

Transport Assessment

Land at Gavray Drive, Bicester

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1.0 Introduction

Report Structure

- 1.1 Markides Associates have been instructed by Gallagher Estates Limited to provide transport input in relation to their application to develop 180 residential units on a site location to the north of Gavray Drive, Bicester. The location of this site can be seen in **Figure 1.1**.
- 1.2 A Transport Assessment (TA) for the proposed residential development was previously prepared by Odyssey Markides and was submitted as part of a planning application on behalf of Gallagher Estates Limited in May 2015 (Application Ref: 15/00837/OUT).
- 1.3 Cherwell District Council determined, at the 15th June 2017 Planning Committee, that the application should be refused. The Council concluded that the proposed development '*was in conflict with the Development Plan*', although it should be noted that there were no highway related matters associated with the refusal decision.
- 1.4 Gallagher Estates Limited have now launched an appeal against the Council decision. As such, Markides Associates (MA) have been commissioned to prepare this Transport Assessment Addendum as an update to the previously submitted TA. The Addendum should therefore be read in conjunction with the previously submitted TA to fully understand the transport implications of the proposed development, which it should be noted, is unchanged in terms of scale and layout from that proposed within the original planning application.

Scope of Addendum

- 1.5 MA have consulted with Oxfordshire County Council (OCC) as the Local Highway Authority for the Bicester area. A pre-application scoping document was submitted to OCC, a meeting held to discuss and agree the scope and form of the update and further correspondence to obtain data from OCC's SATURN model of the Bicester area was undertaken. Details of this scoping exercise are included in **Appendix A**.
- 1.6 The main focus of the update is to utilise the OCC SATURN model data to assess the future impact of the proposals. This model was not available at the time of the original planning application, but is now being utilised to assess the impacts of all of the major development proposals in Bicester. The opportunity has also been taken to update other areas of the TA

to take on board any changes that have occurred between its production in 2014/2015 and now.

1.7 The scope of this Addendum is therefore as follows:

- Provide an update to the local Policy position and report any changes to those presented in the previously submitted TA;
- Provide an update to the review of existing transport conditions, particularly focussing on any changes to accident data and public transport;
- Update predictions in relation to predicted future year (with and without development) junction operation for the junctions assessed as part of the previously submitted TA, with these using traffic flow data from the OCC SATURN model;
- Summarise and draw conclusions on the outcome of providing an updated review of existing transport conditions and updated future year assessments.

Report Structure

1.8 This report is structured as follows:

- Section 2 provides an update on current adopted planning policy relevant to transport;
- Section 3 updates information related to existing highway conditions, particularly related to accident statistics in the area;
- Section 4 provides up to date information on access to the site by sustainable modes of transport;
- Section 5 sets out the methodology that has been agreed with Oxfordshire County Council to utilise their SATURN model for future year impact assessments;
- Section 6 provides updated junction capacity assessments utilising future year flows from the SATURN model;
- Section 7 sets out the main transport related mitigation measures that will accompany the proposals; and
- Section 8 gives a brief summary and conclusion.

2. PLANNING POLICY UPDATE

Introduction

- 2.1 The following section reviews key reference points within transport related planning policy at national and local levels to ensure specific policies are complemented by the development proposals and identifies any changes to policy that have occurred since the original TA was produced.
- 2.2 National Planning Policy is the same as it was stated in the previous submitted TA. Changes have been noted to the Oxfordshire Local Transport Plan and Cherwell District Council Planning Policy. In particular, a new Local Transport Plan 4 (“Connecting Oxfordshire”) and a new Adopted Cherwell Local Plan for the period 2011-2031 have now been released.
- 2.3 Non-Statutory Cherwell Local Plan 2011, and Bicester Movement study are not updated. The Bicester Masterplan, has now been adopted as a Supplementary Planning Document.

National Planning Policy Framework (NPPF)

- 2.4 The National Planning Policy Framework (NPPF) remains that current adopted planning policy at National level.

2.5 Oxfordshire County Council Policy

- 2.6 The previous submitted TA referred to the OCC Local Transport Plan 3 (LTP3) and emerging documents Bicester Master Plan and Bicester Movement Study. However, a new Local Transport Plan 4 "Connecting Oxfordshire" has now been released and replaces LTP3.

Local Transport Plan 4- Connecting Oxfordshire (2015-2031)

- 2.7 Since LTP3 was adopted in 2011, much has changed. To ensure that the county’s transport systems are fit to support population and economic growth, Oxfordshire County Council has developed a new Local Transport Plan. Connecting Oxfordshire, the Local Transport Plan 4 for Oxfordshire, was adopted in September 2015. It sets out the transport vision, goals and

objectives, to ensure that they support the Local Enterprise Partnership's Strategic Economic Plan as well as District Council Local Plans and other council strategies.

- 2.8 The four goals that previous Local Plan referred to, have now consolidated into three:
- Support jobs and housing growth and economic vitality;
 - Reduce transport emissions, enhance air quality and support the transition to a low carbon economy; and
 - Protect and enhance Oxfordshire's environment and improve quality of life (including public health, safety and individual wellbeing).
- 2.9 Policies that are included in the new LTP4 and are related to the new developments are:
- **Policy 01:** Oxfordshire County Council will work to ensure that the transport network supports sustainable economic and housing growth in the county, whilst protecting and where possible enhancing its environmental and heritage assets and supporting the health and wellbeing of its residents.
 - **Policy 02:** Oxfordshire County Council will manage and, where appropriate, develop the county's road network to reduce congestion and minimise disruption and delays, prioritising strategic routes.
 - **Policy 03:** Oxfordshire County Council will support measures and innovation that make more efficient use of transport network capacity by reducing the proportion of single occupancy car journeys and encouraging a greater proportion of journeys to be made on foot, by bicycle, and/or by public transport.
 - **Policy 04:** Oxfordshire County Council will prioritise the needs of different types of users in developing transport schemes or considering development proposals, taking into account road classification and function/purpose, the characteristics and function of the place and the need to make efficient use of transport network capacity.
- 2.10 The main differences between the LTP3 and LTP4 is that LTP4 is more positive about progressing workplace parking charges in Oxford, gives strengthened emphasis on Air Quality including plans for Clean Air Zones and Oxford Zero Emission Zone, including cycling, walking and Door to Door policies. Furthermore, changes are noted on the way in which transport improvements can be funded.

- 2.11 Therefore, as the previous TA stated, OCC's policies highlight that development should be located in areas that are accessible by sustainable modes of travel, with proposed site layouts supporting pedestrian and cyclist movement, thereby reducing the reliance on travel by private car. Also, where additional vehicular movements are generated, and these materially impact upon the performance of the existing local highway network, this impact should be mitigated, including the adoption of routeing arrangements for construction vehicle access.
- 2.12 The Site development proposals satisfying the above-mentioned policies. The accessibility of the Wider Site, and therefore the Site, has been previously tested at appeal, with the inspector concluding that the site is readily accessible by sustainable forms of travel and within reasonable proximity of the town centre. Sustainable travel will be further promoted by the implementation of a TP. As an outline application, supported by parameter plans, detailed consideration of the internal pedestrian and cycle routes within the site will be addressed through subsequent reserved matter applications. This Addendum will assess the development impact on the local highway network and will, where necessary, identify a mitigation strategy. Finally, as it was also mentioned in the previous TA the Site benefits from being located adjacent to the strategic road highway network, ensuring that construction vehicle access will not be reliant on access via residential routes.
- 2.13 The Bicester Area Strategy has been also updated as a part of the new LTP4.
- 2.14 Policies that are included in the new Bicester Strategy are described above.
- **BC1:** Improve access and connections between key employment and residential sites and the strategic transport system. This will be achieved by improving connectivity to the strategic highway, including future proposals for the A34, Junctions 9 and 10 of the M40. Also, improvements on eastern peripheral corridor such as upgrading the link to dual carriageway on the A4421 between the Buckingham Road and Gavray Drive are also mentioned within the Strategy.
 - **BC2:** Reduce the proportion of journeys made by private car by implementing a Sustainable Transport Strategy. This will be achieved by implementing Bicester town centre highway modifications, enhancing pedestrian, cycle and public transport links to the Bicester Village Station and Bicester North Station and key employment sites, improving Bicester's bus services along key routes, providing bus priority where feasible to ease movements, significantly improving public transport connectivity

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with other key areas of economic growth within Oxfordshire, providing improved public transport infrastructure, improving access to Bicester Village, providing new sections of urban pedestrian and cycle routes to better connect residential developments with the town centre and key employment destinations

- **BIC3:** Increase people's awareness of the travel choices available in Bicester, which should improve public health and wellbeing. One of the action that help this to be achieved is by discouraging undesirable routing of traffic by developing a signage strategy

2.15 The main changes between the previous Bicester Area Strategy and the new are related to:

- **Infrastructure Improvements:** 1) Investigating Options for infrastructure improvements and bus priority on A41. 2) Progressing Way finding Project for Bicester with the aim of improving signage across the town.
- **Sustainable Transport Strategy:** 1) Better support of the Cherwell District Council's Sustainable Transport Strategy, including schemes such as Central Corridor Cycle Improvements 2) Cycle friendly measures must be incorporated into all new road schemes and new housing developments 3) References to improve walking facilities 4) Options for relaxing the cycle ban on Sheep Street 5) Secure sustainable transport measures in all major new development
- **Traffic management:** 1) A strategic system of Variable Message Signs for Bicester
- **Scheme delivery:** 1) Intention to provide a detailed delivery plan for future infrastructure programmes.
- **Infrastructure Improvements:** 1) Investigating Options for infrastructure improvements and bus priority on A41. 2) Progressing Way finding Project for Bicester with the aim of improving signage across the town.

Adopted Cherwell Local Plan 2011-2031

2.16 Original TA referred to the Adopted Cherwell Local Plan 1996 (Saved Policies), Emerging Local Plan 2011-2031 and Non-Statutory Local Plan 2011. The current planning policy for the area is now set out in the Adopted Cherwell Local Plan 2011-2031 Part (incorporating Policy Bicester 3 re-adopted on 19 December 2016).

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2.17 The Cherwell Local Plan 2011-2031 - Part 1 provides the strategic planning policy framework for the District to 2031. Its vision is that by 2031, Cherwell District will be an area where all residents enjoy a good quality of life and it will be more prosperous than it is today. Those who live and work there will be happier, healthier and feel safer.

2.18 The Local Plan 2011-2031 – Part 1 replaced a number of the ‘saved’ policies of the adopted Cherwell Local Plan 1996 though many of its policies are retained and remain part of the development plan.

2.19 The main transport related policy within the Adopted Plan is Policy SLE4:

‘Policy SLE4 : Improved Transport and Connections

The Council will support the implementation of the proposals in the Movement Strategies and the Local Transport Plan to deliver key connections, to support modal shift and to support more sustainable locations for employment and housing growth.

We will support key transport proposals including:

- *Transport Improvements at Banbury, Bicester and at the Former RAF Upper Heyford in accordance with the County Council’s Local Transport Plan and Movement Strategies*
- *Projects associated with East-West rail including new stations at Bicester Town and Water Eaton*
- *Rail freight associated development at Graven Hill, Bicester*
- *Improvements to M40 junctions.*

Consultation on options for new link and relief roads at Bicester and Banbury will be undertaken through the Local Transport Plan (LTP) review process. Routes identified following the strategic options appraisal work for LTP4 will be confirmed by the County Council and will be incorporated in Local Plan Part 2.

New development in the District will be required to provide financial and / or in-kind contributions to mitigate the transport impacts of development.

All development where reasonable to do so, should facilitate the use of sustainable modes of transport to make the fullest possible use of public transport, walking and cycling. Encouragement will be given to solutions which support reductions in greenhouse gas

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emissions and reduce congestion. Development which is not suitable for the roads that serve the development and which have a severe traffic impact will not be supported.'

2.20 In addition to the general transport policy, the development site forms part of the site covered by Policy Bicester 13. This includes the following specific transport related items:

- Retention of Public Rights of Way and a layout that affords good access to the countryside.
- New footpaths and cycleways should be provided that link with existing networks, the wider urban area and schools and community facilities. Access should be provided over the railway to the town centre.
- A linked network of footways which cross the central open space, and connect Langford Village, Stream Walk and Bicester Distribution Park.
- A layout that maximises the potential for walkable neighbourhoods and enables a high degree of integration and connectivity between new and existing communities.
- A legible hierarchy of routes to encourage sustainable modes of travel. Good accessibility to public transport services with local bus stops provided. Provision of a transport assessment and Travel Plan.
- Additional bus stops on the A4421 Charbridge Lane will be provided, with connecting footpaths from the development. The developer will contribute to the cost of improving local bus services.

