#### **APPENDIX A: INDICATIVE MASTERPLAN**



Illustrative Master Plan

Transport Assessment March 2015

# APPENDIX B: CDC PREVIOUS SCOPING REPORT (REFERENCE RH/14/00001/SCOP)

## Public Protection & Development Management

Andy Preston - Head of Public Protection & Development Management



# DISTRICT COUNCIL NORTH OXFORDSHIRE

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4 April 2014

Dear Sır

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (ENGLAND AND WALES) REGULATIONS 2011

**Request for a Scoping Opinion** 

Application Number: 14/00001/SCOP

Applicant's Name: David Lock Associates

Proposal Residential development (including affordable housing) incorporating

a local wildlife site together with land reserved for a primary school, community facilities, public open space, localised land remodelling

and structure planting

Location: Land between Birmingham London Rail Line and

Gavray Drive, Bicester

Parish(es): Bicester

Further to your submission, including the Environmental Impact Assessment Scoping Report dated February 2014, received by this department on 25<sup>th</sup> February 2014, I write to advise that I have consulted relevant colleagues both in Cherwell District Council and Oxfordshire County Council, together with other statutory authorities and consultation bodies. Their responses are set out below but can be found in full detail on public access available through the Council's website. If at any point following the issue of this letter that some late representations are received, the Council will endeavour to send them onto you with our opinion but you may wish to continue to monitor the public access information in any event. These responses below constitute the Council's opinion unless otherwise indicated.

The request for a scoping Opinion relates to a proposed planning application for residential development on approximately 24.5 hectares of undeveloped land between Birmingham London Rail Line and Gavray Drive situated to the east of Bicester town centre within the urban area ring

road from where access is obtained. Outline planning permission was granted for, inter alia, residential development under application reference 04/02797/OUT. The extension of time application 10/01667/OUT decision was quashed by the High Court and remains with this Council for redetermination. To achieve this, further information has already been requested under Regulation 22 and the scoping opinion (13/00001/SCOP) which was issued on 26<sup>th</sup> April 2013, sought to ensure that all issues significant to that case were addressed in the revised Environmental Impact Assessment (EIA)

This new scoping opinion is the result of further work undertaken with a view to your submitting an entirely separate outline application alongside a new ES. It has been established that as the proposal is a Schedule 2 development, as defined by the Regulations, it will be subject to an EIA as the development is likely to have significant effects on the environment by virtue of factors such as its nature, size or location. Contrary to the view you hold in your paragraph 1.12, having considered the selection criteria in schedule 3, this Council considers that environmental effects are likely hence the need for an EIA. I refer to the EIA Regulations and the supplementary Planning Practice Guidance which superseded Circular 2/99 on 6th March 2014.

#### **Consultations**

Bicester Town Council Objects to the residential development on this site. The land should be retained to provide a local wildlife site. The Town Council also opposes this proposal in line with the draft local plan that provides provision for a wildlife reserve only with no housing

Launton Parish Council No comment received but in referring to the previous correspondence no objections were raised

Aylesbury Vale District Council Again no comment was received but the previous consultation response was that AVDC supported the proposal in making provision for the rail chord to enable provision of the Evergreen 3 rail link Oxford-London and the operation of the East-West Rail through Bicester The Council does not anticipate in terms of EIA that other than possible increases in traffic on the A41 there would be wider environmental impacts from the proposed development. The Council may have further comments at the planning application stage.

Ward Members no comments received

#### **Internal Consultations**

#### Anti-social Behaviour Manager

It is some while since this site was considered and there will be one significant change in the vicinity of the site that will have some bearing on the noise climate of the area. The upgrading of the Bicester to Oxford Railway line and in particular the creation of the Bicester chord will change the amount of rail noise affecting the development site. This having been said the indicative plan seems to recognise this in the way the land has been allocated but I would expect this to be addressed in the design and access statement. Equally traffic flows on Charbridge Lane have increased with time and the effect of road traffic noise on the south east corner of the site will need to be assessed and if necessary mitigated.

From the scoping perspective the applications proposals for EIA seem to correctly address the Environmental Protection issues that would be of concern to the ASB Team

#### **Environmental Protection Officer**

No comments have been received relating to the contaminated land issue though you should please note that our records show that the site is potentially contaminated. It is recommended that this issue be addressed in the EIA and your specific request for air quality monitoring data (reference paragraph 5.9 of your EIA Scoping Report – Feb 2014) has been made and I will continue to chase a formal response. As soon as it is received I will forward this onto you

#### **Arboricultural Officer**

No formal comment has been received but it is noted from the previous response that provision should be made for 1 No arboricultural survey to be undertaken in accordance with BS5837 2012

and then included within the arboricultural section of the Environmental Statement. The arboricultural report must be up to date with the site inspected within the last twelve months. The Arboricultural Impact Assessment must include an assessment of the vegetative influences upon adjacent plots with particular acknowledgement towards issues such as natural light levels / shading, potential encroachment & maintenance issues, risk of direct and indirect damages or disturbances to adjacent dwellings and built features, surveillance lines and security issues.

**Biodiversity and Countryside Officer:** 

In accordance with the attached protocol, the applicant will need to provide a PROW Statement and plan as Bicester Footpath Nos 3, 4 and 16 cross the application site

**Ecology Officer** 

Generally I am in agreement with what they propose to include in their EIA, with a few exceptions It has been decided to exclude the overall invertebrate assemblage, overall bird assemblage and harvest mice from the EIA on the basis that they are not Valued Ecological Receptors (VERs) This has the potential to undermine the robustness of the EIA, therefore the CIEEM Guidelines on EIA should be fully adhered to

The invertebrates assemblage on site is considered to be of District Value by EDP (EDP scoping report para 3 134), but is actually nearer regional level value given the presence of several species of high conservation importance (several butterflies and a moth) and 24 Nationally Scarce species, as assessed by an invertebrate specialist (CPA report para 4 3 10). Attempting to separate out the three hairstreak butterflies as the only invertebrate VERs would give an inaccurate picture of the impacts of the proposed development.

Bird species recorded on site include UK BAP (Biodiversity Action Plan) Priority species and species of Conservation Concern. Both breeding birds and overwintering birds were considered by EDP to be of local to District Value. Considering that the overall bat assemblage on site is considered to be of no more than local value, but is still a VER, I find it strange that the overall bird assemblage, given the number of rarer species recorded, is not considered to be a VER.

The harvest mouse survey in 2013 found four harvest mouse nests. Given that much of the site (east of the brook) is suitable for them there is likely to be a not-insignificant population of this species present. The harvest mouse is a UK BAP Priority species and as such should also be considered to be a VER.

A consistent theme in previous applications has been a lack of clarity with regards to ecological impacts (individual and cumulative), mitigation and enhancement. The new EIA report should detail the following for each VER

- Construction impacts significance without mitigation, mitigation measures, residual significance
- Operational impacts significance without mitigation, mitigation and enhancement measures, residual significance

The EIA needs to demonstrate how the ecological mitigation and enhancement measures ensure that the development is compliant with relevant species legislation as well as National and Local planning policy

Landscape Architect:

Consideration has been given to David Lock Associates Scoping Report, in particular the chapter Landscape Visual Amenity (page 24 and 25) and I comment as follows

With regard to paragraph 5 43, the LVIA should be implemented under the current *Guidelines for Landscape and Visual Impact Assessment Third Edition 2013*/ Landscape Institute and the Institute of Environmental Management and Assessment, and the proposed methodology to be agreed with CDC prior to the assessment

With regard to paragraph 5 44, bullet point 4. The nature of the possible landscape and visual effects that are likely and the magnitude of significance of these effects.

Para 5 45 (i) should include within the baseline assessment the main receptors i.e. the relevant parts of the receiving landscape, and the nature of people that are likely to be affected by the change (ii) Add consider the requirements in respect of the likely significant, cumulative landscape and visual effects of the development

The likely landscape and visual effects of the construction process should also be included, especially when considering the existing residencies of Gavray Drive Construction exclusion zones to sensitive habitat and root protection areas to existing trees, hedgerows, scrub, ponds, ditches, and the watercourse, are a major consideration, given the landscape character with the potential mitigation of the vegetation structure on the development

Also what are the likely landscape and visual effects resulting from 'environmental improvements' such as hedge laying (opening up views of the development), attentuation basins and SUDs, etc?

The scoping requirements are generally acceptable if the above criteria are included

#### **Oxfordshire County Council**

The consultation response from the County Council received on 25<sup>th</sup> March includes the key service areas. Some of the responses received go beyond what would be required at this stage with regard to informing the ES because the role of the ES is to simply identify the significant impacts of the proposed development but nevertheless I report these officer comments as follows

Highways. Key issues: □ Highway Safety □ Accessibility □ Traffic Impact
Legal Agreement required to secure:  ☐ Section 106 Town & Country planning Act ☐ Section 38 Highways Act 1980 ☐ Section 278 Highways Act 1980
Submission Requirements  Detailed Plans of Access and Layout Transport Assessment Travel Plan

#### **Detailed Comments:**

Sustainability is at the core of the National Planning Policy Framework and must be the focus of a comprehensive Transport Assessment (TA) that will be required in support of any submission. The TA will need to demonstrate that the site and local highway network, with mitigation where necessary, would be able to accommodate associated trips in a safe manner, would provide access to employment, education, recreation and public transport hubs whilst encouraging the use of sustainable modes of transport, would not have any significant adverse upon highway capacity, queuing, delay or air quality, and would not conflict with the Draft Cherwell Local Plan, Oxfordshire Local Transport Plan 3 and emerging documents Bicester Master Plan and Bicester Movement Study. The TA should be supported by a Travel Plan and appropriate plans of access, layout and any proposed off-site works. It is expected that matters relating to highway drainage be incorporated in the principal drainage strategy for the site.

# On-site - Layout and Access Matters for consideration Development layout to accord with MfS (and to be constructed to OCC specifications), Car parking standards to OCC/CDC adopted standards Cycle parking standards to OCC standards HGV, Bus and car parking tracking plans

Access is noted as being taken via the existing spurs from Gavray Drive. The geometry of these access points requires consideration as they are relatively wide with large sweeping radii and allow turning movements to be made at relatively high speed. Appropriate provision must be made for pedestrians and cyclist to access the site and negotiate the proposed junctions safely.

The detailed layout of the development should be designed in accordance with the guidance of Manual for Streets (MfS), prioritising pedestrians, cyclists and public transport users respectively before considering the private car. A design speed of 20mph should be incorporated throughout Appropriate provision must be made for parking, not only in terms of number but in terms of size, convenience and location. A mix of allocated and unallocated parking would provide greater efficiency, visitor parking must be provided and on-street parking may be incorporated. Parking areas as streets and footpaths should be overlooked and appropriately lit to ensure security and encourage use. OCC Parking Standards have been adopted by CDC and provide an appropriate bench mark.

Provision must be made for waste collection with appropriate turning heads for HGVs/refuse vehicles. Areas for adoption must include a service strip of 600mm, and doors, windows, etc must not open over any area to be adopted as public highway. SUDS must be incorporated within development and associated highway.

