed the opportunity to see this initial transportation work undertaken;
- Not aware of other sites at this scale currently been promoted within Walsall;
- Historically smaller developments have come forward in recent years;
- A larger development was seen favorably at a high level (for its ability to contribute positively to highways mitigation);
- Access was generally deemed acceptable for the level of development; however, expressed that the main site access on A461 may require new traffic signals;
- Main concern was the existing A461 capacity from the site into Walsall;
- Hence, we discussed linking signals (they are currently not linked) to aid platooning vehicle movement and hence fee up capacity; and
- A strategy heavily based upon public transport and sustainable access will be key to delivering this development.

4.8.2 Further to the above, and more recently (*August 2017*), Walsall Council are currently undertaking an improvement scheme along the A461 Lichfield Road; the overall scheme aims to address the issues of growing congestion and capacity along this strategic route.

4.8.3 The scheme targets two key locations, including the A461 Lichfield Road/B4152 Salter's Road junction and the A461 Lichfield Road/A452 Chester Road (Shire Oak); both locations will be widened to increase capacity, they will benefit from new and improved pedestrian facilities and new traffic signals/communications technology will be introduced to improve efficiency and operation.

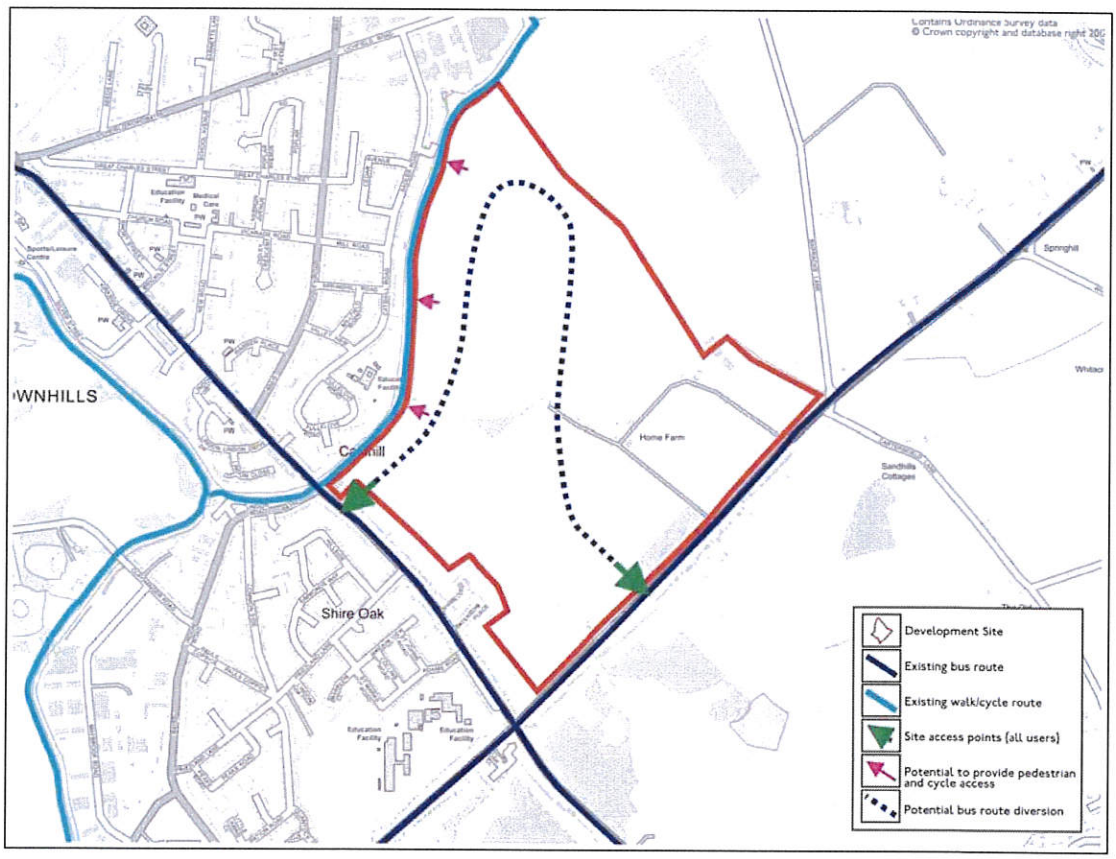
4.8.4 The proposed site access on Lichfield Road (signals) could potentially be incorporated within the network approach now being carried out by WCC; this could be achieved through various traffic signal management methods and optimisation techniques.

4.9 Summary

4.9.1 In summary, it is considered that the site can be delivered in line with the aforementioned improvement scheme and other site-specific infrastructure requirements to enhance accessibility and sustainability. The site-specific improvements are listed below, and are also illustrated on **Figure 4.4**:

- New site access formed with A452 Chester Road;
- New site access formed with A461 Lichfield Road;
- Linkages to the existing foot/cycleway running alongside the Wyrley and Essington Canal; and
- Diversion of existing bus to serve the site via a loop arrangement; including provision of high specification bus stop infrastructure.

Figure 4.4: Proposed Site Connectivity Plan



4.9.2 A Travel Plan would set out objectives, aims, targets, measures and a monitoring framework would ensure that the site is accessible for all modes of transport and as sustainable as possible.

4.9.3 There may be more off-site highway works required in order to mitigate development impacts at key junction locations/corridors, and these would be explored as part of a planning application.