Bicester Master Plan and Bicester Movement Study

2.21 Bicester Master Plan is now adopted as a Supplementary Planning Document. It considers potential housing and employment sites both up to 2031 and then beyond up to 2040. Policy Bicester 13: Gavray Drive is included in the section C of this document.

OCC March 2014 Guidance Document “ Transport Assessment and Travel Plans”

2.22 There is no update regarding the OCC’s Transport Assessments and Travel Plans Guidance; therefore, OCC March 2014 Guidance document is still valid.

3. EXISTING HIGHWAY CONDITIONS

Existing Highway Network

- 3.1 There have been no significant changes implemented on the road network in the immediate area of the site since the original Transport Assessment was produced.

Accident Data

- 3.2 The original TA examined personal injury accident data for a period of 39 months between 01/01/2011 and 31/03/2014. To update the analysis, further accident data has been obtained from Oxfordshire Road Safety covering the period 01/01/2012 to 30/09/2017. Full accident data is presented in **Appendix B**, with a summary provided in the following paragraphs.
- 3.3 The more recent accident data identifies that the following personal injury accidents have been recorded:
- Gavray Drive/Mallards Way priority junction- 0 accidents;
 - Gavray Drive/ A4421 Wretchwick Way roundabout- 1 accident, resulting in 2 slight injuries;
 - Peregrine Way/ A4421 Wretchwick Way priority junction- 5 accidents, resulting in 6 slight and 1 serious injury;
 - Peregrine Way/ A4421 Wretchwick Way/ A4421 Neunkirchen Way roundabout junction- 6 accidents, resulting in 6 slight injuries;
 - A41/B4100 London Road/A4421 Seelscheid Way/ Gravenhill Road roundabout junction- 8 accidents, resulting in 6 and 1 serious injury and 1 fatality.
- 3.4 The only accident close to the Gavray Drive / A4421 junction involved a rear end shunt in southbound queueing traffic. The accident record indicates that this junction is not a high risk location for road traffic accidents.

- 3.5 At the A4421 / Peregrine Way priority junction four of the accidents involved vehicles turning right from the A4421 colliding with northbound vehicles on the A4421. The proposed development will be making a S106 contribution towards the delivery of safety improvements at this junction.
- 3.6 At Peregrine Way/ A4421 Wretchwick Way/ Neunkirchen Way roundabout, 1 accident involving slightly injured pedestrian has occurred between the 31/03/2014 and 30/09/2017 period. The car driver likely turned left at roundabout into Peregrine Way without signal ahead of making turn.
- 3.7 At the A41/London Road/ A4421 Seelscheid Way/ Gravenhill Road roundabout, 4 accidents recorded in the last 3 years, classified as “Slight” incidents in terms of severity. It is noticeable that two of them involving pedal cycles and the most recent one (2017), involving a motorcycle.
- 3.8 In summary, this review has shown that the number of accidents (7) that have recorded in the most recent 42 months (31/03/2014-30/09/2017) is significantly lower than the number of accidents (18) that occurred in the 39 month period (01/01/2011-31/03/2014) originally assessed. This is indicative of an improvement in road safety in the area around the site.

4. SUSTAINABLE MODES

Rail

- 4.1 In the previous TA, two national railway stations were mentioned, Bicester North and Bicester Town, which was closed at the time due to Chiltern Railways Evergreen 3 project improvements. Improvements as part of CDCs Infrastructure Plan, including a new passenger service between Oxford and London Marylebone via Bicester, were also described in the original TA.
- 4.2 The Evergreen 3 works have now been completed and Bicester Village Station, previously called Bicester Town, is now open. The station is located approximately 1300m walk distance from the site via the residential estates to the south. In terms of service frequency, there are currently 3-4 services during peak hours between Oxford and Bicester Village Station and London with journey times of 70-80 minutes to the capital.
- 4.3 A new service is expected to operate in 2019 by East West Rail which will connect Oxford with Bedford via Bicester Village and Milton Keynes.

Bus

- 4.4 Since the production of the original TA there have been a number of changes to the bus network in Oxfordshire. OCC have significantly reduced subsidy for services that do not operate on a commercial basis and as a result there has been a reduction in the number of routes served across the County. In Bicester, the Bicester Circular bus service (22 and 23) no longer operates. The X5 service continues to run through Langford Village to the south, offering an hourly service to Bicester town centre and Oxford.
- 4.5 Further bus services improvements and additional bus stops on the A4421 Charbridge Lane will be provided as stated in the Bicester Masterplan.

Pedestrian and Cycle Infrastructure

- 4.6 It is understood that the existing pedestrian and cycle infrastructure has not changed significantly since the original TA submission.

5. TRAFFIC IMPACT – ASSESSMENT METHODOLOGY

Previous Assessment

- 5.1 In the previous TA, the impact of development traffic was assessed in using the following methodology:
- Future year (2020) baseline traffic flows in the area around the site were derived by applying TEMPRO growth factors to the observed traffic flows and adding on traffic associated with committed development proposals in the area;
 - Development traffic flows were estimated using agreed trip rates and these flows were assigned to the network based on journey to work data from the 2011 Census for the area;
 - The development traffic flows were added to the 2020 baseline flows to produce 2020 With Development traffic flows; and
 - Individual junction capacity models were run using the baseline and with development traffic flows and the results compared to identify the impact of the development on junction performance.

Updated Assessment

- 5.2 Since the submission of the application in 2015, OCC now have an up to date strategic SATURN model of the Bicester area that they now require to be used to assess the impact of development on traffic in the town. As part of the scoping discussions related to this TA Addendum it was agreed that to ensure the assessment of traffic impact was robust, the SATURN model would be used to obtain traffic flows for 2021 and 2026 and these would be used to assess the impact of the development.
- 5.3 The SATURN model already includes traffic generation associated with committed development in Bicester, including the sites that are allocated within the Adopted Local Plan. The model therefore includes traffic associated with the development of 300 residential units on Gavray Drive. To derive 2021 and 2026 baseline traffic flows, the trips associated with a 300 residential unit development have been manually subtracted from the SATURN flows.

5.4 The development traffic generation for the site has been calculated using the trip rates that were previously agreed. The distribution of traffic for the site has been taken from a SATURN select link analysis for the site provided by OCC. The SATURN output provided by OCC can be seen in full in **Appendix C**.

5.5 The resultant traffic flows used in the assessment are set out as follows:

- 2021 and 2026 Baseline Flows can be seen in **Figures 5.1 to 5.4**.
- 2021 and 2026 With 180 Residential Units Flows can be seen in **Figures 5.5 to 5.8**.
- 2021 and 2026 With 300 Residential Units Flows can be seen in **Figures 5.9 to 5.12**.

Percentage Change in Flows

5.6 In order to check that the geographic scope of the assessment remains reasonable, the percentage change in traffic flow as a result of the development in each of the peaks has been checked on the A4421, London Road and the A41 as set out in **Table 5.1**.

Table 5.1 : Percentage Change in Traffic Flows in 2021 as a Result of 180 Residential Units on Gavray Drive

Location	AM Peak			PM Peak		
	Base	Dev	%age	Base	Dev	%age
A4421 North of Gavray Drive	1273	25	1.96%	1612	35	2.17%
A4421 South of Gavray Drive	1318	51	3.87%	1601	53	3.31%
London Road	687	30	4.37%	987	26	2.63%
A41 East	2793	30	1.07%	3146	34	1.08%
A41 West	2699	18	0.66%	2950	22	0.75%

5.7 It can be seen that the change in traffic flow in all locations is below 5% and therefore the geographic scope applied in the original TA remains appropriate.

6. TRAFFIC IMPACT – JUNCTION CAPACITY ASSESSMENT

Baseline Assessments

- 6.1 The junction models utilised in the original TA have been re-run using the traffic flows set out in Figures 5.1 to 5.4 to obtain their 2021 and 2026 baseline performance. The results of these assessments are summarised in **Tables 6.1 to 6.5** and the outputs are provided in full in **Appendix D**.

Table 6.1 : Gavray Drive/ Mallards Way priority junction- 2021 and 2026 Baseline

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
	2021 Base			
Mallards Way turning left	0.03	0	0.09	0
Mallards Way turning right	0.01	0	0.00	0
Gavray Drive turning right	0.08	0	0.08	0
2026 Base				
Mallards Way turning left	0.03	0	0.06	0
Mallards Way turning right	0.06	0	0.04	0
Gavray Drive turning right	0.05	0	0.05	0

Table 6.2 : Gavray Drive / Charbridge Lane/A4421 Wretchwick Way roundabout/ Wretchwick Avenue- 2021 and 2026 Baseline

Arm	AM Peak (07:45-08:45)		PM Peak (16:45-17:45)	
	RFC	Max Queue	RFC	Max Queue
	2021 Base			
A4421 Wretchwick Way	0.38	1	0.47	1
Gavray Drive	0.05	0	0.01	0
Charbridge Lane	0.29	0	0.45	1
Wretchwick Avenue	0.13	0	0.09	0
2026 Base				
A4421 Wretchwick Way	0.45	1	0.42	1
Gavray Drive	0.13	0	0.05	0
Charbridge Lane	0.64	2	0.70	2
Wretchwick Avenue	0.46	1	0.74	3

Table 6.3 : A4421 Wretchwick Way/ Peregrine Way priority junction- 2021 and 2026 Baseline

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
	2021 Base			
Peregrine Way turn left to A4421 Wretchwick Way NE	0.20	0	0.16	0
Peregrine Way turn right to A4421 Wretchwick Way SW	0.14	0	0.17	0
A4421 Wretchwick Way NE turn right to Peregrine Way	0.21	0	0.32	1
	2026 Base			
Peregrine Way turn left to Wretchwick Way NE	0.21	0	0.14	0
Peregrine Way turn right to Wretchwick Way SW	0.15	0	0.14	0
Wretchwick Way NE turn right to Peregrine Way	0.20	0	0.38	1

Table 6.4 : Peregrine Way/A4421 Wretchwick Way/ A4421 Neunkirchen Way roundabout- 2021 and 2026 Baseline

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
	2021 Base			
Neunkirchen Way	0.20	0	0.45	1
Peregrine Way	0.39	1	0.27	0
A4421 Wretchwick Way North	0.26	0	0.30	0
	2026 Base			
Neunkirchen Way	0.20	0	0.33	1
Peregrine Way	0.40	1	0.23	0
A4421 Wretchwick Way North	0.19	0	0.21	0

Table 6.5 : Seelscheid Way / A41 East/ Gravenhill Road North/A41 West/B4100 London Road roundabout- 2021 and 2026 Baseline

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 Base				
Seelscheid Way	0.66	2	0.62	2
A41 East	0.75	3	0.95	15
Gravenhill Road North	0.54	1	1.57	126
A41 West	0.86	6	1.11	97
B4100 London Road	0.34	1	0.64	2
2026 Base				
Seelscheid Way	0.56	1	0.50	1
A41 East	0.73	3	1.00	30
Gravenhill Road North	0.88	7	0.80	4
A41 West	0.92	11	1.02	39
B4100 London Road	0.26	0	0.52	1

- 6.2 The only junction to be experience degrees of saturation in excess of the practical capacity limit of 0.85 is the A4421 / A41 (Rodney House) Roundabout. In the AM peak the existing junction layout would be marginally over capacity on the A41 West arm in 2021 and 2026 and at Gravenhill Road in 2026. In the PM peak there are capacity issues on both A41 arms in 2021 and 2026 and on Gravenhill Road in 2021. The improvement in performance in 2026 is due to the link road through the South East Bicester site taking some traffic off of the movements between the A41 East and A4421 (and vice versa).
- 6.3 Having established the performance of each of the junctions within the immediate highway network under the baseline scenario, it is necessary to test the impact of the additional traffic that would be generated by the development proposals.
- 6.4 The individual junction models have been re-run using the traffic flows in **Figures 5.6 to 5.10**. The results are summarised in **Tables 6.6 to 6.10** and can be seen in full in **Appendix D**.