Please note access works are likely to be subject to a Section 278 agreement. Areas for adoption would be subject to a Section 38 agreement. The Advance Payments Code(APC), Sections 219 - 225 of the Highways Act, is in force in the county to ensure financial security from the developer to off-set the frontage owners' liability for private street works, typically in the form of a cash deposit or bond. Should a developer wish for a street or estate to remain private then to secure exemption from the APC procedure a 'Private Road Agreement' must be entered into with the County Council to protect the interests of prospective frontage owners.

#### Off-Site - Transport Assessment and Mitigation

Matters for consideration -

- ☐ Accessibility of Essential Services by Walking, Cycling and Public Transport
- ☐ Trip Generation and Distribution
- □ Junction Modelling
- □ Accident History
- □ Mitigation/Improvement

The development must contribute to encouraging sustainable transport choices in accordance with Local and National Planning Policies and Strategies. With regard to the TA, Oxfordshire County Council Officers would welcome the opportunity for pre-application discussions to ensure all relevant matters are considered appropriately.

The TA is required to appraise the accessibility of essential services, shops and public transport links. Local destinations will need to be identified and where appropriate pedestrian and cycle audits should be provided and mitigation or improvements proposed. Gavray Drive benefits from separate pedestrian and cycle provision, however, its carriageway is straight and relatively wide resulting in high vehicular speeds. The proposal should address this point and will need to consider pedestrians and cyclists crossing the carriageway. In a similar manner public transport links and services must be identified and appraised.

The TA is required to assess potential trip generation and distribution of the developed site and to provide models of local junctions including development traffic and existing traffic flows adjusted for traffic growth/other development. Junctions to be modelled are as the submitted document and as follows.

- ☐ Gavray Drive/Mallards Way
- □ Gavray Drive/Wretchwick Way
- ☐ Peregrine Way/Wretchwick Way
- H Peregrine Way/Wretchwick Way/Neunkirchen Way
- ☐ A41/London Road/Selschield Way

Beyond these junctions the TA should justify why further modelling is not required i.e. demonstrate traffic dissipation to insignificant levels

In the interests of providing a robust assessment the Local Highway Authority considers 85%ile trip rates should be used, taken from interrogation of the TRICS database, giving due consideration to the type, scale and location of the development. Pertinent times for modelling are the am peak hour (0800-0900) and the pm peak hour (1700-1800). For the purposes of this proposal PICADY and ARCADY software would provide appropriate models.

Mitigation works should be identified, where necessary, and must not conflict with the emerging Bicester Plan and Bicester Movement Study NB This Council's Infrastructure Development Team may require further modelling work to be undertaken

Accident history for the previous five years should be reported with any clusters identified and accounted for

Mitigation works would be subject to appropriate safety audits and legal agreements under S106 Town & Country Planning Act and S278 Highways Act

<u> Fravel Plan</u>
Matters for consideration -
☐ Targets for Modal Shift
☐ Travel Plan Coordinator
☐ Travel Information Packs

A Travel Plan will be required to promote the use of sustainable transport modes and reduce single occupancy car trips. The plan should set out reasonable targets and include inter alia the appointment of a Travel Plan Coordinator and travel information packs for new residents.

#### Archaeology:

A mitigation scheme for this proposal site has already been agreed, which was based on a programme of archaeological investigations as part of an EIA for the earlier application. This scoping document states that the existing historic environment information for the site will be updated and reassessed and included in this new EIA in line with national guidance. The county council is satisfied with this approach.

#### **Ecology:**

It is confirmed that this is a very sensitive site in terms of ecology - European Protected Species and a Local Wildlife Site Refer to comments from CDC's ecology officer

#### **Education:**

For this level of housing we would not expect a new school, but would instead be looking to increase capacity in the surrounding area through school expansion. It is not known if we have any indication of housing mix etc, but generally 350 homes would be expected to generate close to 100 primary pupils, i.e. a little under a 0.5 form entry school, so expansion of an existing school of 0.5fe (or building an already planned new school 0.5fe larger than initially intended) would be a proportionate response. In this instance, we would expect expansion of an existing school to be the solution, and we would be keen to see attention in this application given to pedestrian accessibility to the nearest existing schools, Longfields Primary School and Langford Village Primary School

#### External

#### **Environment Agency:**

#### Flood Risk

The Langford Brook, Main River, flows through the 20 79 hectare site, a significant proportion of which lies within Flood Zone (FZ) 2 and 3. There are therefore significant fluvial flood risk issues which will need to be addressed in the Environmental Statement. We welcome the commitment to

do this in paragraph 5 34 of the Environmental Impact Assessment Scoping report dated February 2014

Sequential Test

As this site is located in an area of high flood risk, the Sequential Test must be applied by CDC to show whether there are any other reasonably available alternative sites at lower flood risk. We are aware that this site has been allocated in the Cherwell District Council Local Plan (2006-2031) which is currently being examined in public. As the Local Plan has not yet been adopted, the planning application will require a site specific Sequential Test.

**Exception Test** 

Should it be demonstrated to the satisfaction of the Local Authority, that the Sequential Test has been adequately passed, the Exception Test should be applied for this type of development in accordance with paragraph 102 of the National Planning Policy Framework (NPPF). A sequential approach should be taken to position development in areas of lowest flood risk (i.e., Flood Zone 1). Table 3 of the Planning Policy Guidance (PPG) sets out which type of development is acceptable in which flood zone (Paragraph 067 Reference ID 7-067-20140306). Part 2 of the Exception Test requires the applicant to demonstrate in a site specific flood risk assessment that the development will be safe, without increasing flood risk elsewhere, and, where possible will reduce flood risk overall. We are pleased to see that this has been proposed in paragraph 5 36 of the EIA Scoping report.

We have the following comments in relation to the numbered paragraphs in the submitted EIA scoping report

Paragraph 5 35 We recommend that the applicant consults with the Lead Local Flood Authority (Oxfordshire County Council) at an early stage, regarding flood risk issues associated with surface and groundwater locally

Paragraph 5 36 Although the site has been the subject of a previous application c2004 to 2006, much has changed since then including legislation and flood modelling. The Environmental Impact Assessment will therefore need to include an up to date Flood Risk Assessment with the best available evidence to support it.

The applicant should ensure the Flood Risk Assessment addresses flood risk from all sources and you should ensure you are using the latest flooding information. The applicant should also ensure the Flood Risk Assessment considers the impacts of the proposed development on flood risk at the site, as well as upstream and downstream of the site.

The applicant should adhere to the recommendations and guidance of the Cherwell and West Oxfordshire Level 1 Strategic Flood Risk Assessment (2009), along with relevant policies in Cherwell District Council's Development Plan and the NPPF and Planning Policy Guidance (PPG) This is to ensure you have a robust Flood Risk Assessment (FRA) and Drainage Strategy The PPG offers advice including a checklist for FRAs (Paragraph 068 Reference ID 7-068-20140306) The applicant should ensure there is separate access to both parts of the site which are separated by the Langford Brook, ensuring there is safe access and egress avoiding areas of flood risk

Paragraph 5 38 We are pleased that the applicant proposes to consider surface water management features within the site. Our preferred option would be infiltration or SUDS which deliver multiple benefits such as ponds and swales. In designing these we recommend reference is made to Section 5 of the PPS25 Practice Guide and CIRIA publications C624 and C697.

The applicant should have a good understanding of the existing drainage which will inform a robust drainage system. This should include an assessment of how the site currently drains and design the drainage system to mimic the current arrangements. The applicant should limit run off to existing rates and consider any opportunity to reduce flood risk through development. This could involve reducing surface water runoff rates and volumes below the existing calculated greenfield rates.

In terms of final point of discharge, our preference would be for infiltration or discharge to a watercourse as opposed to discharge to a public sewer

We recommend the applicant consults the Lead Local Flood Authority (Oxfordshire County Council) and Water Company (Thames Water) at an early stage regarding design, adoption, maintenance and operation of the storm water management system. We also recommend you consult Thames Water at an early stage regarding design, adoption and capacity of the network. The applicant will be required to submit an up to date Surface Water Drainage Strategy which we will need to review.

Paragraph 5 39 Concerns of impacts to water quality in the Langford Brook and Sites of Special Scientific Interest (SSSIs) downstream of the site should be investigated. We advise that it is likely that adverse impacts could be mitigated through the use of Sustainable Drainage Systems

#### Environment Agency data

For Environment Agency data about the most up to flooding information for the Langford Brook, please contact our Customers and Engagement Team at WTenquiries@environment-agency gov uk

This information is provided in the form of flood map products and the product supplied depends on the type and size of the development being undertaken. To determine what product would be most appropriate for this type of development please visit our website at <a href="https://www.environmentagency.gov.uk/research/planning/93498">www.environmentagency.gov.uk/research/planning/93498</a> aspx
Please be aware that there may be a charge for this information

With regard to matters of ecology, the Langford Brook, Main River, flows directly through the site and we consider that the proposed development could potentially have significant effects on the ecology both on and off site

Paragraph 5 26 We are pleased to see that an Ecological Impact Assessment will be undertaken. The results of this should be used to ensure that mitigation or compensation measures are proposed for any wildlife habitats which have been identified as important.

Paragraph 5 30 As mentioned, we are concerned that the development could have a detrimental impact on the two SSSIs downstream (Wendlebury Meads and Mansmoor Closes SSSI) and therefore this should be examined in the Environmental Statement. We note that Natural England have been consulted and commented with regard to these SSSIs, and we will take a joined up approach to ensure their protection.

It is a requirement for all development by a watercourse to consider the ecological and physical status and potential of that watercourse according to the Water Framework Directive (WFD). The Langford Brook is currently at 'good' ecological status and the proposals should ensure no degradation to this. Part of this can be achieved by ensuring an 8 metre buffer zone is retained on both sides of the watercourse. This should be managed and maintained.

With regard to foul drainage, we are pleased to see that section 5.40 in the EIA scoping report refers to the need to investigate the foul drainage infrastructure capacity to ensure this is sufficient for any increasing flows from the proposed development. This should consider both network and treatment capacity in line with planned growth in Bicester, and whether phasing of development is needed, taking account of water infrastructure availability.

Further advice to the application with regard to water supply. Section 5.62 refers to the need to ensure there would be sufficient water provision for any proposed development. We recommend that proposals consider integrating water efficiency measures into the design of new buildings such as through low flow toilets/tap or rainwater harvesting technologies which are more effective on a community-wide basis.

#### **Thames Water:**

The provision of water and waste water infrastructure is essential to any development

While Thames Water accepts that paragraph 5 38 refers to a surface water drainage strategy, paragraph 5 40 refers to a foul water drainage strategy and paragraph 5 26 refers to the capacity of the water mains, we would make the following comments

It is unclear at this stage what the net increase in demand on our infrastructure will be as a result of the proposed development. Thames Water is concerned that the network in this area may be unable to support the demand anticipated from this development. The developer needs to consider the net increase in water and waste water demand to serve the development and also any impact the development may have off site further down the network, if no/low water pressure and internal/external sewage flooding of property is to be avoided.