OS NORTH

Anchor Bridge

144.5m

LINDON ROAD

Post

PH

2.4m x 43m Vis Splay

TCB

2.4m x 43m Vis Splay

148.7m

CHESTER ROAD

150.6m

9

1

1a

3

3a

5

16

21

35

drawing title: Priority Junction Access Design - Chester Road	client: Gallagher Estates	mode transport planning, Lombard House, 145 Great Charles Street, Birmingham B3 3LP; t 0121 794 8390; e info@modetransport.co.uk; w www.modetransport.co.uk	mode transport planning	scale 1:500@A3	A	07-09-17	Issued
	job title: Home Farm, Sand Hills, Walsall			drawn jwm			
				checked bdf			
				created Sept 17	drawing no. P32-3351-PS-002		

File: P:\Mode\P32-3351 Sandhills\Brownhills Walsall\P32-3351-PS-002a.dwg

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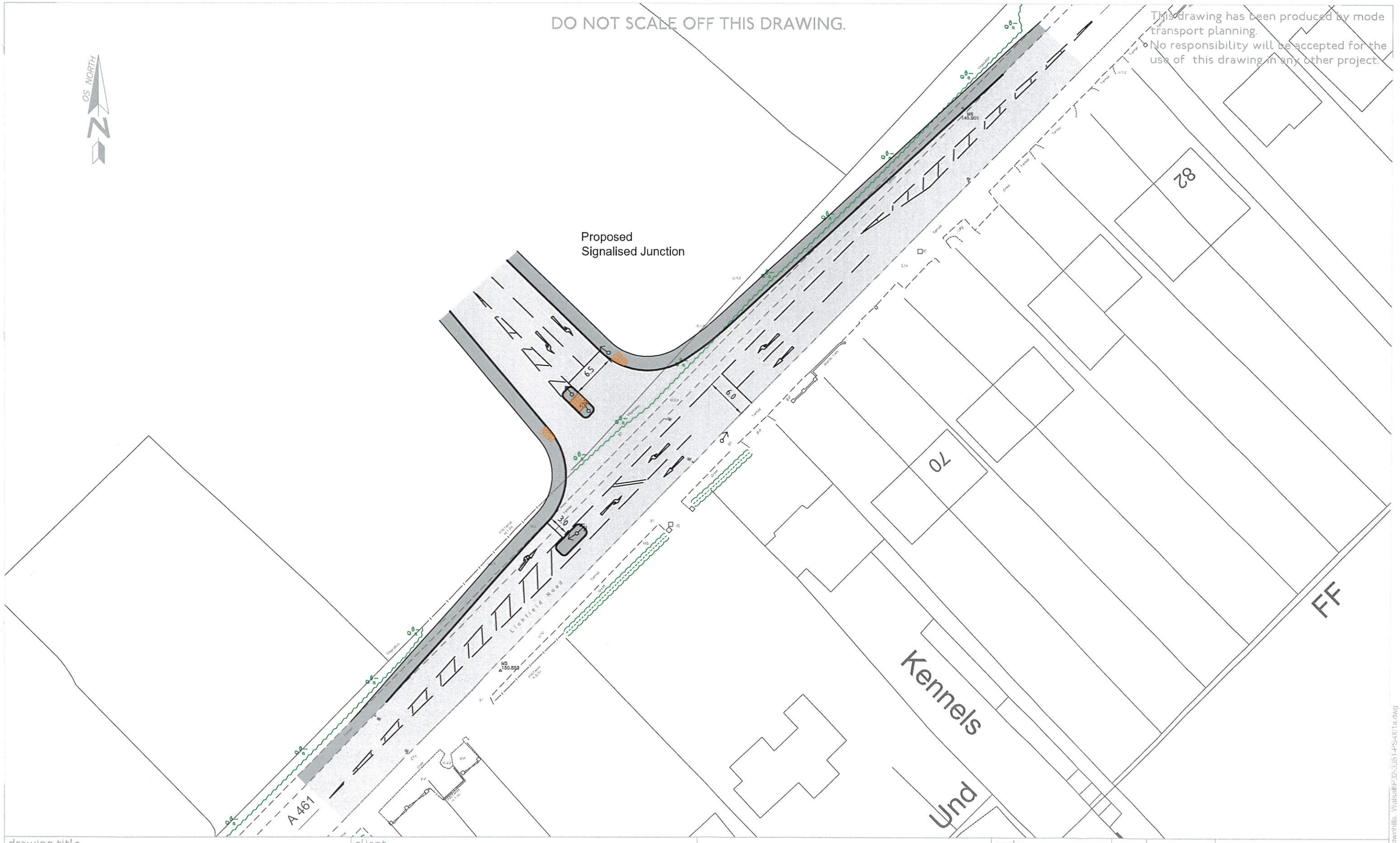
OS NORTH



drawing title: Lichfield Road Signalised Junction Access Design	client: Gallagher Estates	mode transport planning Lombard House 145 Great Charles Street Birmingham B3 3LP t 0121 794 8390 e info@modetransport.co.uk w www.modetransport.co.uk	mode transport planning	scale 1:500@A3 drawn JL checked bdf created Sept 17	A 07-09-17 Issued drawing no. P32-3351-PS-001
	job title: Home Farm, Sand Hills, Walsall				

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