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Table 6.6 : PICADY RESULTS, Gavray Drive / Mallards Way priority junction- 2021 and 2026 with 180 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 with 180 Units				
Mallards Way turning left	0.03	0	0.09	0
Mallards Way turning right	0.04	0	0.01	0
Gavray Drive turning right	0.08	0	0.08	0
2026 with 180 Units				
Mallards Way turning left	0.03	0	0.06	0
Mallards Way turning right	0.08	0	0.06	0
Gavray Drive turning right	0.06	0	0.05	0

Table 6.7 : ARCADY RESULTS, Gavray Drive / Charbridge Lane/ Wretchwick Avenue/ A4421 Wretchwick Way roundabout- 2021 and 2026 with 180 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 with 180 Units				
A4421 Wretchwick Way	0.39	1	0.48	1
Gavray Drive	0.09	0	0.06	0
Charbridge Lane	0.30	0	0.47	1
Wretchwick Avenue	0.14	0	0.10	0
2026 with 180 Units				
A4421 Wretchwick Way	0.46	1	0.44	1
Gavray Drive	0.21	0	0.13	0
Charbridge Lane	0.66	2	0.72	3
Wretchwick Avenue	0.47	1	0.77	3

Table 6.8 : PICADY RESULTS, A4421 Wretchwick Way/ Peregrine Way priority junction-2021 and 2026 with 180 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 with 180 Units				
Peregrine Way turn left to Wretchwick Way NE	0.20	0	0.16	0
Peregrine Way turn right to Wretchwick Way SW	0.14	0	0.18	0
Wretchwick Way NE turn right to Peregrine Way	0.22	0	0.32	1
2026 with 180 Units				
Peregrine Way turn left to Wretchwick Way NE	0.21	0	0.14	0
Peregrine Way turn right to Wretchwick Way SW	0.15	0	0.14	0
Wretchwick Way NE turn right to Peregrine Way	0.21	0	0.38	1

Table 6.9 : ARCADY RESULTS, Neunkirchen Way/Peregrine Way/A4421 Wretchwick Way roundabout-2021 and 2026 with 180 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 with 180 Units				
Neunkirchen Way	0.21	0	0.46	1
Peregrine Way	0.39	1	0.27	0
A4421 Wretchwick Way North	0.26	0	0.30	0
2026 with 180 Units				
Neunkirchen Way	0.21	0	0.33	1
Peregrine Way	0.40	1	0.24	0
A4421 Wretchwick Way North	0.19	0	0.22	0

Table 6.10 : ARCADY RESULTS, Seelscheid Way / A41 East/ Gravenhill Road North/A41 West/B4100 London Road roundabout-2021 and 2026 with 180 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 with 180 Units				
Seelscheid Way	0.67	2	0.63	2
A41 East	0.76	3	0.96	18
Gravenhill Road North	0.55	1	1.63	133
A41 West	0.87	7	1.13	110
B4100 London Road	0.36	1	0.65	2
2026 with 180 Units				
Seelscheid Way	0.58	1	0.50	1
A41 East	0.74	3	1.01	32
Gravenhill Road North	0.89	7	0.82	4
A41 West	0.93	12	1.03	46
B4100 London Road	0.28	0	0.52	1

- 6.5 With the proposed development in place, all junctions that previously operated within capacity remain within capacity with RFC's below 0.85.
- 6.6 The A41 / A4421 roundabout, which was over-capacity, under the baseline traffic flows remains over capacity in both scenarios. Looking firstly at the AM peak period, the maximum increase in queue length on the over-capacity approaches to this junction is a single vehicle in both 2021 and 2026. In the PM peak, the baseline capacity issues are greater and, as a result, the effect of development traffic is marginally greater. Queue length increases of between 2 and 13 vehicles would be expected if the existing junction layout were retained.
- 6.7 The level of impact identified shows a worsening of the situation, but the scale of increase in queue lengths does not equate to a severe adverse impact.
- 6.8 Furthermore, as explained within the original TA, as part of the approved Graven Hill development, a significant improvement scheme for this junction has been proposed and approved and is currently going through the detailed design process. This improvement will

see the signalisation of the roundabout and introduction of pedestrian crossing facilities on each arm. **Appendix E** reproduces the preliminary junction design that was submitted as part of the Graven Hill planning application. Condition 51 of the planning approval states that:

'Prior to the first occupation of the Graven Hill development the proposed Entrance Works (A41 / Gravenhill Road / B4100 / A4421 roundabout) as shown in Figure 11.3 in the accompanying Transport Assessment, drawing reference 27808-L463 (September 2011) – A41 / Gravenhill Road / B4100 mitigation scheme (signal), between the land and the highway shall be formed, laid out and constructed strictly in accordance with the Local Highway Authority's specifications and that all ancillary works specified shall be undertaken.'

- 6.9 The TA that was submitted in support of that application demonstrated that the proposed signal scheme would be sufficient to accommodate the Graven Hill development traffic and other committed development proposals, including the previously approved development of 500 units at Gavray Drive.
- 6.10 The approved junction improvement scheme will therefore ensure that the junction operates within capacity with 180 units built at Gavray Drive.
- 6.11 In summary, the conclusions drawn with regard to the traffic impact of the proposed development on the surrounding road network remain as identified in the original Transport Assessment.

Cumulative Assessment - With 300 Units at Gavray Drive

- 6.12 Further tests have been undertaken to demonstrate what the cumulative impact of the future development of the whole of the allocations site at Gavray Drive for a total of 300 units would be. Traffic flows from **Figures 5.9 to 5.12** have been used in the various junction models. The results from these are summarised in **Tables 6.11 to 6.15** and shown in full in **Appendix D**.

Land at Gavray Drive, Bicester
Transport Assessment Addendum

Table 6.11 : PICADY RESULTS, Gavray Drive / Mallards Way priority junction-2021 and 2026 with 300 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
2021 with 300 Units				
Mallards Way turning left	0.04	0	0.09	0
Mallards Way turning right	0.06	0	0.05	0
Gavray Drive turning right	0.08	0	0.08	0
2026 with 300 Units				
Mallards Way turning left	0.03	0	0.06	0
Mallards Way turning right	0.09	0	0.08	0
Gavray Drive turning right	0.06	0	0.05	0

Table 6.12 : ARCADY RESULTS, Gavray Drive / Charbridge Lane/ Wretchwick Avenue/ A4421 Wretchwick Way roundabout- 2021 and 2026 with 300 Units

Arm	AM Peak (07:45-08:45)		PM Peak (16:45-17:45)	
	RFC	Max Queue	RFC	Max Queue
2021 with 300 Units				
A4421 Wretchwick Way	0.39	1	0.49	1
Gavray Drive	0.12	0	0.08	0
Charbridge Lane	0.31	0	0.48	1
Wretchwick Avenue	0.14	0	0.10	0
2026 with 300 Units				
A4421 Wretchwick Way	0.46	1	0.45	1
Gavray Drive	0.23	0	0.17	0
Charbridge Lane	0.67	2	0.74	3
Wretchwick Avenue	0.47	1	0.80	4

Table 6.13 : PICADY RESULTS, A4421 Wretchwick Way/ Peregrine Way priority junction- 2021 and 2026 with 300 Units

Arm	AM Peak (07:45-08:45)		PM Peak (16:45-17:45)	
	RFC	Max Queue	RFC	Max Queue
	2021 with 300 Units			
Peregrine Way turn left to Wretchwick way NE	0.20	0	0.16	0
Peregrine Way turn right to Wretchwick way SW	0.14	0	0.18	0
Wretchwick way NE turn right to Peregrine Way	0.22	0	0.32	1
	2021 with 300 Units			
Peregrine Way turn left to Wretchwick way NE	0.21	0	0.14	0
Peregrine Way turn right to Wretchwick way SW	0.15	0	0.14	0
Wretchwick way NE turn right to Peregrine Way	0.21	0	0.39	1

Table 6.14 : ARCADY RESULTS, Neunkirchen Way/Peregrine Way/A4421 Wretchwick Way roundabout – 2021 and 2026 with 300 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
	2021 with 300 Units			
Neunkirchen Way	0.21	0	0.46	1
Peregrine Way	0.39	1	0.28	0
A4421 Wretchwick Way North	0.26	0	0.31	1
	2026 with 300 Unit			
Neunkirchen Way	0.21	0	0.34	1
Peregrine Way	0.41	1	0.24	0
A4421 Wretchwick Way North	0.20	0	0.22	0

Table 6.15 : ARCADY RESULTS, Seelscheid Way / A41 East/ Gravenhill Road North/A41 West/B4100 London Road roundabout-2021 and 2026 with 300 Units

Arm	AM Peak		PM Peak	
	RFC	Max Queue	RFC	Max Queue
	2021 with 300 Units			
Seelscheid Way	0.69	2	0.64	2
A41 East	0.77	3	0.97	20
Gravenhill Road North	0.56	1	1.66	138
A41 West	0.87	7	1.14	119
B4100 London Road	0.37	1	0.65	2
	2026 with 300 Units			
Seelscheid Way	0.58	1	0.51	1
A41 East	0.74	3	1.01	34
Gravenhill Road North	0.90	8	0.82	4
A41 West	0.94	13	1.03	51
B4100 London Road	0.29	0	0.53	1

6.13 As with 180 residential units at Gavray Drive, all junctions assessed apart from the A41 / A4421 roundabout remain within capacity with RFC's below 0.85. The A41 / A4421 roundabout, in its current form, would experience a slight worsening in performance if 300 units were constructed at Gavray Drive. However, the improvement scheme identified for this junction as part of the committed Graven Hill development scheme has been designed to accommodate traffic associated with 500 residential units at Gavray Drive and would therefore operate within capacity once implemented.

7. TRANSPORT MITIGATION MEASURES

Travel Plan

- 7.1 A Travel Plan for the proposed development was submitted as one of the planning application documents. The Travel Plan is the start of a long-term management strategy that seeks to deliver sustainable transport objectives for the site. It is a living document that once implemented will be regularly monitored and reviewed.
- 7.2 The Travel Plan included a strategy for implementation, marketing, monitoring and reporting. It also identified a range of measures to encourage sustainable travel and set interim targets for mode shift, against which the TP can be monitored.
- 7.3 The measures that will be implemented as part of the Travel Plan include:
- A Travel Plan Co-ordinator (TPC) will be appointed 3 months before the initial occupation of the residential units, followed by the formation of a Travel Plan Steering Group.
 - A Sustainable Travel Information Pack will be provided to all households on first occupation. This will include information on routes to key local destinations by foot, bicycle and public transport, site specific public transport information, TPC contact details and journey planner website information
 - Personalised travel planning sessions will be offered by the TPC to each household.
 - The TPC will organise a 'walking bus' between the site and the local primary school.
 - Cycle parking will be provided on site and cycle information will be provided to each household.
 - The TPC will organise the formation of a Bicycle User Group for the development.
 - The TPC will form a Car Sharing Database for the site.

S106 Financial Contributions

- 7.4 The Highway Authority have requested the following financial contributions to be made towards transport improvement measures:
- A contribution towards strategy to increase capacity on the A4421 on the A4421 north of Gavray Drive.
 - £1000 per dwelling towards the procurement of additional bus services running along Charbridge Lane and / or Wretchwick Way
 - £18,000 towards bus stop infrastructure for stops on Wretchwick Way (shelter and real time information on northbound stop, flagpole and information case on both northbound and southbound).
 - A monitoring fee of £1240 to enable the Travel Plan to be monitored for five years.
 - £20,000 towards safety improvements at the junction of Peregrine Way and Wretchwick Way.

7.5 The S106 Agreement is currently being finalised between OCC, CDC and Gallagher Estates legal advisors and the Heads of Terms currently include all of the above items.

S278 Highway Works

7.6 Discussions regarding the provision of the following S278 Highway Works are ongoing with OCC at the time of completion of this TA.:

- Works on Gavray Drive to include vehicle access, pedestrian and cycle access, safe crossing points across Gavray Drive, and raised crossing across Mallards Way; and
- Signalised crossing of Wretchwick Way (to allow residents to cross safely to and from the southbound bus stop) plus hardstanding for bus stops.