We would therefore recommend that any EIA report should consider the following

- The developments demand for water supply and network infrastructure both on and off site and can it be met
- The developments demand for wastewater network infrastructure both on and off site and can it be met
- The surface water drainage requirements and flood risk of the development both on and off site and can it be met

Thames Water also notes (as referred to at paragraph 5 62) there is a Thames Water water main crossing the development site which may need to be diverted at the Developer's cost, or necessitate amendments to the proposed development design so that the aforementioned main can be retained. Unrestricted access must be available at all times for maintenance and repair

Should the developer wish to obtain information on the above issues they should contact our Developer Services department on 0845 850 2777

#### Natural England:

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law and guidance has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Olivia Euesden on 0300 060 4924. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk

As you may be aware, Natural England has introduced an improved service to provide discretionary advice related to planning proposals, supported by the introduction of charges – our Discretionary Advice Service (DAS) If the developer requires substantive pre-application advice in addition to that provided below, Natural England advises that the applicant/developer consults Natural England directly, so that they have the opportunity to express an interest in using DAS

The first step is for the developer to fill out a simple form, so we can register their interest, and make sure they have the nght adviser for their case Please visit our website (http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/das/default.aspx)

#### Berkshire Buckinghamshire Oxfordshire Wildlife Trust (BBOWT):

As you are aware, we have been involved as consultees for this site for many years and would hope that this opportunity is taken to overcome some of the long running concerns that we and others have had in terms of the approach to ecology on this sensitive site

We welcome the additional surveys which have been carried out in 2013

We are extremely concerned about the proposal to "scope out" the following by not considering them as "Valued Ecological Receptors" (see paragraph 5.32)

"the overall invertebrate assemblage"

"the overall bird assemblage"

In addition there are several other matters which will need addressing in the EIA as described below

#### Overall invertebrate assemblage

Paragraph 5 32 includes "the overall invertebrate assemblage" as "not currently considered to be a VER (Valued Ecological Receptor)". This suggestion is in sharp contrast to the conclusion drawn by the invertebrate report by Colin Plan Associates, extracts of which are as follows.

"that there is a high incumbent invertebrate ecology interest at Gavray Drive."

"this is expressed in the overall biodiversity and in results of assemblage-type analysis as well as in the presence of some key species of high individual nature conservation importance,"

"ISIS analysis shows that there is no significant change since 2005 and this in turn suggests a stable and established community structure,

"The interest is evenly spread across the site so that no particular area can be determined as making a greater contribution than any other,"

"Loss of or damage to a part of the site will, therefore, likely prove to have a negative impact on invertebrate ecology;"

"The high value of the invertebrate interest encountered together with the reliance of individual species upon more than one physical area and in particular the presence of a continuous network of established and well-structured hedgerows suggests that the complete loss of the site, or the loss of a major part of the site, would have a negative impact at the highest level. Given the presence of certain species of raised individual value this negative impact would apply at regional level or higher."

The proposal of separating out black, brown and white-letter hairstreak butterflies as VERs, but not considering the overall invertebrate assemblage as a VER is not consistent with the above statement of "this is expressed in the overall biodiversity and in results of assemblage-type analysis as well as in the presence of some key species of high individual nature conservation importance"

The assessment of district value for the site in paragraph 3 134 of the Ecology Scoping Report is not consistent with the statement by Colin Plant Associates that "the complete loss of the site, or the loss of a major part of the site, would have a negative impact at the highest level. Given the presence of certain species of raised individual value this negative impact would apply at regional level or higher." Even if the value of the assemblage is no higher than District level then this should still prompt the overall invertebrate assemblage to be considered a VER. In conclusion the overall invertebrate assemblage should be assessed as a Valued Ecological Receptor in the EIA.

#### Overall bird assemblage

Paragraph 5 32 includes "the overall bird assemblage" as "not currently considered to be a VER (Valued Ecological Receptor)" However the evaluation of the bird surveys considered the site to be of "no more than district level" value for breeding birds and of "local to district to value for wintering birds". As this is stating that the site is therefore a significant site for birds in the entire District then this value should be assessed in the EIA. There will clearly be impact on a number of priority species, and birds of conservation concern. Indeed the LWS citation quoted in the Ecology.

Scoping Report specifically mentions that the site is notable for both priority bird species and Birds of Conservation Concern (see paragraph 3 6) In conclusion the overall bird assemblage should be assessed as a Valued Ecological Receptor in the EIA

Botanical survey

We welcome the submission of a detailed botanical survey with the Scoping Report. This notes that for a variety of reasons Field 2 was not able to be assessed in sufficient detail to be able to attribute a NVC community. Nevertheless, as this field still has unimproved grassland then its quality and the impact of development must be evaluated in the context of the EIA.

Harvest Mouse

We welcome the submission of a survey for harvest mouse. There is clear evidence of a population being present on site. Harvest mouse is a priority species and of limited distribution in Oxfordshire. Therefore the impact on this population should be evaluated in the EIA by including harvest mouse as a Valued Ecological Receptor.

Hydrological assessment

We welcome the note in paragraph 5 27 that the effects of localised raising of ground levels will be considered, any effect on the hydrology of the retained LWS needs to be taken into account in this assessment

Net gain in biodiversity

The EIA should demonstrate how the development will result in a net gain in biodiversity (in line with paragraph 109 of the NPPF) This is particularly relevant given the location of the site within the Ray Conservation Target Area, and Policy ESD 11 in the Submission Cherwell Local Plan Proposed mitigation and enhancement measures for all identified receptors need to be included within the EIA

**Network Rail:** 

Network Rail has have reviewed the proposed location for the development. The obvious crossing for the potential increase of usage would be Tubbs Lane footpath crossing which is located off Launton Road opposite Longfields, crossing the single line OXD (Oxford to Bletchley) line, eventually joining to the top of Gavray Drive. This crossing is already used heavily by pedestrians and cyclists as it links the Langford Village estate to the town side of Bicester. It currently has an extremely large amount of child users and mothers with pushchairs using it as on the Launton Road side of Tubbs crossing, there is a childrens play area and also a day nursery approximately 30 metres from the approach to the crossing

The East to West rail project phase one has now commenced and this crossing is now within the EWR blockade. Before the EWR projects re-open Tubbs crossing, there will be a bridge installed at this location eliminating the current crossing set up and extinguishing Tubbs as a registered level crossing. We believe the new bridge will be installed by the end of April 2014.

There is another footpath crossing within Bicester and this is Jarvis Lane which also crosses the single line OXD line. Jarvis Lane is also located off Launton Road but is slightly more out to the edge of Bicester and is mainly used by factory workers who cross from Launton Road over to the Charbridge way industrial estate to access their places of employment. This crossing will also have a bridge installed but this will not be in the EWR project phase one, this is being taken into account for the EWR project phase 2. This crossing is actually the boundary marker between project phase 1 and phase 2. Project 1 is between oxford, through London Road crossing, through Tubbs crossing and stopping at Jarvis Lane crossing. Phase 2 will then commence from Jarvis crossing and go through Bicester eastern perimeter crossing (aka Charbridge Lane crossing) and head towards the Claydons and Bletchley. We believe the works for phase 2 will commence towards the back end of 2015 which will include the bridging of Jarvis Lane and the road bridging of Bicester Eastern perimeter road (Charbridge Lane).

There will still be a period of time where the OXD line will be used with trains moving at 40mph across Jarvis Lane and Bicester EPR road crossing until phase 2 of EWR commences. These movements will be sporadic which is what the current recorded set up has been at these two crossings for several years now. Due to this, both of these crossings are classed as low risk and

will remain low risk until the bridges are installed. At no point will any of the crossings mentioned be open to the public following the increased tracking and line speed of 100 mph following final commissioning of the EWR project – they will by then have been replaced with footbridges.

London Road vehicle crossing will be staying and eventually being opened at two tracks and 100 mph speed increase. This does have some pedestrian use, due to the fact that as well as being predominantly used by vehicles to access Bicester town, there is also a footpath at the side of the carriageway. This crossing will be protected by barriers, flashing road traffic signals and audible alarms so mitigation is strong at this location but we do now have concerns over increased use at this location by pedestrians and this is something we will be taking forward to the projects with the intention of building a case to have a separate footbridge installed

#### Other

#### **CPRE**

The eastern three quarters of the site is in a Conservation Target Area and has been designated a County Wildlife Site. As such the whole of this part of the site is subject to policies ESD 10 and ESD 11 of your draft Local Plan to 2031, and consequently should be immune from development. We note that generally an attempt has been made to abide by this rule, but that some proposed development still appears in this eastern segment. This seems perverse given the clear indication from the recent surveys detailed in the Scoping Study that the entire eastern segment of the site site remains rich in biodiversity. Building on a corner of this area would defeat the whole purpose of conservation as laid out in the above policies, and CPRE would certainly be minded to object strongly to such a proposal should it go forward as a planning application.

#### **Upper Thames Branch of Butterfly Conservation:**

Butterfly Conservation view these proposals as a major improvement on previous proposals and feel they largely meet the outstanding requests made in our previous submissions

However, the long overdue invertebrate survey, in spite of being inadequate, has presented important new evidence which receives no evaluation in the Ecology Baseline Report. In Butterfly Conservation's opinion these inadequacies and omissions need addressing before Cherwell District Council accept this Scoping Application.

Below we make more detailed comments in support of the above statements

#### Development down-sizing

Sections 3 0, 3 1 & 3 2 and the Revised Masterplan in Gallagher Estates' Scoping Report detail how the development will be down-sized from previous proposals and not intrude into the designated Local Wildlife Site. As stated in our previous submissions we feel this down-sizing will enable the breeding colonies of the Brown Hairstreak butterfly (Section 41 Species of Principal Importance under the NERC Act), White-letter Hairstreak butterfly (also a NERC Section 41 species) and Black Hairstreak butterfly (nationally rare) to survive as long as future management of the Local Wildlife Site is adequately funded

We also welcome the intention detailed in the following section 3 3 to take a more considered view on the buffer zone afforded to retained trees and hedgerows. Our view is that hedgerows need a buffer zone each side of at least 3 metres and ideally 5 metres to allow proper maintenance and ensure they retain their ecological value.

Inadequacies of the Terrestrial Invertebrate Survey carried out by Colin Plant Associates (CPA) The Terrestrial Invertebrate Survey did not include overnight moth trapping. We feel this is a major and serious omission. There are over seventy Section 41 night flying moth species and we have to challenge the statement made in section 2.2.8 of the Survey Report (Appendix EDP4 of the Baseline Ecology Report) that none are likely to be present. There is extremely varied habitat within the site and the presence of a Section 41 night flying moth species cannot be ruled out without overnight moth-trapping.