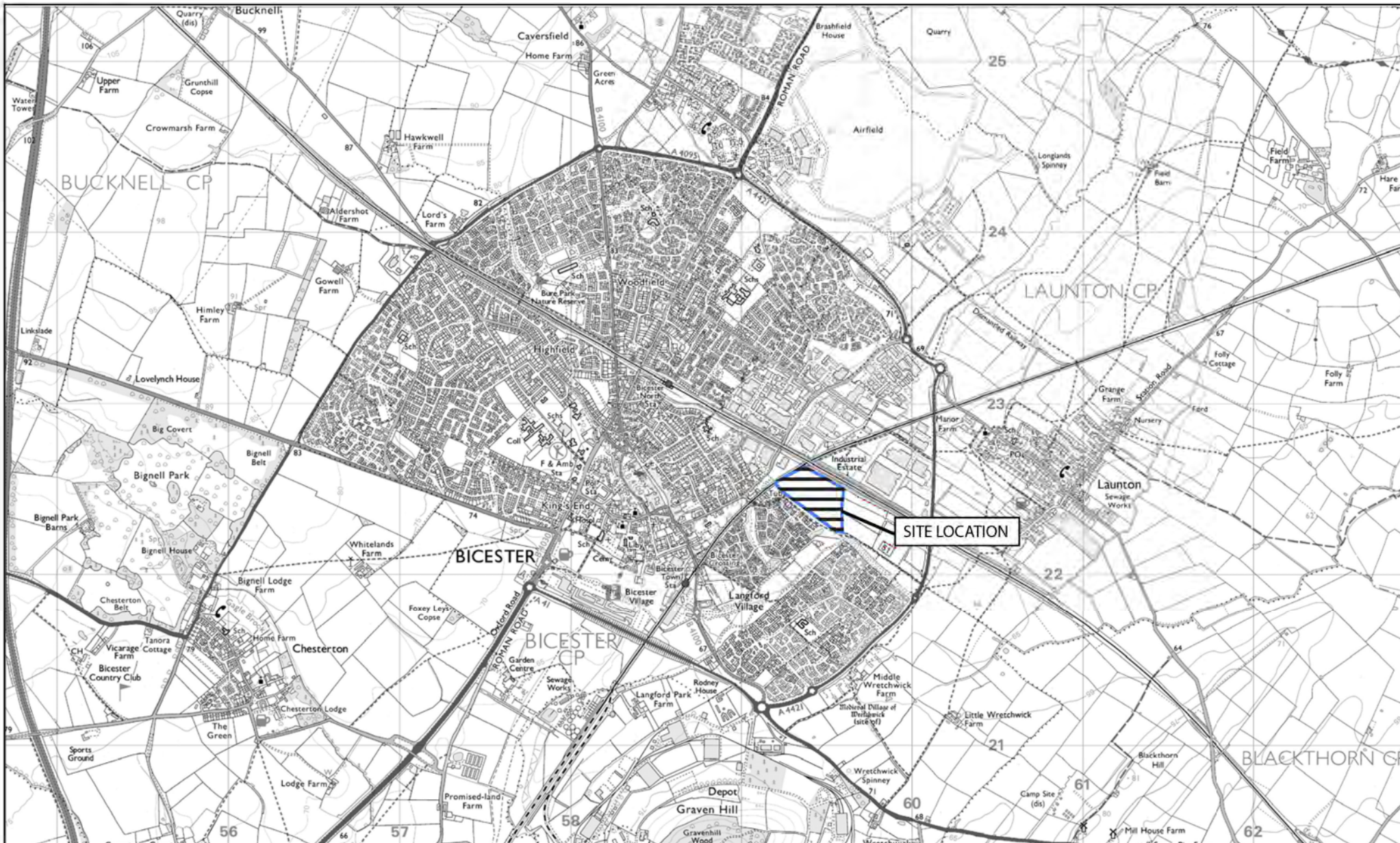
7.7 Preliminary layout drawings for the above measures are provided in **Appendix F**.

8. SUMMARY AND CONCLUSION

- 8.1 A Transport Assessment (TA) for a proposed residential development (180 dwellings) including affordable housing and public open space on land to the north of Gavray Drive, Bicester was previously prepared by Odyssey Markides. The TA was submitted as part of a planning application on behalf of Gallagher Estates Limited in May 2015 (Ref: 15/00837/OUT).
- 8.2 Cherwell District Council determined, at the 15th June 2017 Planning Committee, that the application should be refused. The Council concluded that the proposed development '*was in conflict with the Development Plan*', although it should be noted that there were no highway related matters associated with the refusal decision.
- 8.3 Gallagher Estates Limited have now launched an appeal against the Council decision. As such, Markides Associates (MA) have been commissioned to prepare this Transport Assessment Addendum as an update to the previously submitted TA.
- 8.4 The Addendum should be read in conjunction with the previously submitted TA to fully understand the transport implications of the proposed development, which it should be noted, is unchanged in terms of scale and layout from that proposed within the original planning application.
- 8.5 The main areas that have been updated in this Addendum relate to:
- An update to the local Policy position;
 - An update to the review of existing transport conditions, particularly focussing on any changes to accident data and public transport provision; and
 - Updated predictions in relation to predicted future year (with and without development) junction operation for the junctions assessed as part of the previously submitted TA, with these using traffic flow data from the OCC SATURN model.
- 8.6 The assessment identifies that the conclusions drawing in the original TA in relation to the impact of the proposed development on transport in the area around the site are unchanged. The number of personal injury accidents on the nearby road network have reduced in the period since the original assessment. The capacity impact assessment based

on OCC's SATURN model of Bicester provides similar results to the original TA, with the only junction to experience any capacity issues being the A41 / A4421 roundabout. The impact of the proposals on this junction is demonstrated to be small and the committed improvement works to the junction associated with the consented Graven Hill development have already been demonstrated to operate acceptably with development of full allocation site on Gavray Drive in place. There therefore remain no transport related reasons why consent should not be granted for the proposed development.

FIGURES



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Rev	Amendments	Drn	Chk	App	Date



MARKIDES ASSOCIATES

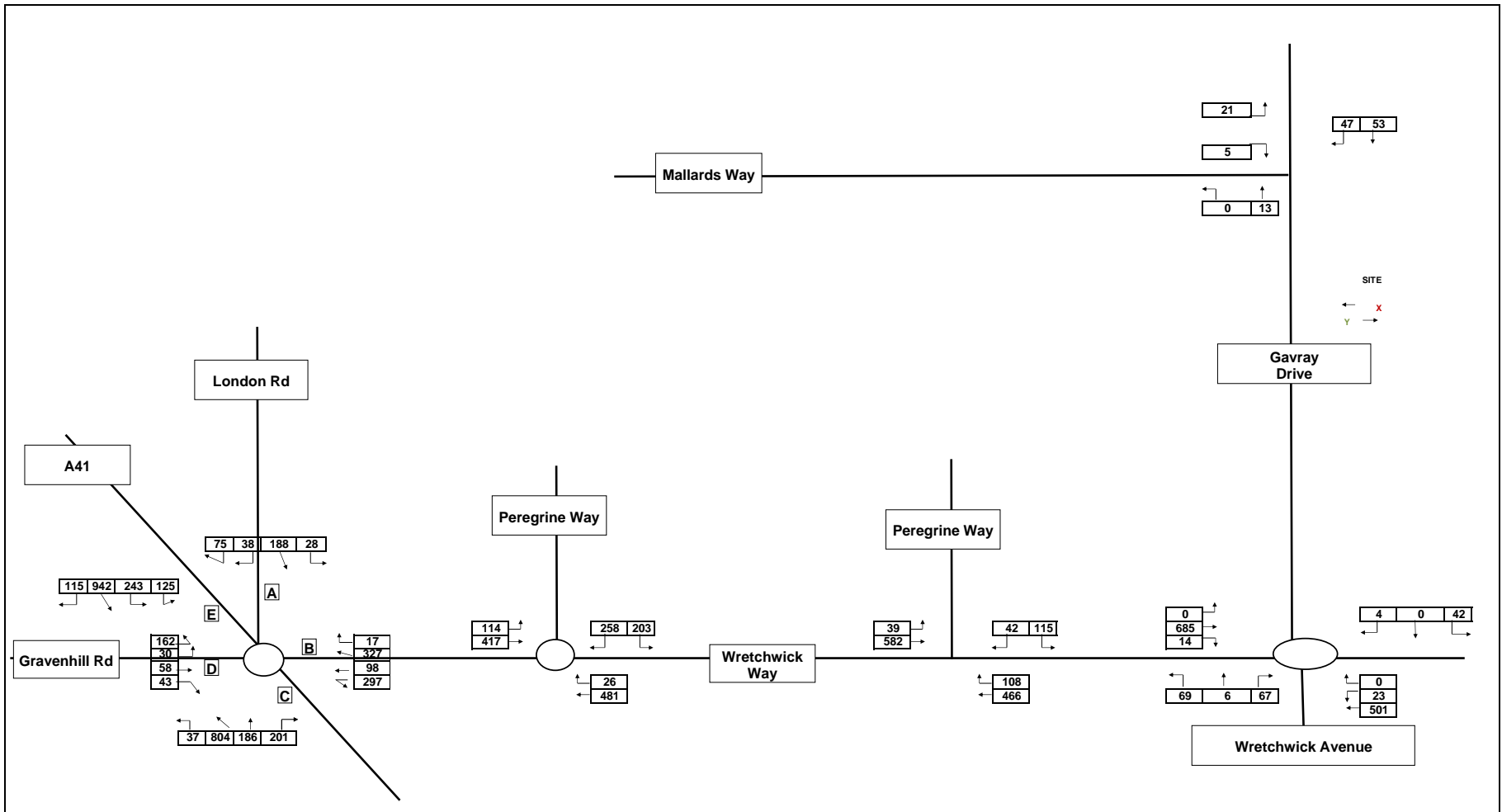
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E: enquiries@markidesassociates.com
W: www.markidesassociates.com

Job Title	GAVRAY DRIVE
Drawing Title	SITE LOCATION PLAN

Client	GALLAGHER ESTATES
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Scale	NTS	Date	27/04/2018	Designed	PF
Drawn	PF	Checked	JB	Approved	JB
Job No	17167-00	Figure No	1.1	Rev	



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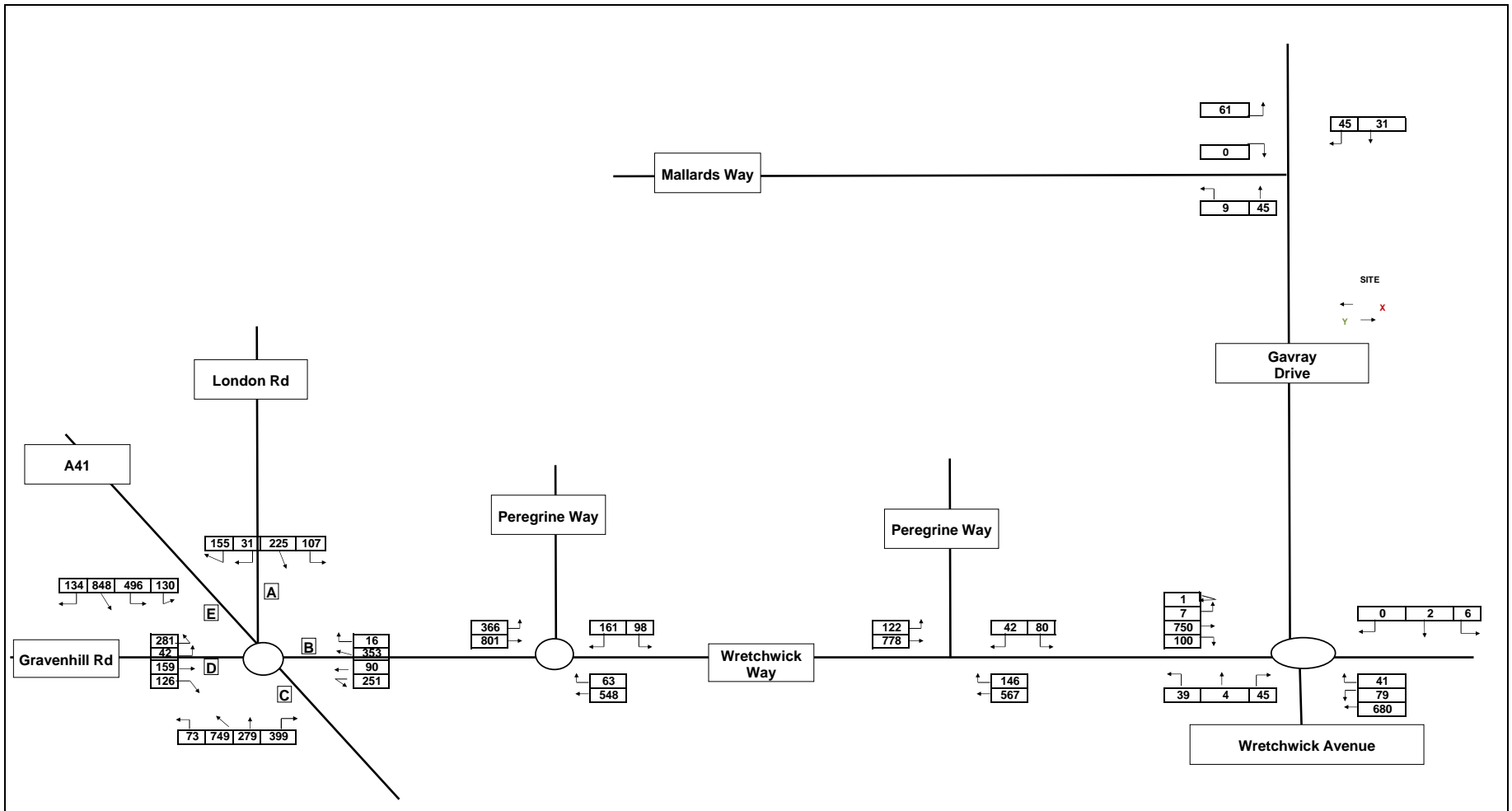
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Drawing Title:	BASELINE 2021 FLOWS - AM