Section 1 2 1 of the Terrestrial Invertebrate Survey Report shows the 2013 survey consisted of only six day visits two of which were affected by poor weather. We feel this was inadequate and it is notable that this survey did not pick up the known presence of the Brown Hairstreak, White-letter Hairstreak, Black Hairstreak or even the much more common Purple Hairstreak along with several other species of common butterfly which have all been recorded by Butterfly Conservation members. Thus we cannot agree with the second sentence of section 1 3 which states "Our overall 'tally' of species at Bicester is undoubtedly lower than we had hoped for at the start of the project Nevertheless, we are of the opinion that it is fully adequate for the purpose of performing an evaluation of current ecological value"

We were surprised to learn that an invertebrate survey was carried out in 2005 and can only wonder why the results have not been made available before. The results of the 2005 survey are in fact used to partially compensate for the inadequacies of the 2013 survey but the fact that they are eight years old makes this dubious practice. Also the dates the site were visited in 2005 are not given and there is no indication of the methodologies employed at that time, so we unable to assess how comprehensive it was

#### Forester Moth (Adiscita statices)

In spite of its inadequacies the 2013 Invertebrate Survey did record the day-flying Forester Moth which is a Section 41 Species of Principal Importance under the NERC Act. Incredibly the Ecology Baseline Report makes no reference to the proven presence of this species. Hence there has been no assessment of how the proposed development might affect the "the stable and established population" of this species.

The Terrestrial Invertebrate Survey Report rightly lists the larval foodplants of the Forester Moth as Common Sorrell (*Rumex acetosa*) and Sheep's Sorrell (*Rumex acetosella*) Reference to the Broadview Ecological Consultants (BEC) Botanical Survey report shows the latter to be absent from the site, this is to be expected owing to the lack of acid soils. So at Gavray Drive Meadows the Forester Moth is totally dependent on Common Sorrel which the BEC report shows is present but not uniformly across the site (see Table 1 in the BEC Report). In all but three fields it is either absent or only occasional. The three exceptions are fields 3, 8 & 9 which will all be subjected to full or partial development. In fact the down-sized development as shown on the Revised Masterplan will destroy about two-thirds of the breeding habitat of the Forester Moth almost certainly leading to its demise at the site.

Thus to protect the Forester moth colony the development will need further down-sizing or mitigation via habitat creation. A large area of amenity grassland is to be created in the western half of the development. If the grassland seeding contains a high concentration of Common Sorrel and subsequently receives sympathetic management, which may well conflict with its use as an amenity resource, this area should be capable of supporting the Forester Moth colony along with the retained parts of Fields 8 & 9. However, this habitat would have to be created a two seasons before the total destruction of field 3 and partial destruction of field 8 & 9. This would require the overall development to be double phased with the western half being phase 1 and the eastern half phase 2.

#### Nationally Scarce Invertebrate Species

The Terrestrial Invertebrate Survey also recorded 24 Nationally Scarce invertebrate species none of which are Lepidoptera. Again incredibly the Ecology Baseline Report makes no reference to them. As Butterfly Conservation's experience and expertise is focussed on Lepidoptera we do not feel qualified to comment. The advice of appropriate groups/organisations expert in these groups should be sought. Buglife could probably assist in this process.

#### Negative tone of the Ecology Baseline Report

The Ecology Baseline Report was prepared by Gallagher Estates ecological consultants namely, the Environmental Dimension Partnership (EDP) Above we have been critical of the major omissions in EDP's contribution by not commissioning overnight moth trapping as part of the Terrestrial Invertebrate Survey and then failing to consider the important species the survey did throw up. The tone of their evaluation of the state of the site is once again unfairly pessimistic by stressing the problems created by neglect of the site rather than highlighting how the Local Wildlife Site could be returned to the wildlife haven it once was by proper and adequately funded

management Even in the face of positive comments made by BEC, CPA and BC regarding respectively the site's botanical diversity, the value of the invertebrate assemblage and the importance of the butterflies they continue to downplay all these aspects. In view of their negative attitude to the site Butterfly Conservation can only express concern regarding previous proposals that they should act as the Ecological Clerk of Works during the construction phase.

#### Summary

Butterfly Conservation view these proposals as a major improvement on previous proposals and feel they largely meet the outstanding requests made in our previous submissions. However, we feel the following actions need to be put in place before the applicants can consider drawing up Scoping Proposals that Cherwell District Council can accept

- (a) The invertebrate survey should be extended into 2014 and include over-night moth trapping
- (b) Consideration should be given to how the Forester Moth colony can be safeguarded either by further down-sizing of the development east of the Langford Brook or by on site mitigation
- (c) Expert advice should be sought on the 24 Nationally Scarce Species thrown up by the Invertebrate survey to date and any more discovered during 2014

#### Bioscan (Dominic Woodfield):

The request is accompanied by both a revised masterplan (general parameters sketch), and the results of the ecology surveys carried out in response to Cherwell District Council's Regulation 22 request and Gallagher's subsequent scoping application 13/00001/SCOP, which I responded to as a consultee just over a year ago

The first thing to say is that we appear to have made a huge stride forward. The 'General Parameters' masterplan contained within the scoping report indicates a significantly reduced quantum of development east of the Langford Brook and no longer encroaching beyond the boundaries of the Local Wildlife Site, as designated. This is the first time since the 2004 application – ten years ago – that a meaningful concession has been made in masterplanning terms to the site's now acknowledged and undisputed sensitivities. The applicants are to be warmly applicated for this.

Secondly, it also appears as if the applicant's ecological consultants have at last responded positively, or have been instructed to respond positively, to the need for a thorough baseline to be assembled. The botanical survey in particular is of high quality, and in recognising that the grassland communities present are derived from those of high conservation value and are likely to be readily returned to them with the return of appropriate management, it represents a welcome departure from the much reduced quality and fixation on the effects of 'neglect' that has characterised previous submissions. It is however disappointing that it omits consideration of the remaining pockets of grassland within Field 2, as mapped on plan EDP1 submitted with the document, and which clearly have the same 'unimproved' origins as much of the grassland within the LWS, albeit badly affected by scrub invasion in recent years. This is an important point in assessing the merits of the latest masterplan.

Generally speaking, the invertebrate survey work is also much improved in terms of scope and effort, although the continued failure to conduct overnight moth-trapping surveys, despite these being specifically advised last year, on a site of such evident importance to Lepidoptera is not explained. I do think this should be remedied prior to determination as moths remain a significantly under-studied species on this site, and the discovery of the day-flying forester moth, also a priority species under section 41 of the NERC Act, clearly signposts that there could be substantial as yet undocumented interest associated with this group. On butterflies, as previously, I will defer to the national and local experts from Butterfly Conservation, but I would make the observation that a further section 41 species, grizzled skipper, is inexplicably omitted from the baseline despite having been recorded by a local party last year and I believe despite photographic confirmation having been sent to EDP by that individual

The surveys for amphibians, breeding and wintering birds and bats are subject to various omissions and/or limitations but on the whole these are minor and I am content that the work provides a reasonably representative baseline for these groups overall. I note also that the

suggested for surveys for harvest mouse have now confirmed the presence of this Priority/Section 41 species on the site

Overall, I consider that results of the various surveys now undertaken provide an ecological information baseline that is broadly sufficient for EIA purposes, with the exception of the continued omission of targeted survey work on moths. This needs to be remedied given this site's evident and increasing importance to Lepidoptera generally.

While we are in a much-improved position as regards the baseline ecological survey work, I must seriously question much of the evaluation of those survey results, as set out in EDP's scoping report and also the impact assessment methodology they propose, in particular at sections 5 30 to 5 33 ('Determination of Valued Ecological Receptors') There is firstly here the question of whether ecological receptors have been correctly valued. In that context, I am bound to draw attention here to the apparent divergence of opinion between a well-respected national specialist (Colin Plant Associates) and a non-specialist commissioning consultancy (EDP) over the evaluation of a diverse invertebrate assemblage that includes 24 Nationally Scarce species, even without taking into account the site's exceptional butterfly interest (something that cannot logically be disaggregated from 'invertebrate interest' in any event, as appears to be attempted). That invertebrate assemblage is collectively considered as of 'high value' and vulnerable to damage by Colin Plant Associates (para 4 3 10 appendix EDP4), whereas the commissioning consultant EDP offers a more modest assessment of 'District level of importance' (scoping report para 3 134). There is little doubt which of these two assessments has the better evidential basis.

Secondly, even if EDP's 'District level' assessment was defensible, the approach of 'scoping out' elements "not currently considered to be VER's" is inherently challengeable in EIA terms as it risks failing to alert decision makers to 'likely significant effects'. In this instance, the intention appears to be to scope out receptors valued at District level. This could mean that significant effects at the District level (which could well fall within the ambit of 'likely significant effects' in EIA terms), and which will be integral to the process of assessing local plan policy compliance in any event, will fail to be identified in the ES, and cannot then be taken into account by decision makers. This could undermine the validity and legal robustness of the EIA. I would strongly recommend that the approach advocated by the Chartered Institute of Ecology and Environmental Management (CIEEM) and as set out in their Guidelines for Ecological Impact Assessment is more fully and properly followed, as indeed it is stated will be the case elsewhere in the scoping report (e.g. para 4.8 and 5.27). This absolutely does not mean that every last receptor needs to be included in the assessment, but it does mean that receptors clearly identified as of conservation importance (e.g. nationally scarce species) should not be artificially set aside in the manner proposed.

Turning aside from ecology, you will recall that in my response to 13/00001/SCOP, I also offered comments on other EIA disciplines. The result of any further work on these disciplines is not included in the applicant's scoping report, although comments are provided on the approach that they intend to take to each. I comment on each of these as follows.

Air Quality - no comments to make

Arboriculture – I welcome the intention to map root protection zones for trees. I note that the stated intention is for RPZs for both trees and hedgerows to be respected in designing the development interface with retained hedgerow and tree features (see para 3.4 of the scoping report). In this context I would observe that the arboricultural survey needs also to map RPZs for hedgerows as well as trees.

Archaeology and Heritage – I previously commented that the Environmental Statement submitted in support of a previous industrial proposal classed the relict Mediaeval hedge and green lane pattern in the eastern part of the site (including one hedgerow assessed to be of Saxon age), together with the extent of intact ridge and furrow, to be a 'regionally significant' historic landscape. In this context I welcome the statements at 5 20 and 5 25 which appear to recognise the presence of historic landscape receptors and commit to their inclusion in the assessment process.

Hydrology and Drainage – I am concerned that the statement at paragraph 5 38 suggests that all surface water drainage will be directed to the public sewer network, after appropriate attenuation. This does not appear to make any provision for upholding existing groundwater infiltration rates, and thus raises the possibility that the hydrological regime underpinning the grassland habitats of conservation importance on the site could be subject to derogation. No mention is made of SUDS. The applicant previously commissioned a study from the Wetlands Advisory Service that

established a good baseline understanding of the existing hydrological regime. It is crucially important to the future of the retained habitats that this existing regime is protected. My previous comments on this aspect of the EIA therefore still stand, so I repeat them here

"FRA should be carried out in accordance with the latest flood risk models adjusted for climate change and should include details of any compensation excavations proposed, including assessment of alternatives (e.g. to developing in the flood zone)

Details will need to be provided as to how on-site attenuation of surface water will be designed and managed in accordance with best practice SUDS principles to replicate existing Greenfield rates of run-off from the site to avoid increasing downstream flood risk (including within Langford Village, but also in respect of downstream SSSIs identified as a concern by Natural England)

Details will need to be provided as to how surface water quality will be upheld, including through use of interception an filtration systems and through biological treatment in 'open' SUDS systems. The existing hydrological regimes supporting lowland flood meadow, retained hedgerows and ponds should be understood through appropriate survey information and details set out as to how these would be replicated, including compensatory provision for loss of inputs from hard development and/or from re-direction of established flows."