Drawing No:	FIGURE 5.1
Client:	GALLAGHER ESTATES

Job No:	17167-00
Date:	22/01/2018

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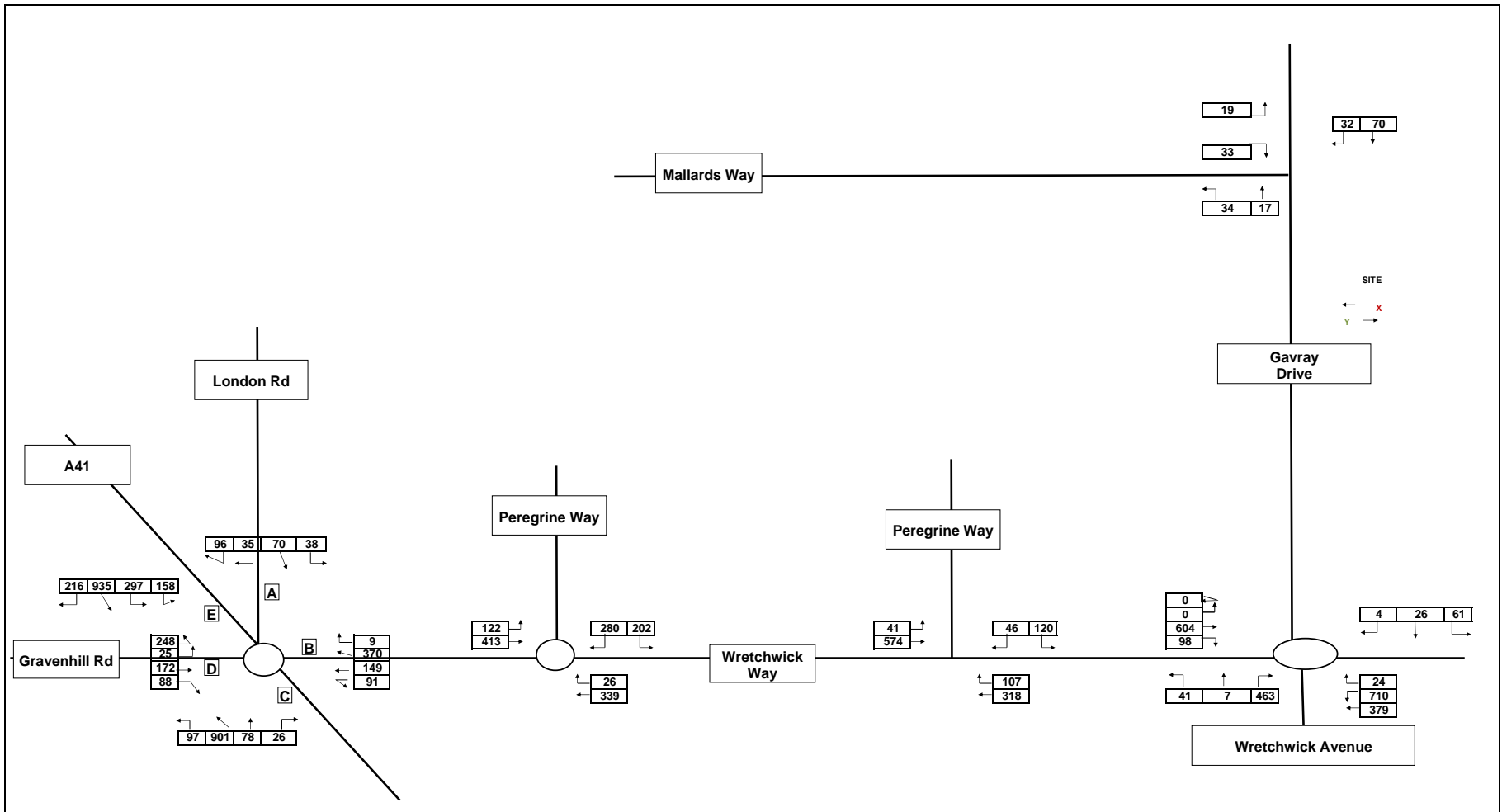
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Drawing No:	FIGURE 5.2
Client:	GALLAGHER ESTATES

Job No:	17167-00
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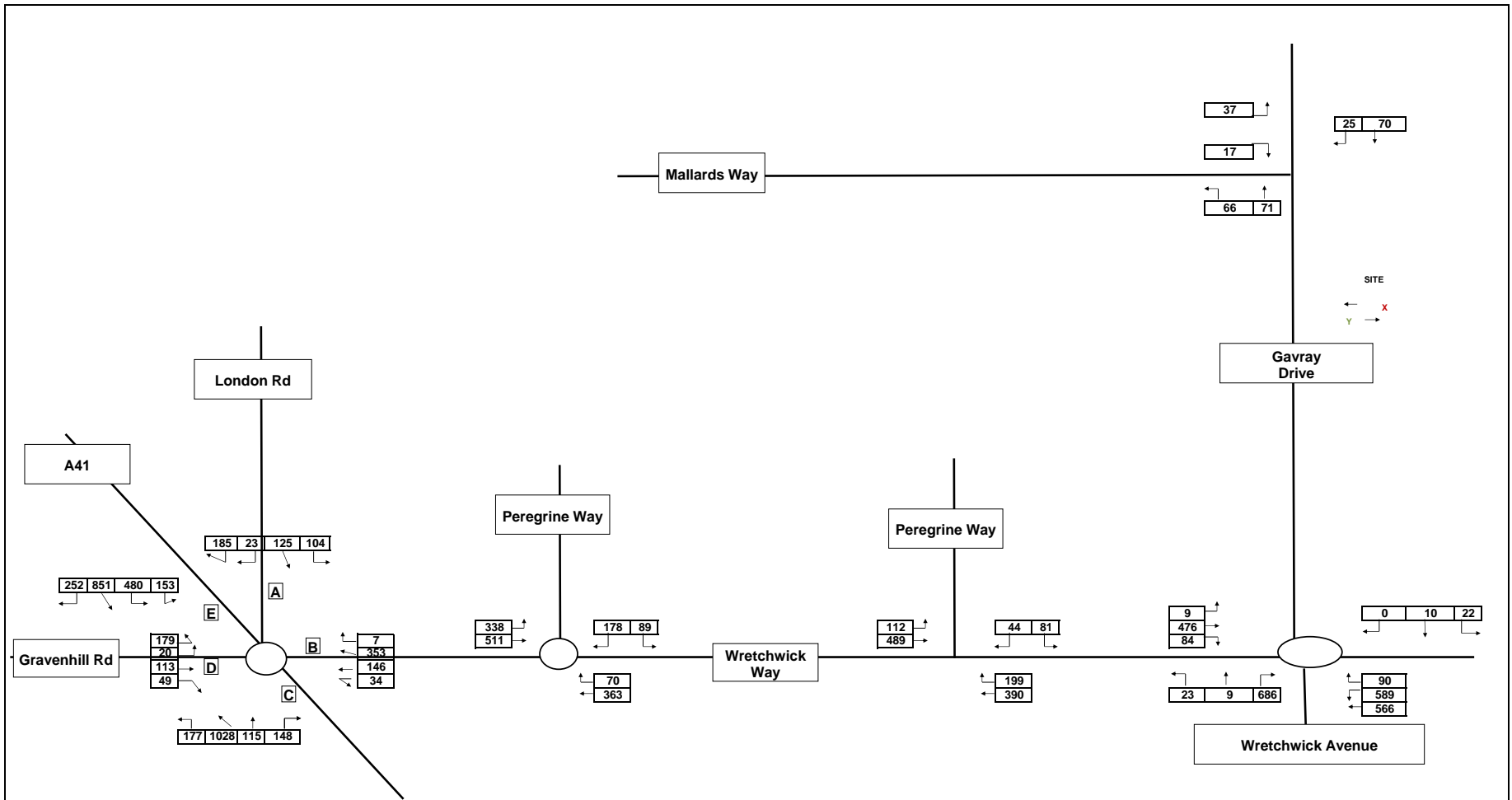
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Drawing Title:	BASELINE 2026 FLOWS - AM

Drawing No:	FIGURE 5.3
Client:	GALLAGHER ESTATES

Job No:	17167-00
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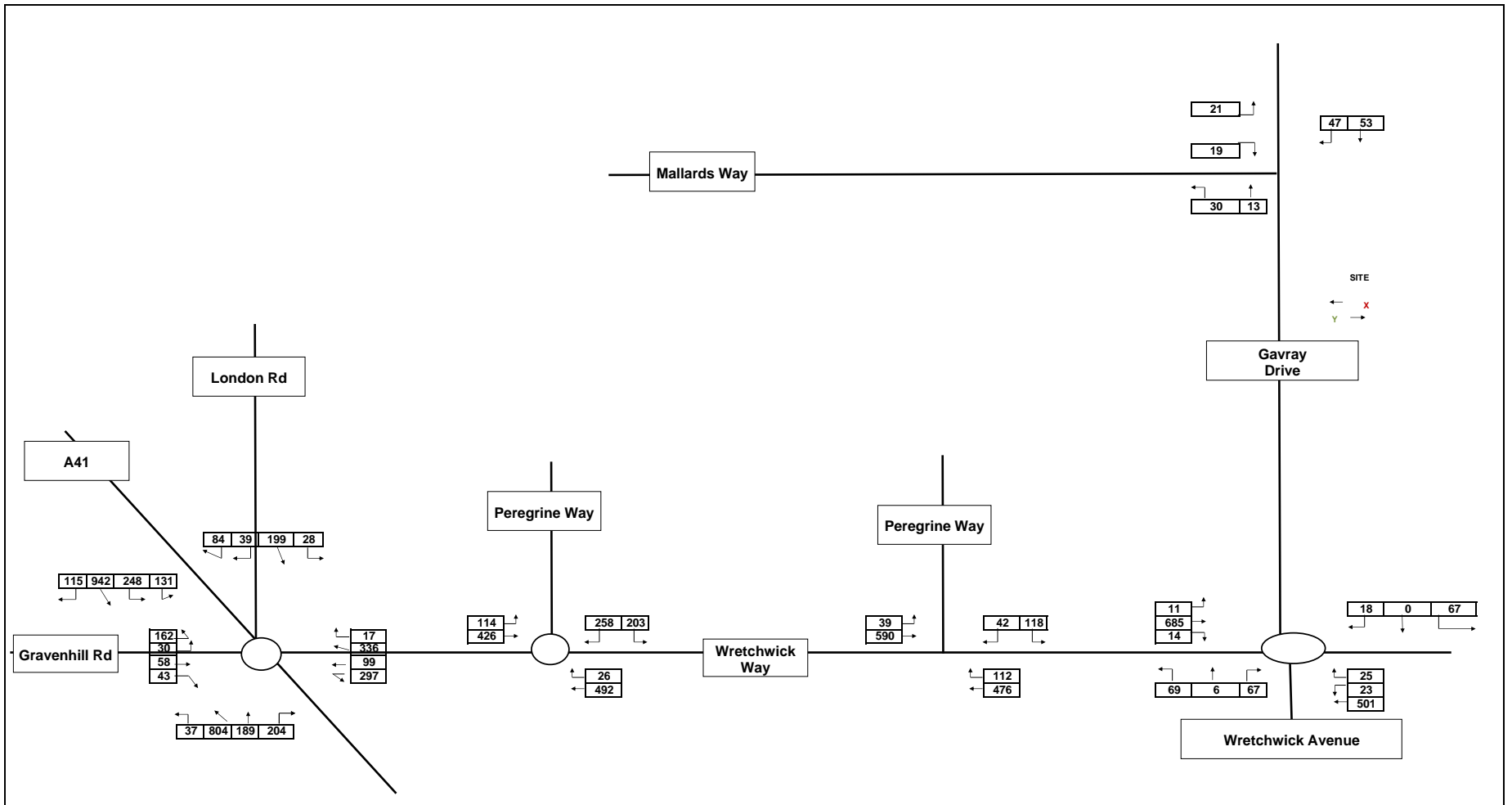
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Drawing Title:	BASELINE 2026 FLOWS - PM