Landscape and Visual Amenity - no comments to make

Noise - no comments to make

Services and Utilities - no comments to make

Socio-economics - no comments to make

**Transportation and Access** — I welcome the commitment to assess construction traffic movements to rectify the omission of this important potential impact source from the previous ES There are two other areas that I believe the EIA needs to cover, as set out in my response to 13/00001/SCOP, but for which there is no specific mention in the latest scoping report. I therefore repeat the comments here

#### Sustainability

As well as 'iocational' sustainability (including proximity to facilities and likely transport modes of residents), this section of the ES needs to cover matters such as the source of building materials – in particular the type and source of primary aggregate required for any land raising

Details of the cut and fill balance, including in particular the likely requirements for export of surplus material from the site, also need to be provided (amongst other things to inform construction traffic assessments)

#### Cumulative Impacts and consideration of alternatives

The EIA process needs to include proper consideration of alternatives, including reduced scale or altered configuration of development within the site, over and above alternative sites and in the context of need. It is also crucial, in the context of the current rapid expansion of Bicester and pressure on the existing transport, drainage and sewerage infrastructure, that cumulative effects are considered — not only of recently completed developments but of those 'in planning' or envisaged as part of CDCs' Bicester masterplan

#### Evolution of the indicative masterplan

I hope the above comments are helpful in terms of setting the scope for the forthcoming EIA of the applicant's revised development proposals. In terms of the progression of those proposals beyond the indicative masterplan now provided, I reiterate that we have made huge strides forward, but concerns do remain. For the purposes of signposting to the applicant how those concerns might be addressed in future masterplan iterations, and in the light of the questions posed for CDC at para 1.8 (a-q) of the Scoping Report, I therefore offer the following comments

- 1) To ensure national and local policy compliance the objective has to be to achieve 'no net loss' of biodiversity and 'net gain' where possible. On this sensitive site, this will only be achieved by a combination of retention of critical habitat resources, managing the tension between development proximity and optimal management, and putting the mechanisms in place as part of the development package to deliver and sustain the optimum management of the site into the long term.
- 2) There are no defined systems for 'measuring' net loss or net gain, but using the emerging Defra metrics that inform the pilot 'biodiversity offsetting' system, and assuming optimum management is delivered and sustained for retained habitats, the current indicative masterplan indicates a small shortfall in equity of loss versus gain
- 3) Sensitivity testing suggests that this shortfall would be remedied by an element of further 'pull back' from the boundaries of the Local Wildlife Site in the eastern part of the site, in particular in terms of Fields 3 and 2, which have intrinsic interests complementing the LWS and which assist its

connectivity eastwards to the wider River Ray Conservation Target Area I note that these fields fall within the area subject to the CTA policy in any event

- 4) If optimum (grazing and hay-cutting) management of the retained LWS is to be achieved, there is also a need to ensure that such management is a viable proposition. In this context, there is a need for on-site areas of semi-improved grassland, such as that within Fields 8, 9 and 3, to be available as a place to rotate grazing animals.
- 5) It is in no-one's interests to preclude public access and use of the retained habitats at the end of the day this site is, and should remain, a fantastic asset for the people of Bicester. But in order for it to remain so, formal open space uses, or uses that are likely to generate pressure from future residents to manage the site in a certain way (e.g. informal kick-about areas) will not be compatible uses for the retained habitats. Conversely, the larger retained area relative to neighbouring development will, assuming the delivery of optimum management, improve the resilience of the retained LWS to informal uses, rendering jogging, dog-walking and passive recreation (e.g. around field edges on mown paths) able to be accommodated without significant detriment. Indeed the presence of this asset on the doorstep is likely to have a highly positive effect on values and by extension the sense of local ownership and stewardship and the motivation to sustain it
- 6) I note that the question is asked of CDC as to whether the primary school remains an essential deliverable. It strikes me that if it does not, the additional pull-back required to achieve 'no net loss' of biodiversity along the lines of the above could be achieved with no overall loss and perhaps still net gain of residential units above the 254-290 range quoted at para 3.5

#### Two letters of objection have been received from local residents

1 We object to houses being built on the land to the north of Gavray Drive Bicester, to the east of Langford Brook and to the south of Chiltern Railway The land is a valuable local wildlife site (http://www.tverc.org/cms/content/local-wildlife-sites Cherwell no 52W01) which is unimproved farmland. It is neutral damp marshland of type MG4. There are not very many areas such as this left in England. Gavray contains many different species of meadow flowers which are the food of butterflies and their caterpillars. Last summer I photographed 16 species of butterflies and 3 of daytime flying moths. The different species of the rare hairstreak butterflies are all present. There are hares, deer and buzzards and many small birds. There are also huge numbers of reptiles (lizards, grass-snakes and newts in the ponds.) The hedges are still the same ones as on the Ordnance survey map of 1881 and are older than that date. They map the past activity of generations of farmers which have shaped our land and its wildlife. Without farming our countryside would look completely different. The site provides a marvellous educational resource for children where they can learn about English wildlife and its conservation, and where they will actually see it, rather than on a computer screen.

In the developer's plans the areas set aside for wildlife are far too small to be sustainable. The developer has just recently submitted a new scoping plan (14/00001/SCOP) to Cherwell which does leave more space for wildlife. However, the plans show houses to be built each side of the very old boundary footpath 129 and the old boundary hedge which has demarcated Launton Parish from Bicester since mediaeval days. The hedge also contains six old oak trees which are protected. Indeed, the footpath will be bounded on both side by buildings which destroys its character as a countryside walk for people and their dogs and turns it into just another thoroughfare for getting from A to B between buildings. Also, the land on the north side of the old boundary hedge, (scheduled by the developer for building, on their new submission 14/00001/SCOP), is actually part of the Ray Conservation Target Area designated by Cherwell District Council on their new Local Plan 2014

The developer has now conducted new surveys (the previous ones were out of date) which includes plants, insects (butterflies and moths), reptiles (lizards, grass-snakes and newts) and bats and birds. All of these species were found to be present, some in large numbers http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=externalDocuments&keyVal=N1K37YEM0K200

The scoping report 24 Feb 2014 Part 1 and Part 2 are the relevant documents and contain the developer's outline plans and the results of their new wildlife surveys. These show just how valuable Gavray Meadow is as a wildlife site.

If Bicester is an Eco-Town, as it claims, how can it destroy a local wildlife site? In winter the site reverts to a marshland and is not suitable for housing. It acts as a huge sponge, absorbing excess water, helping to prevent flooding of Langford village downstream. In order to raise the level of the Gavray site above the water-table, many tonnes of rubble will have to be transported to the inconvenience of Langford residents. I live in Langford and every winter my garden becomes a quagmire and I cannot walk on the lawn. On the Gavray site the impaction of marshy soil will turn it into a lake. Let us think of a more suitable application of this land which would benefit the Bicester Community in general. I have met many families walking on the Gavray site who have said how much they like looking at the wild flowers and hearing the birds sing. Old inhabitants of Bicester especially feel nostalgic for the lost meadows and the wildlife of their youth. Their voices should be heard also 1,200 Bicester people have signed our petition supporting the conservation of Gavray local wildlife site. We hope that you will listen to us, the people of Bicester.

2 The scoping study put forward by David Lock Associates on behalf of the developer Gallaghers, whilst not a full planning application, is in direct contradiction to the latest Local Plan I submit that whilst it may be interesting to see a possible use for the site, until the Local Plan has been approved by the government inspector, this scoping document should be rejected as inadmissible until then

Once the Local Plan has been adopted / accepted, it would perhaps be sensible to look at the suggestions in this scoping plan for a future use of the area concerned. The site is divided naturally by Langford Brook and so we can look at the east and west areas separately. The western end, bounded by the new rail chord currently being constructed, Gavray Drive and the Langford Brook, is currently used for farming although it does readily flood. If I had to make a decision in the future about this area I would agree that the housing and school suggested by the scoping document may be a good use.

Looking at the eastern end, bounded by Langford Brook, the railway embankment, Gavray Drive and the ring road, has the majority of the area already identified in the Local Plan as a Conservation Target Area with a designated County Wildlife Site. As such this area falls under the policies of ESD 10 and ESD 11 of the Local Plan

There is another small division within this area being that of the public footpath running east to west. Although the area to the south of this footpath does not seem to be categorised as the County Wildlife Site, it does not make any sense to allow development as the close proximity of the northern wildlife area will compromise any attempts at retaining the extensive wild features

The Scoping Study suggests more development to the north of the footpath and this most definitely must be objected to as it cannot sensibly have a boundary on the edge of the wildlife area without the potential for damage. It is interesting to note the environmental surveys carried out by David Lock Associates confirms the extensive wildlife in the area and yet they still suggest potentially compromising the site by considering development.

To summarise, I object to the Scoping document being presented prior to the conclusion of the Local Plan inspection. If after the successful conclusion of the inspection of the Local plan Gallaghers proposed the development shown in this scoping document. I would not argue against development to the west of Langford Brook but do and will object to any development to the east of the brook.

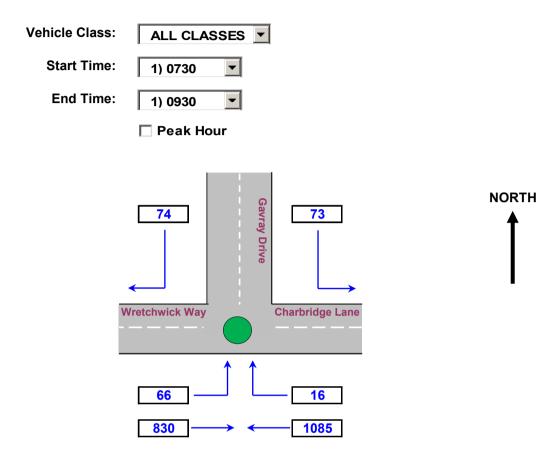
I apologise for the delay in this response and I trust that this letter is of assistance in properly informing this scoping decision and is sufficiently clear to enable you to progress the EIA

Yours faithfully

Rebecca Horley Principal Planning Officer Enc Transport Assessment April 2015

# APPENDIX C: JUNCTION COUNT TURNING DATA AUTOMATIC TRAFFIC COUNT DATA

Junction: (2) Gavray Drive / Charbridge Lane / Wretchwick Way



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

Important This spreadsheet & Interactive Vehicle Flow Diagram was produced based on specific Note: parameters. Consequently, alteration to the spreadsheet format or it's properties may result in malfunction.