Drawing No:	FIGURE 5.4
Client:	GALLAGHER ESTATES

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Notes

Job Title:
GAVRAY DRIVE, BICESTER

Drawing Title:
WITH 180 UNITS 2021 FLOWS - AM PEAK

Drawing No:
FIGURE 5.5

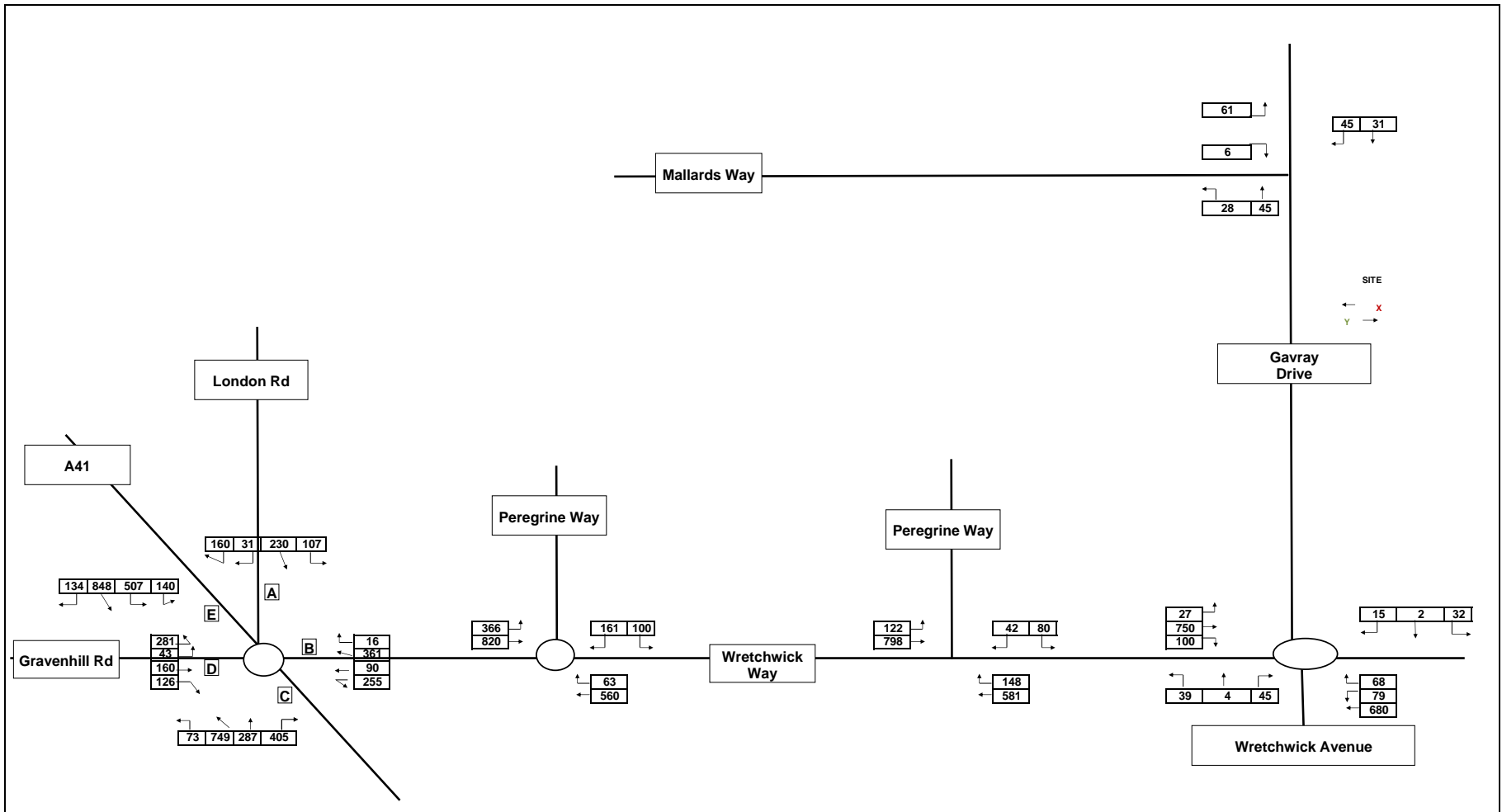
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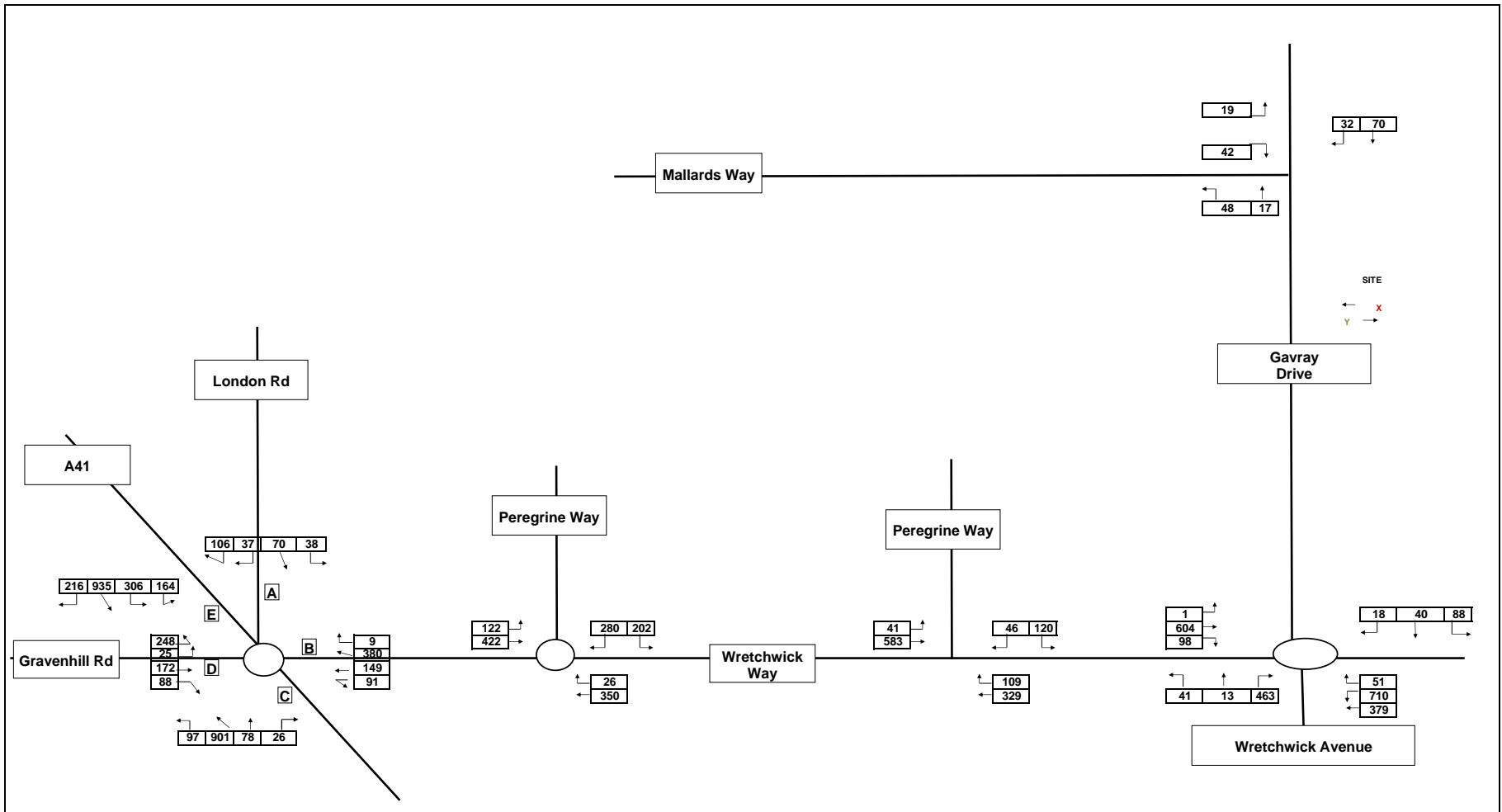
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Drawing Title:	WITH 180 UNITS 2021 FLOWS - PM

Drawing No:	FIGURE 5.6
Client:	GALLAGHER ESTATES

Job No:	17167-00
Date:	22/01/2018

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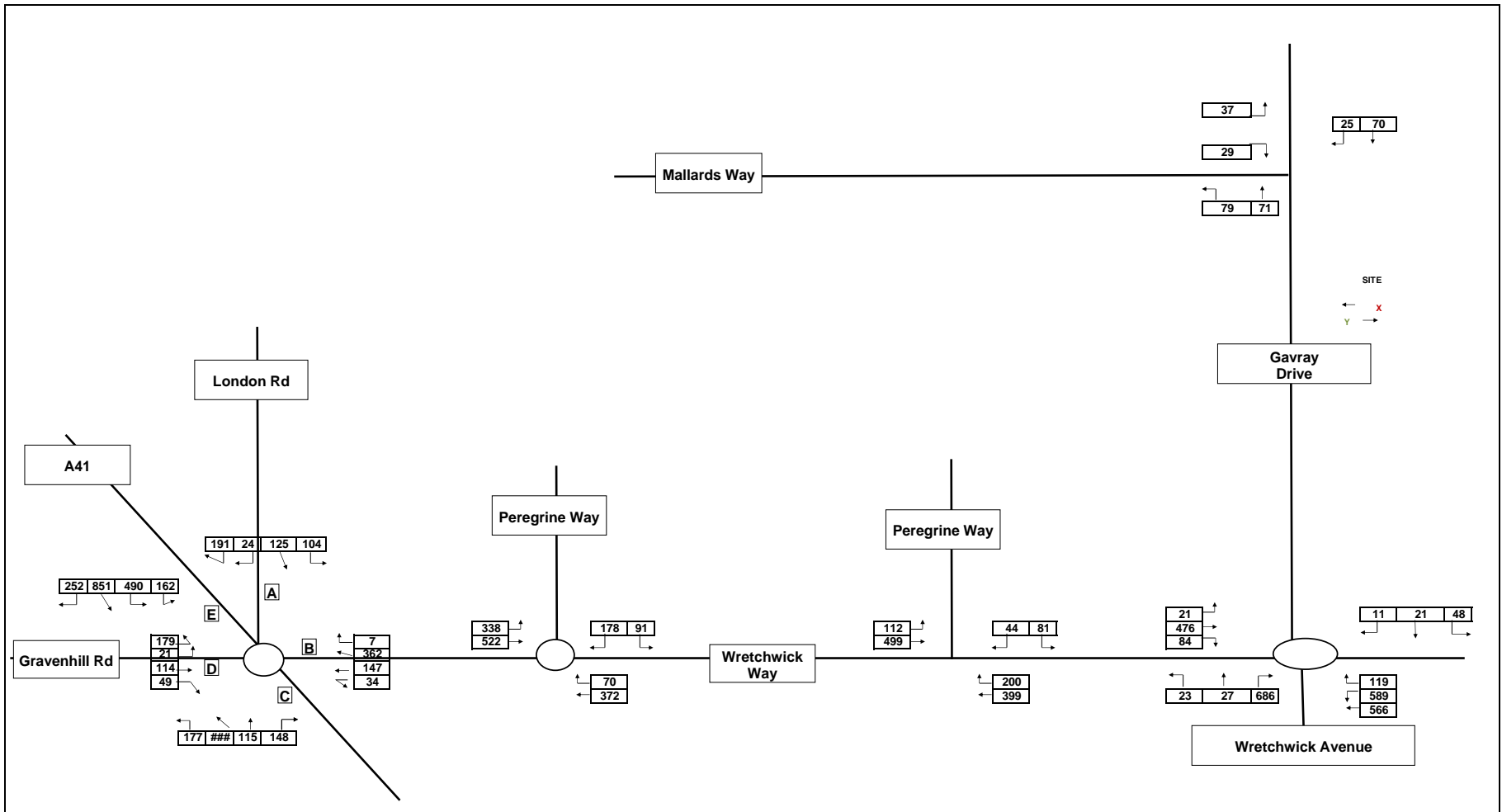
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Drawing Title:	WITH 180 UNITS 2026 FLOWS - AM

Drawing No:	FIGURE 5.7
Client:	GALLAGHER ESTATES

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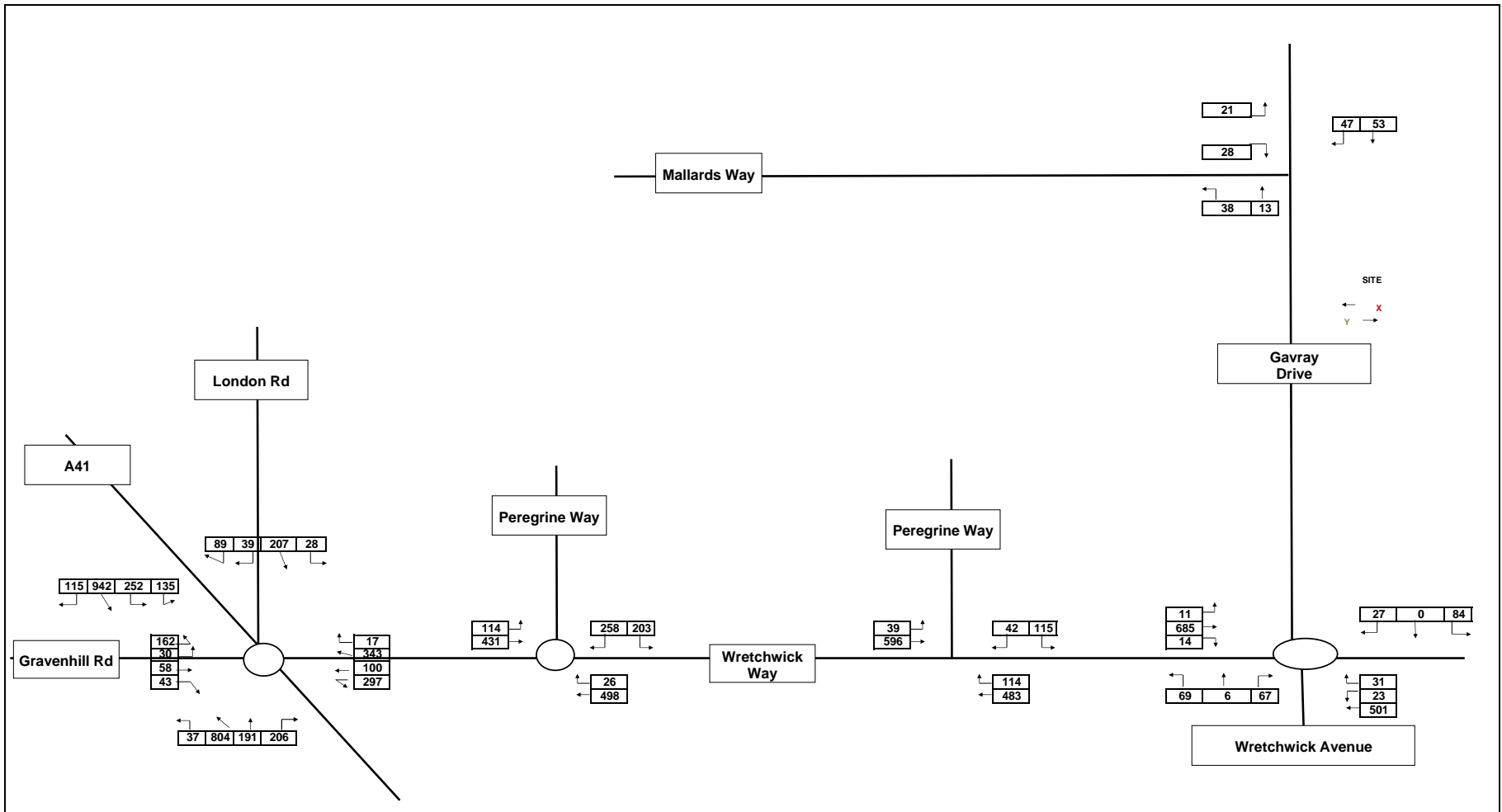
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Drawing Title:	WITH 180 UNITS 2026 FLOWS - PM

Drawing No:	FIGURE 5.8
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Notes

Job Title:
GAVRAY DRIVE, BICESTER

Drawing Title:
WITH 300 UNITS 2021 FLOWS - AM

Drawing No:
FIGURE 5.9

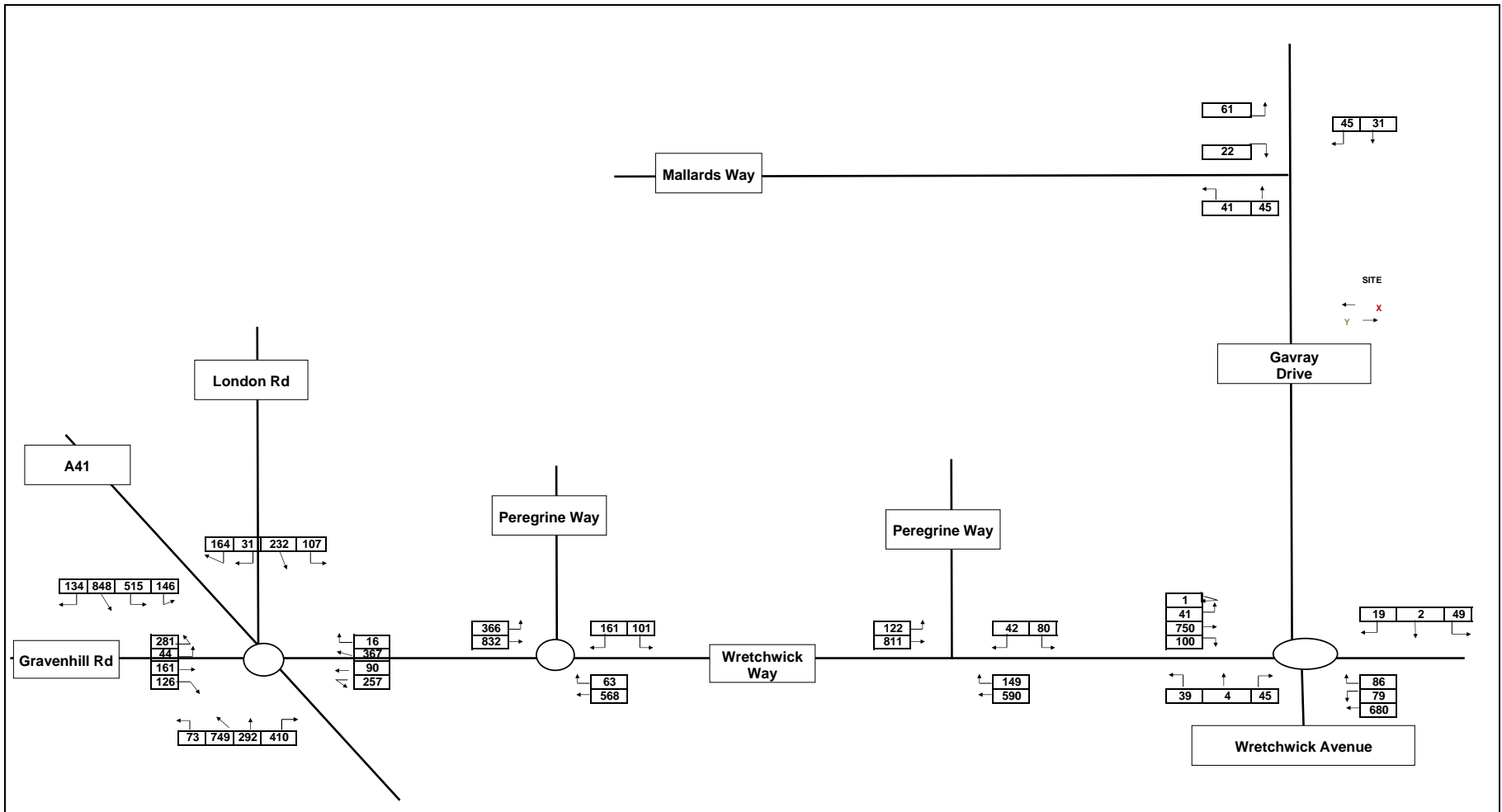
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22/01/2018

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Job Title:
GAVRAY DRIVE, BICESTER

Drawing Title:
WITH 300 UNITS 2021 FLOWS - PM

Drawing No:
FIGURE 5.10

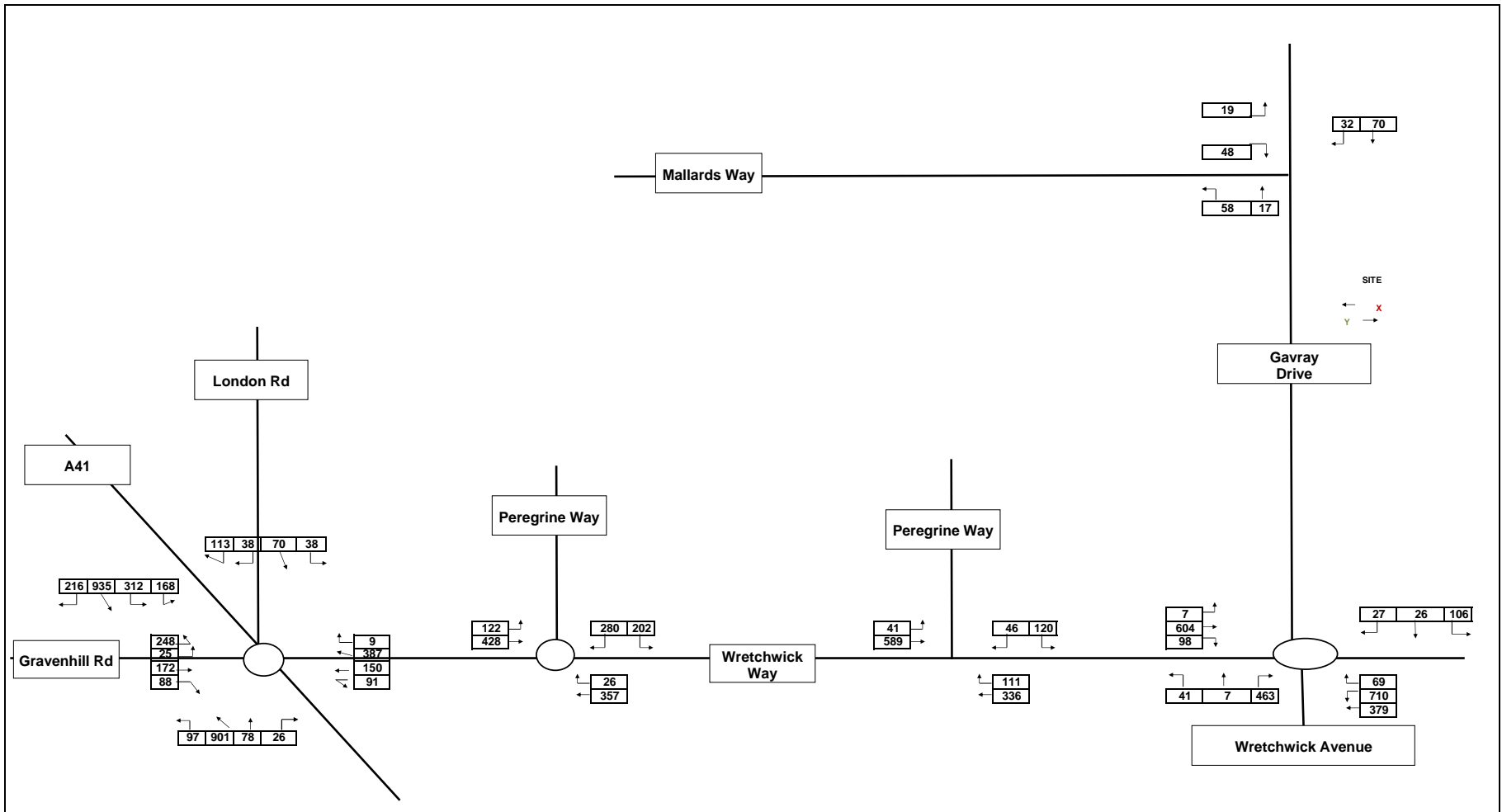
Client:
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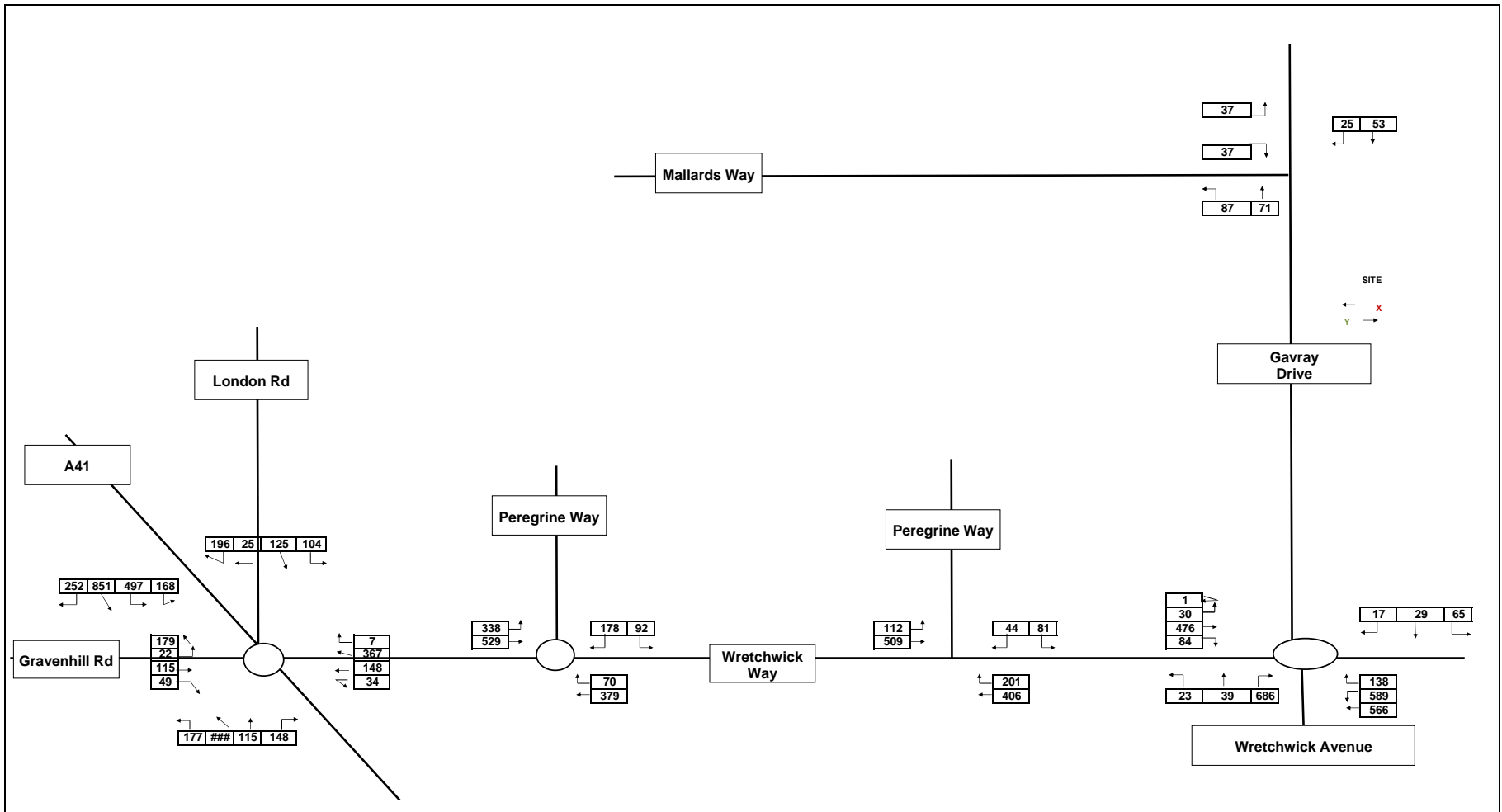
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Drawing Title:	WITH 300 UNITS 2026 FLOWS - AM