Junction: (2) Gavray Drive / Charbridge Lane / Wretchwick Way

**Approach: Gavray Drive** 

	L	eft to Char	bridge Lan	R	ight to Wre	tchwick W	ay	
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	10	0	0	10	10	0	0	10
0745 - 0800	9	0	0	9	12	0	0	12
<b>Hourly Total</b>	19	0	0	19	22	0	0	22
0800 - 0815	7	0	0	7	11	0	0	11
0815 - 0830	13	0	0	13	6	0	0	6
0830 - 0845	9	0	0	9	11	0	0	11
0845 - 0900	14	0	0	14	7	0	0	7
<b>Hourly Total</b>	43	0	0	43	35	0	0	35
0900 - 0915	7	0	0	7	10	0	0	10
0915 - 0930	4	0	0	4	7	0	0	7
<b>Hourly Total</b>	11	0	0	11	17	0	0	17
Session Total	73	0	0	73	74	0	0	74
1630 - 1645	3	0	0	3	8	0	0	8
1645 - 1700	6	0	0	6	12	0	0	12
Hourly Total	9	0	0	9	20	0	0	20
1700 - 1715	2	0	0	2	10	0	0	10
1715 - 1730	5	0	0	5	7	0	0	7
1730 - 1745	1	0	0	1	8	0	0	8
1745 - 1800	4	0	0	4	9	0	0	9
<b>Hourly Total</b>	12	0	0	12	34	0	0	34
1800 - 1815	3	0	0	3	7	0	0	7
1815 - 1830	2	0	0	2	5	0	0	5
<b>Hourly Total</b>	5	0	0	5	12	0	0	12
Session Total	26	0	0	26	66	0	0	66

Junction: (2) Gavray Drive / Charbridge Lane / Wretchwick Way

Approach: Charbridge Lane

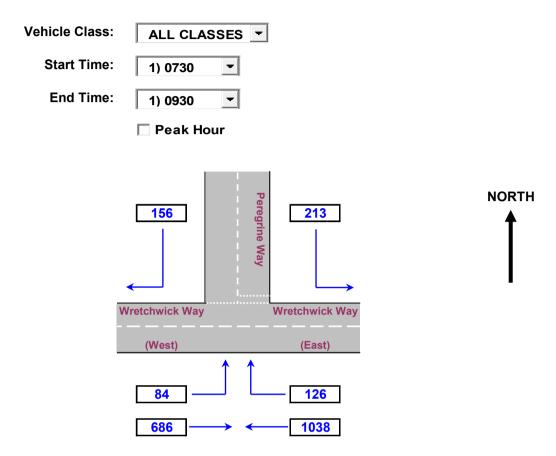
	Ah	nead to Wro	etchwick W	ay	Right to Gavray Drive						
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL			
0730 - 0745	153	14	0	167	1	0	0	1			
0745 - 0800	114	7	0	121	2	0	0	2			
<b>Hourly Total</b>	267	21	0	288	3	0	0	3			
0800 - 0815	132	12	0	144	0	0	0	0			
0815 - 0830	149	11	0	160	3	0	0	3			
0830 - 0845	144	14	0	158	1	0	0	1			
0845 - 0900	130	11	1	142	5	0	0	5			
<b>Hourly Total</b>	555	48	1	604	9	0	0	9			
0900 - 0915	91	5	0	96	2	0	0	2			
0915 - 0930	90	7	0	97	2	0	0	2			
Hourly Total	181	12	0	193	4	0	0	4			
Session Total	1003	81	1	1085	16	0	0	16			
1630 - 1645	96	6	0	102	4	0	0	4			
1645 - 1700	76	6	0	82	7	0	0	7			
Hourly Total	172	12	0	184	11	0	0	11			
1700 - 1715	104	5	0	109	14	0	0	14			
1715 - 1730	102	5	0	107	7	0	0	7			
1730 - 1745	114	7	1	122	12	0	0	12			
1745 - 1800	122	6	0	128	11	0	0	11			
Hourly Total	442	23	1	466	44	0	0	44			
1800 - 1815	95	5	0	100	5	0	0	5			
1815 - 1830	97	6	0	103	7	0	0	7			
Hourly Total	192	11	0	203	12	0	0	12			
							-				
<b>Session Total</b>	806	46	1	853	67	0	0	67			

Junction: (2) Gavray Drive / Charbridge Lane / Wretchwick Way

**Approach: Wretchwick Way** 

		Left to Ga	vray Drive		Ał	nead to Cha	arbridge La	ne
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	9	0	0	9	109	3	0	112
0745 - 0800	7	0	0	7	122	6	0	128
<b>Hourly Total</b>	16	0	0	16	231	9	0	240
0800 - 0815	12	0	0	12	125	4	0	129
0815 - 0830	6	0	0	6	88	7	0	95
0830 - 0845	11	0	0	11	90	5	0	95
0845 - 0900	9	0	0	9	84	6	0	90
<b>Hourly Total</b>	38	0	0	38	387	22	0	409
0900 - 0915	5	0	0	5	88	2	0	90
0915 - 0930	7	0	0	7	87	4	0	91
<b>Hourly Total</b>	12	0	0	12	175	6	0	181
<b>Session Total</b>	66	0	0	66	793	37	0	830
1630 - 1645	7	0	0	7	105	5	0	110
1645 - 1700	7	0	0	7	115	7	0	122
Hourly Total	14	0	0	14	220	12	0	232
1700 - 1715	9	0	0	9	134	5	0	139
1715 - 1730	13	0	0	13	122	6	0	128
1730 - 1745	11	0	0	11	156	5	0	161
1745 - 1800	5	0	0	5	173	5	0	178
<b>Hourly Total</b>	38	0	0	38	585	21	0	606
1800 - 1815	8	0	0	8	151	7	0	158
1815 - 1830	4	0	0	4	166	6	0	172
<b>Hourly Total</b>	12	0	0	12	317	13	0	330
							-	
<b>Session Total</b>	64	0	0	64	1122	46	0	1168

Junction: (3) Peregrine Way / Wretchwick Way



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

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Junction: (3) Peregrine Way / Wretchwick Way

**Approach: Peregrine Way** 

	Left	to Wretchy	vick Way (E	Right	Right to Wretchwick Way (West)				
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	
0730 - 0745	28	0	0	28	22	0	0	22	
0745 - 0800	27	0	0	27	20	0	0	20	
<b>Hourly Total</b>	55	0	0	55	42	0	0	42	
0800 - 0815	33	0	0	33	26	0	0	26	
0815 - 0830	26	0	0	26	17	0	0	17	
0830 - 0845	34	0	0	34	19	0	0	19	
0845 - 0900	26	0	0	26	24	0	0	24	
<b>Hourly Total</b>	119	0	0	119	86	0	0	86	
0900 - 0915	22	0	0	22	14	0	0	14	
0915 - 0930	17	0	0	17	14	0	0	14	
<b>Hourly Total</b>	39	0	0	39	28	0	0	28	
<b>Session Total</b>	213	0	0	213	156	0	0	156	
1630 - 1645	19	0	0	19	12	0	0	12	
1645 - 1700	20	0	0	20	16	0	0	16	
<b>Hourly Total</b>	39	0	0	39	28	0	0	28	
1700 - 1715	24	0	0	24	11	0	0	11	
1715 - 1730	17	0	0	17	14	0	0	14	
1730 - 1745	21	0	0	21	12	0	0	12	
1745 - 1800	18	0	0	18	9	0	0	9	
<b>Hourly Total</b>	80	0	0	80	46	0	0	46	
1800 - 1815	16	0	0	16	11	0	0	11	
1815 - 1830	15	0	0	15	6	0	0	6	
Hourly Total	31	0	0	31	17	0	0	17	
<b>Session Total</b>	150	0	0	150	91	0	0	91	

Junction: (3) Peregrine Way / Wretchwick Way

Approach: Wretchwick Way (East)

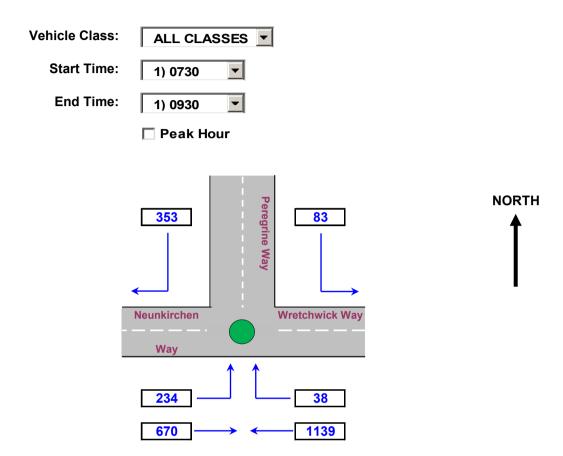
	Ahead	to Wretch	wick Way (	(West)	Vest) Right to Peregrine Way					
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL		
0730 - 0745	151	13	0	164	9	0	0	9		
0745 - 0800	111	6	0	117	13	0	0	13		
Hourly Total	262	19	0	281	22	0	0	22		
0800 - 0815	134	13	0	147	14	0	0	14		
0815 - 0830	133	7	0	140	17	0	0	17		
0830 - 0845	127	16	0	143	26	0	0	26		
0845 - 0900	119	13	1	133	19	0	0	19		
Hourly Total	513	49	1	563	76	0	0	76		
0900 - 0915	96	7	0	103	12	0	0	12		
0915 - 0930	86	5	0	91	16	0	0	16		
Hourly Total	182	12	0	194	28	0	0	28		
Session Total	957	80	1	1038	126	0	0	126		
<u>,                                      </u>										
1630 - 1645	77	6	0	83	27	0	0	27		
1645 - 1700	61	5	0	66	29	0	0	29		
Hourly Total	138	11	0	149	56	0	0	56		
1700 - 1715	92	5	0	97	26	0	0	26		
1715 - 1730	78	6	0	84	34	0	0	34		
1730 - 1745	85	7	0	92	33	0	0	33		
1745 - 1800	101	6	1	108	31	0	0	31		
Hourly Total	356	24	1	381	124	0	0	124		
1800 - 1815	72	6	0	78	27	0	0	27		
1815 - 1830	86	5	0	91	19	0	0	19		
Hourly Total	158	11	0	169	46	0	0	46		
Session Total	652	46	1	699	226	0	0	226		

Junction: (3) Peregrine Way / Wretchwick Way

**Approach: Wretchwick Way (West)** 

		Left to Per	egrine Way	1	Ahea	d to Wretch	nwick Way	(East)
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	8	0	0	8	95	4	0	99
0745 - 0800	11	0	0	11	104	4	0	108
<b>Hourly Total</b>	19	0	0	19	199	8	0	207
0800 - 0815	14	0	0	14	96	4	0	100
0815 - 0830	10	0	0	10	67	6	0	73
0830 - 0845	11	0	0	11	71	6	0	77
0845 - 0900	12	0	0	12	66	5	0	71
<b>Hourly Total</b>	47	0	0	47	300	21	0	321
0900 - 0915	7	0	0	7	74	3	0	77
0915 - 0930	11	0	0	11	77	4	0	81
<b>Hourly Total</b>	18	0	0	18	151	7	0	158
<b>Session Total</b>	84	0	0	84	650	36	0	686
1630 - 1645	17	0	0	17	88	6	0	94
1645 - 1700	16	0	0	16	101	6	0	107
<b>Hourly Total</b>	33	0	0	33	189	12	0	201
1700 - 1715	28	0	0	28	120	6	0	126
1715 - 1730	22	0	0	22	125	3	0	128
1730 - 1745	24	0	0	24	146	6	0	152
1745 - 1800	16	0	0	16	162	5	0	167
<b>Hourly Total</b>	90	0	0	90	553	20	0	573
1800 - 1815	18	0	0	18	144	8	0	152
1815 - 1830	13	0	0	13	149	6	0	155
<b>Hourly Total</b>	31	0	0	31	293	14	0	307
							-	
<b>Session Total</b>	154	0	0	154	1035	46	0	1081

Junction: (4) Peregrine Way / Wretchwick Way / Neunkirchen Way



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

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Junction: (4) Peregrine Way / Wretchwick Way / Neunkirchen Way

**Approach: Peregrine Way** 

	L	eft to Wret	chwick Wa	Ri	Right to Neunkirchen Way					
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL		
0730 - 0745	15	0	0	15	47	0	0	47		
0745 - 0800	9	0	0	9	63	0	1	64		
<b>Hourly Total</b>	24	0	0	24	110	0	1	111		
0800 - 0815	12	0	0	12	55	0	0	55		
0815 - 0830	7	0	0	7	44	0	1	45		
0830 - 0845	14	0	0	14	46	0	1	47		
0845 - 0900	11	0	0	11	37	0	1	38		
Hourly Total	44	0	0	44	182	0	3	185		
0900 - 0915	7	0	0	7	26	0	0	26		
0915 - 0930	8	0	0	8	30	0	1	31		
Hourly Total	15	0	0	15	56	0	1	57		
<b>Session Total</b>	83	0	0	83	348	0	5	353		
1630 - 1645	7	0	0	7	31	0	0	31		
1645 - 1700	11	0	0	11	27	0	1	28		
Hourly Total	18	0	0	18	58	0	1	59		
1700 - 1715	10	0	0	10	28	0	1	29		
1715 - 1730	7	0	0	7	33	0	1	34		
1730 - 1745	16	0	0	16	36	0	0	36		
1745 - 1800	13	0	0	13	31	0	0	31		
Hourly Total	46	0	0	46	128	0	2	130		
1800 - 1815	9	0	0	9	29	0	1	30		
1815 - 1830	6	0	0	6	26	0	0	26		
Hourly Total	15	0	0	15	55	0	1	56		
Session Total	79	0	0	79	241	0	4	245		

Junction: (4) Peregrine Way / Wretchwick Way / Neunkirchen Way

**Approach: Wretchwick Way** 

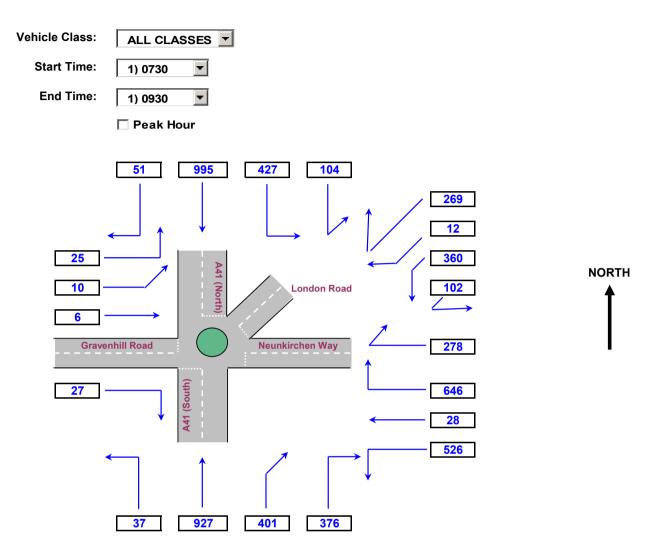
	Ah	ead to Neu	ınkirchen W	/ay	F	Right to Per	regrine Wa	у
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	164	11	0	175	1	0	0	1
0745 - 0800	125	6	0	131	6	0	0	6
Hourly Total	289	17	0	306	7	0	0	7
0800 - 0815	157	14	0	171	2	0	0	2
0815 - 0830	145	5	0	150	7	0	0	7
0830 - 0845	133	14	0	147	8	0	0	8
0845 - 0900	138	14	1	153	6	0	0	6
Hourly Total	573	47	1	621	23	0	0	23
0900 - 0915	108	8	0	116	5	0	0	5
0915 - 0930	92	4	0	96	3	0	0	3
Hourly Total	200	12	0	212	8	0	0	8
<b>Session Total</b>	1062	76	1	1139	38	0	0	38
1630 - 1645	77	5	0	82	8	0	0	8
1645 - 1700	66	6	0	72	16	0	0	16
<b>Hourly Total</b>	143	11	0	154	24	0	0	24
1700 - 1715	84	5	0	89	19	0	0	19
1715 - 1730	84	6	0	90	13	0	0	13
1730 - 1745	84	4	0	88	12	0	0	12
1745 - 1800	104	7	1	112	8	0	0	8
<b>Hourly Total</b>	356	22	1	379	52	0	0	52
1800 - 1815	83	5	0	88	6	0	0	6
1815 - 1830	80	5	0	85	9	0	0	9
Hourly Total	163	10	0	173	15	0	0	15
							-	· — ·
<b>Session Total</b>	662	43	1	706	91	0	0	91

Junction: (4) Peregrine Way / Wretchwick Way / Neunkirchen Way

**Approach: Neunkirchen Way** 

		Left to Per	egrine Way	1	Ahead to Wretchwick Way				
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	
0730 - 0745	32	0	1	33	83	3	0	86	
0745 - 0800	27	0	1	28	103	4	0	107	
<b>Hourly Total</b>	59	0	2	61	186	7	0	193	
0800 - 0815	29	1	0	30	101	2	0	103	
0815 - 0830	36	0	1	37	66	6	0	72	
0830 - 0845	34	0	1	35	74	7	0	81	
0845 - 0900	26	0	0	26	68	5	0	73	
Hourly Total	125	1	2	128	309	20	0	329	
0900 - 0915	23	0	1	24	67	4	0	71	
0915 - 0930	21	0	0	21	75	2	0	77	
Hourly Total	44	0	1	45	142	6	0	148	
Session Total	228	1	5	234	637	33	0	670	
1630 - 1645	39	0	1	40	90	6	0	96	
1645 - 1700	40	0	2	42	115	7	0	122	
Hourly Total	79	0	3	82	205	13	0	218	
1700 - 1715	46	1	0	47	148	5	0	153	
1715 - 1730	42	0	1	43	144	7	0	151	
1730 - 1745	57	0	1	58	150	5	0	155	
1745 - 1800	45	0	0	45	160	5	0	165	
Hourly Total	190	1	2	193	602	22	0	624	
1800 - 1815	33	1	1	35	156	6	0	162	
1815 - 1830	34	0	0	34	153	7	0	160	
Hourly Total	67	1	1	69	309	13	0	322	
Session Total	336	2	6	344	1116	48	0	1164	

Junction: (5) A41 / London Road / Neunkirchen Way / Gravenhill Road



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

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Junction: (5) A41 / London Road / Neunkirchen Way / Gravenhill Road

Approach: A41 (North)

	F	irst Left to I	ondon Ro	ad	Seco	nd Left to N	leunkircher	n Way		Ahead to A	41 (South)		R	Right to Gra	venhill Roa	ad
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	9	2	0	11	57	5	0	62	105	11	0	116	4	0	0	4
0745 - 0800	12	1	0	13	66	1	0	67	108	13	0	121	4	3	0	7
<b>Hourly Total</b>	21	3	0	24	123	6	0	129	213	24	0	237	8	3	0	11
0800 - 0815	6	0	0	6	68	1	0	69	100	18	0	118	10	1	0	11
0815 - 0830	8	0	1	9	45	2	0	47	115	14	0	129	4	0	0	4
0830 - 0845	13	1	0	14	63	3	0	66	113	15	0	128	7	1	0	8
0845 - 0900	16	0	0	16	44	4	0	48	122	13	1	136	5	7	0	12
<b>Hourly Total</b>	43	1	1	45	220	10	0	230	450	60	1	511	26	9	0	35
0900 - 0915	17	1	1	19	38	1	1	40	117	15	0	132	1	1	0	2
0915 - 0930	16	0	0	16	28	0	0	28	103	12	0	115	1	2	0	3
<b>Hourly Total</b>	33	1	1	35	66	1	1	68	220	27	0	247	2	3	0	5
<b>Session Total</b>	97	5	2	104	409	17	1	427	883	111	1	995	36	15	0	51
	T		T	ı			T	T	T		1			T		
1630 - 1645	22	2	0	24	54	4	0	58	100	4	0	104	6	0	0	6
1645 - 1700	28	1	0	29	76	5	0	81	105	13	0	118	3	0	0	3
<b>Hourly Total</b>	50	3	0	53	130	9	0	139	205	17	0	222	9	0	0	9
1700 - 1715	24	1	0	25	93	3	1	97	118	9	0	127	3	1	0	4
1715 - 1730	20	2	0	22	70	4	0	74	124	4	0	128	3	1	0	4
1730 - 1745	36	4	0	40	111	6	0	117	120	4	0	124	3	2	0	5
1745 - 1800	27	1	0	28	100	1	0	101	108	7	0	115	1	2	0	3
Hourly Total	107	8	0	115	374	14	1	389	470	24	0	494	10	6	0	16
1800 - 1815	28	2	0	30	81	4	0	85	102	4	0	106	2	0	0	2
1815 - 1830	32	2	0	34	99	4	0	103	96	2	0	98	1	0	0	1
Hourly Total	60	4	0	64	180	8	0	188	198	6	0	204	3	0	0	3
	0.45			222	201	24		=10	070			222				
<b>Session Total</b>	217	15	0	232	684	31	1	716	873	47	0	920	22	6	0	28

Junction: (5) A41 / London Road / Neunkirchen Way / Gravenhill Road

Approach: London Road

	Firs	t Left to Ne	unkirchen \	Way	Se	cond Left t	o A41 (Sou	ıth)	R	Right to Gra	venhill Roa	nd	L	ast Right to	A41 (Nort	h)
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	14	0	0	14	34	4	0	38	1	0	0	1	28	4	0	32
0745 - 0800	9	0	0	9	41	1	0	42	1	0	0	1	32	1	0	33
<b>Hourly Total</b>	23	0	0	23	75	5	0	80	2	0	0	2	60	5	0	65
0800 - 0815	15	1	0	16	42	1	0	43	2	0	0	2	43	1	0	44
0815 - 0830	12	2	0	14	54	3	0	57	2	0	0	2	50	1	0	51
0830 - 0845	11	1	0	12	30	1	0	31	2	0	0	2	42	0	0	42
0845 - 0900	10	0	0	10	43	0	0	43	2	0	0	2	24	0	0	24
<b>Hourly Total</b>	48	4	0	52	169	5	0	174	8	0	0	8	159	2	0	161
0900 - 0915	16	1	0	17	54	2	0	56	1	0	0	1	23	1	0	24
0915 - 0930	8	2	0	10	50	0	0	50	1	0	0	1	19	0	0	19
<b>Hourly Total</b>	24	3	0	27	104	2	0	106	2	0	0	2	42	1	0	43
<b>Session Total</b>	95	7	0	102	348	12	0	360	12	0	0	12	261	8	0	269
	T		T	ı					T	T		T	T			
1630 - 1645	12	2	0	14	51	2	0	53	3	0	0	3	26	1	0	27
1645 - 1700	20	0	0	20	77	2	0	79	1	0	0	1	34	2	0	36
<b>Hourly Total</b>	32	2	0	34	128	4	0	132	4	0	0	4	60	3	0	63
1700 - 1715	26	0	0	26	84	2	0	86	1	1	0	2	41	3	0	44
1715 - 1730	24	0	0	24	77	1	0	78	2	0	0	2	30	0	0	30
1730 - 1745	31	1	0	32	68	1	0	69	1	0	0	1	41	3	0	44
1745 - 1800	40	2	0	42	67	2	0	69	1	0	0	1	40	0	0	40
Hourly Total	121	3	0	124	296	6	0	302	5	1	0	6	152	6	0	158
1800 - 1815	34	1	0	35	72	0	0	72	1	0	0	1	41	1	0	42
1815 - 1830	31	1	0	32	63	1	0	64	1	0	0	1	31	2	0	33
<b>Hourly Total</b>	65	2	0	67	135	1	0	136	2	0	0	2	72	3	0	75
			T	T						T .		T				
<b>Session Total</b>	218	7	0	225	559	11	0	570	11	1	0	12	284	12	0	296