Drawing No:	FIGURE 5.11
Client:	GALLAGHER ESTATES

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Date:	22/01/2018

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Job Title:
GAVRAY DRIVE, BICESTER

Drawing Title:
WITH 300 UNITS 2026 FLOWS - PM

Drawing No:
FIGURE 5.12

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APPENDIX A – SCOPING CORRESPONDENCE

Jenny Baker

From: Jenny Baker
Sent: 22 September 2017 17:06
To: 'White, Joy - E&E'
Subject: Land North of Gavray Drive, Bicester
Attachments: OCC - Gavray Drive, Bicester - Scoping for TA.DOC; Site Access.pdf; 14-033 Figure 1-1 - Site Location Plan.pdf; 14-033 Figure 6-1 - Walking Isochrones.pdf; Bicester Junction 2 - Accs Plot.pdf; Bicester Junction 3 - Accs Plot.pdf; Bicester Junction 4 - Accs Plot.pdf; Bicester Junction 5 - Accs Plot.pdf

Dear Joy

Following our telephone conversation last week, my client has decided to appeal the refusal of planning consent on the above site. As discussed, we are keen to update the traffic analysis / ES work on transport to ensure that there is no scope for criticism regarding the impact of the proposals on transport in the area. As requested, I attach a scoping form and background information on the scheme as submitted in order to enable us to open discussions on access to the required SATURN modelling data. I am away on annual leave next week, but it would be good to have a meeting after I have returned to move things forward. If you could let me know your availability for week beginning 2nd October (or the following week) that would be very helpful.

Kind regards

Jenny Baker

Director



Markides Associates Ltd.
9th Floor, The Tower Building, York Road, London SE1 7NX

Tel: 020 7442 2225 Mobile: 07961 386424

Registered in England and Wales No. 10394301

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Scoping for Transport Assessments Form

Please e-mail the completed form to

transport.development.control@oxfordshire.gov.uk



**OXFORDSHIRE
COUNTY COUNCIL**

www.oxfordshire.gov.uk

Planning Application No. 15/00837/OUT

Contact Information

Developer		Consultant	
Company:	Gallagher Estates Limited	Company:	Markides Associates Ltd.
Address:	Gallagher Business Park Gallagher Way Warwick CV34 6AF	Address:	9 th Floor The Tower Building York Road London SE1 7NX
Contact person:		Contact person:	Jenny Baker
Tel:		Tel:	020 7442 2225
E-mail:		E-mail:	jenny@markidesassociates.co.uk

Development Details

Brief Description of the development	Outline planning application relating to a proposed residential development (180 dwellings) including affordable housing and public open space.
Description of the location (Please attach a location map in .pdf format when submitting this form)	Land to the east of central Bicester bounded by Gavray Drive to the south, the Oxford to Bletchley rail line to the west, the Birmingham to Marylebone rail line (Chiltern line) to the north and the Langford Brook watercourse to the east. Please see attached map.
Postcode	
Number/Street Name/Road	Gavray Road
Town	Bicester
Size (GFA/no of units)	Up to 180 Units
Planned date of opening	Estimated to be 2020

Consultant (name, address and contact details)	As Above									
Applicant (name, address and contact details)	As Above									
Site/ Development name and address)	Land at Gavray Drive West, Bicester									
Description of existing use of land <ul style="list-style-type: none"> - Constraints of existing highway network - Planning History - Extant uses 	The site is currently agricultural land. Following a public inquiry outline planning consent was granted in July 2006 (Ref 04/02797/F) for development of the wider site comprising a development of up to 500 new dwellings and a primary school. The consented scheme was not implemented and an application (Ref 10/01667/OUT) was approved in February 2012. Following a judicial review this approval was quashed in January 2013, although this was not related to transport impact.									
If some or all existing land uses are being relocated then where to?	N/A									
Approximate traffic volume level on adjacent road network? (peak hourly two way flow, average 12 hour two way flow)	<p>2014 flows (vehicles) on Gavray Drive in vicinity of proposed site access</p> <p>AM Peak (0800-0900) – 127 (81 e/b + 46 w/b)</p> <p>PM Peak (1700-1800) – 126 (46 e/b + 80 w/b)</p> <p>2014 flows (vehicles) on Wretchwick Way south of the site</p> <p>AM Peak (0800-0900) – 1065 (452 n/b + 613 s/b)</p> <p>PM Peak (1700-1800) – 1128 (618 n/b + 510 s/b)</p>									
Distribution /Assignment method to be used? How will this be done. i.e Gravity model, or based on existing turning movements	Based on 2011 Census Data (Travel to Work Data) (Middle Super Output Area Cherwell 015)									
How will potential traffic generation from the site be established? <ul style="list-style-type: none"> - TRICS - Special surveys? 	TRICS – Houses Privately Owned and Affordable/Local Authority Houses 85 th percentile rates									
Estimated Modal Splits: Initial estimate of target Modal Splits:	<p>The initial modal splits have been identified using the TTWD from the 2011 Census data and are displayed below.</p> <table border="1"> <thead> <tr> <th>Mode</th> <th>Percentage Use</th> </tr> </thead> <tbody> <tr> <td>Underground, Metro, Light Rail, Tram</td> <td>0.06%</td> </tr> <tr> <td>Train</td> <td>3.80%</td> </tr> <tr> <td>Bus, Minibus or Coach</td> <td>2.64%</td> </tr> </tbody> </table>		Mode	Percentage Use	Underground, Metro, Light Rail, Tram	0.06%	Train	3.80%	Bus, Minibus or Coach	2.64%
Mode	Percentage Use									
Underground, Metro, Light Rail, Tram	0.06%									
Train	3.80%									
Bus, Minibus or Coach	2.64%									

	Taxi	0.13%
	Motorcycle, Scooter or Moped	0.72%
	Driving a Car or Van	73.31%
	Passenger in a Car or Van	4.78%
	Bicycle	4.15%
	On Foot	10.12%
	Other	0.28%
Period of assessment? (peak periods of development and/or network)	2014 – 2020 AM (0800-0900) and PM (1700-1800) peak periods.	
Locations of new/modified accesses of development onto existing road network? (supply plan of development area, road network and access locations)	Existing field access on Gavray Drive.	
Describe committed development to be taken into account:	<p>North West Bicester (Bicester 1) 10/01780/HYBRID/14/01384/OUT Graven Hill (Bicester 2) 11/01494/OUT South West Bicester Phase 1 06/00967/OUT South West Bicester Phase 2 (Bicester 3) 13/00847/OUT Bicester Business Park/Tesco Relocation 12/01193/F Bicester Village Phase 4 12/01209/F Talisman Road 09/01952/OUT 13/01226/REM Adjusted TEMPRO growth also applied.</p>	
Area of impact (based on proposed development levels, existing traffic levels and existing congestion) (supply plan of development area, road network and access locations)	<p>Area of impact is identified as the following junctions:</p> <ul style="list-style-type: none"> • Gavray Drive/A4421 Wretchwick Way Roundabout • Peregrine Way/A4421 Wretchwick Way Priority Junction • Peregrine Way/A4421 Wretchwick Way/A4421 Neunkirchen Way Roundabout • A41/London Road/A4421 Seelscheid Way Roundabout 	
When will site become fully operational?	Estimated at 2020	
School site requirements. Is a primary or secondary school site proposed. If so how will the parent drop off/pick up arrangements be considered? Provision for coach laybys required?	No	
Will the development be split into phases? If so supply plan of phases and timescales.	No	
Will construction traffic be significant? If so how is this dealt with and will it need specific haul routes?	It is not expected that construction traffic will be	

	significant. All traffic will arrive to the site from the Oxford Road A4421 Wretchwick Way via the primary route network.
<p>What are the assessment years?</p> <p>Existing</p> <p>Year of opening</p> <p>Design Year</p> <p>Any other sensitivity tests required eg phasing</p>	<p>Existing – 2014</p> <p>Year of opening is 2020, but assessment year to be agreed depending upon availability of strategic model data.</p>
Car-parking levels for each land use (on and off street)?	Car Parking is a matter for the reserved matters application, but the intention is to provide a level in accordance with the adopted parking guidance.
Provide plan of real travel 5km isochrones (cycling)	All of Bicester is within 5km of the site.
Provide plan of real travel 2km isochrones (walking)	Plan attached showing 1km, 1.5km and 2km distances.
Provide plan of existing bus stops and locations of transport interchanges in area	Gavray Drive is part of an existing hail and ride bus corridor for existing Bicester Circular bus services 22 and 23. Service S5 operates via the residential area south of the site. Additional bus stops in Bicester Town Centre provide additional services. There are two train stations in Bicester – Bicester North is approximately 2,000m walk from the centre of the site, Bicester Town is approximately 1,150m walk from the centre of the site.
<p>Road Safety- Accident records</p> <ul style="list-style-type: none"> - Examination of historical data normally 3/5 years - Safety audit needed for changes to highway layout? (supply plan with recorded accident injury data) 	<p>Accident analysis included for the period 01/01/2011 to 31/03/2014 covering:</p> <ul style="list-style-type: none"> • Gavray Drive/A4421 Wretchwick Way roundabout • Peregrine Way/Wretchwick Way priority junction • Peregrine Way/Wretchwick Way/Neunkirchen Way roundabout • A41/London Road/A4421 Seelscheid Way/Gravenhill Road roundabout <p>Plan and accident data attached. Out of 18 accidents, 15 are slight, 2 are serious, with 1 fatal accident.</p>
General description of how facilities for people with mobility problems will be tackled:	This is more a matter for the reserved matters application, but all internal footways will be 2m, with appropriate crossings including tactile paving

	<p>etc should this be appropriate. Any junction improvements will include facilities for the mobility impaired in accordance with current guidance.</p>
<p>Policy issues</p> <ul style="list-style-type: none"> - Is proposal in line with current national policy? - Is development proposal in line with regional and local plan policies? - Is the development included in the current development plan? 	<p>The site is considered to be in line with current national policy.</p> <p>The site is allocated as a strategic housing site, identified as Policy Bicester 13 (Gavray Drive) within the adopted Cherwell Local Plan 2011-2031.</p>
<p>Any other relevant information:</p>	<p>It is understood that there is an up-to-date SATURN model of Bicester. Initial discussions with OCC have indicated that they would like this to be used as the basis for future year traffic flows, but that no additional model runs are required incorporating the development proposals. Development traffic will be assigned using a spreadsheet based approach reliant on Census data and then added onto the SATURN base flows for with development testing.</p>

Thank You

Please e-mail the completed form and site location map to
transport.development.control@oxfordshire.gov.uk



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Job Title
GARVAY DRIVE , BICESTER

Drawing Title
SITE LOCATION PLAN

Client
**GALLAGHER
ESTATES**

Rev	Amendments	Drn	Chk	App	Date
Scale	NTS	Date	OCT 13	Designed	DP
Drawn	DP	Checked	AS	Approved	JB
Job No	14-033	Figure No	FIGURE 1-1	Rev	