Junction: (5) A41 / London Road / Neunkirchen Way / Gravenhill Road

**Approach: Neunkirchen Way** 

		Left to A4	11 (South)		Al	nead to Gra	avenhill Ro	ad		Right to A	41 (North)		La	st Right to	London Ro	oad
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	86	2	0	88	3	0	0	3	94	10	0	104	29	0	0	29
0745 - 0800	65	1	1	67	2	0	0	2	90	4	0	94	32	0	0	32
<b>Hourly Total</b>	151	3	1	155	5	0	0	5	184	14	0	198	61	0	0	61
0800 - 0815	78	2	0	80	4	1	0	5	81	5	0	86	39	3	0	42
0815 - 0830	71	1	0	72	3	0	0	3	77	2	1	80	37	0	0	37
0830 - 0845	80	2	1	83	3	2	0	5	67	9	0	76	34	4	0	38
0845 - 0900	66	3	1	70	2	2	0	4	67	8	1	76	33	2	0	35
<b>Hourly Total</b>	295	8	2	305	12	5	0	17	292	24	2	318	143	9	0	152
0900 - 0915	36	0	0	36	1	2	0	3	59	3	1	63	32	2	0	34
0915 - 0930	29	1	0	30	2	1	0	3	65	2	0	67	31	0	0	31
<b>Hourly Total</b>	65	1	0	66	3	3	0	6	124	5	1	130	63	2	0	65
<b>Session Total</b>	511	12	3	526	20	8	0	28	600	43	3	646	267	11	0	278
	T		T						T				T	T		
1630 - 1645	38	2	0	40	3	0	0	3	38	4	0	42	23	0	0	23
1645 - 1700	32	0	0	32	1	0	0	1	38	6	1	45	25	2	0	27
Hourly Total	70	2	0	72	4	0	0	4	76	10	1	87	48	2	0	50
1700 - 1715	34	0	0	34	1	1	0	2	43	3	1	47	30	0	0	30
1715 - 1730	41	1	1	43	2	0	0	2	47	2	0	49	29	1	0	30
1730 - 1745	42	2	0	44	1	0	0	1	45	2	0	47	24	0	0	24
1745 - 1800	42	2	1	45	1	0	0	1	62	4	0	66	27	1	0	28
Hourly Total	159	5	2	166	5	1	0	6	197	11	1	209	110	2	0	112
1800 - 1815	39	1	0	40	1	0	0	1	49	2	1	52	28	2	0	30
1815 - 1830	36	2	0	38	1	0	0	1	46	2	0	48	24	0	0	24
<b>Hourly Total</b>	75	3	0	78	2	0	0	2	95	4	1	100	52	2	0	54
-			ī			_				•	•		_	ī		T
<b>Session Total</b>	304	10	2	316	11	1	0	12	368	25	3	396	210	6	0	216

Junction: (5) A41 / London Road / Neunkirchen Way / Gravenhill Road

Approach: A41 (South)

		Left to Grav	enhill Road	d		Ahead to A	441 (North)			Right to Lo	ndon Road		Last	Right to No	eunkirchen	Way
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	3	0	0	3	115	9	0	124	35	0	0	35	44	0	2	46
0745 - 0800	2	3	0	5	117	9	0	126	41	1	0	42	56	1	0	57
Hourly Total	5	3	0	8	232	18	0	250	76	1	0	77	100	1	2	103
0800 - 0815	4	3	0	7	107	9	0	116	52	3	0	55	45	0	0	45
0815 - 0830	4	0	0	4	108	8	0	116	51	2	0	53	48	2	1	51
0830 - 0845	4	0	0	4	115	6	0	121	57	2	0	59	26	4	1	31
0845 - 0900	4	3	0	7	115	11	0	126	57	2	0	59	42	0	0	42
Hourly Total	16	6	0	22	445	34	0	479	217	9	0	226	161	6	2	169
0900 - 0915	1	3	0	4	101	6	0	107	54	3	0	57	44	3	0	47
0915 - 0930	2	1	0	3	83	8	0	91	39	2	0	41	57	0	0	57
Hourly Total	3	4	0	7	184	14	0	198	93	5	0	98	101	3	0	104
<b>Session Total</b>	24	13	0	37	861	66	0	927	386	15	0	401	362	10	4	376
			T	ı			T	T						T		
1630 - 1645	6	0	0	6	108	2	0	110	65	0	0	65	67	2	1	70
1645 - 1700	3	0	0	3	96	6	0	102	63	0	0	63	64	0	2	66
Hourly Total	9	0	0	9	204	8	0	212	128	0	0	128	131	2	3	136
1700 - 1715	2	1	0	3	94	8	0	102	68	1	0	69	74	3	0	77
1715 - 1730	4	1	0	5	110	4	0	114	67	0	0	67	88	3	0	91
1730 - 1745	2	1	0	3	112	7	0	119	60	0	0	60	68	1	1	70
1745 - 1800	1	0	0	1	113	4	1	118	48	0	0	48	65	0	0	65
Hourly Total	9	3	0	12	429	23	1	453	243	1	0	244	295	7	1	303
1800 - 1815	2	0	0	2	96	2	0	98	54	1	0	55	65	1	1	67
1815 - 1830	1	0	0	1	89	3	0	92	50	2	0	52	63	3	0	66
Hourly Total	3	0	0	3	185	5	0	190	104	3	0	107	128	4	1	133
			_									.=-				
<b>Session Total</b>	21	3	0	24	818	36	1	855	475	4	0	479	554	13	5	572

Junction: (5) A41 / London Road / Neunkirchen Way / Gravenhill Road

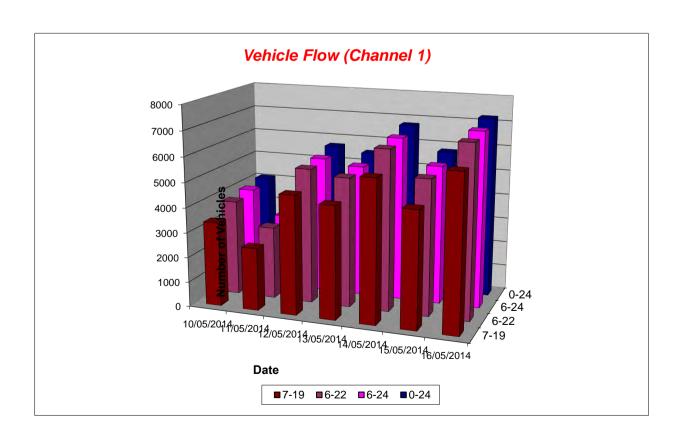
Approach: Gravenhill Road

	F	First Left to	A41 (North	1)	Sec	cond Left to	London R	oad	Ah	ead to Neu	ınkirchen W	/ay		Right to A	41 (South)	
TIME	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL	LIGHT	HGV	BUS	TOTAL
0730 - 0745	2	0	0	2	2	0	0	2	0	0	0	0	1	0	0	1
0745 - 0800	1	1	0	2	0	0	0	0	1	0	0	1	3	1	0	4
<b>Hourly Total</b>	3	1	0	4	2	0	0	2	1	0	0	1	4	1	0	5
0800 - 0815	3	0	0	3	1	0	0	1	1	0	0	1	2	0	0	2
0815 - 0830	3	0	0	3	1	0	0	1	0	0	0	0	1	1	0	2
0830 - 0845	4	0	0	4	1	0	0	1	2	0	0	2	5	2	0	7
0845 - 0900	1	6	0	7	0	2	0	2	0	0	0	0	1	1	0	2
<b>Hourly Total</b>	11	6	0	17	3	2	0	5	3	0	0	3	9	4	0	13
0900 - 0915	2	1	0	3	1	0	0	1	2	0	0	2	4	3	0	7
0915 - 0930	1	0	0	1	1	1	0	2	0	0	0	0	2	0	0	2
Hourly Total	3	1	0	4	2	1	0	3	2	0	0	2	6	3	0	9
<b>Session Total</b>	17	8	0	25	7	3	0	10	6	0	0	6	19	8	0	27
		•								•	•			•		
1630 - 1645	2	0	0	2	1	0	0	1	1	0	0	1	2	0	0	2
1645 - 1700	1	3	0	4	2	0	0	2	0	0	0	0	2	0	0	2
<b>Hourly Total</b>	3	3	0	6	3	0	0	3	1	0	0	1	4	0	0	4
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
1715 - 1730	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
1730 - 1745	0	2	0	2	0	0	0	0	1	1	0	2	0	0	0	0
1745 - 1800	2	0	0	2	0	0	0	0	3	0	0	3	1	0	0	1
Hourly Total	3	2	0	5	1	0	0	1	5	1	0	6	5	0	0	5
1800 - 1815	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1815 - 1830	1	0	0	1	1	0	0	1	1	0	0	1	0	0	0	0
Hourly Total	3	0	0	3	1	0	0	1	1	0	0	1	0	0	0	0
		T						T		T	T	T				
<b>Session Total</b>	9	5	0	14	5	0	0	5	7	1	0	8	9	0	0	9

Channel 1 - Northbound Vehicle Flow Week 1

_	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014		
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5 Day Ave	7 Day Ave
1	27	43	14	15	21	23	23	19	24
2	18	10	12	10	14	22	14	14	14
3	17	5	18	19	17	18	19	18	16
4	16	10	19	19	17	24	21	20	18
5	21	6	37	43	46	35	34	39	32
6	38	25	99	110	104	115	107	107	85
7	66	26	167	174	184	170	175	174	137
8	99	59	419	401	408	443	480	430	330
9	187	73	445	420	455	417	471	442	353
10	258	131	341	339	393	312	461	369	319
11	298	262	251	242	367	269	440	314	304
12	364	285	270	247	395	243	396	310	314
13	375	279	315	295	456	286	462	363	353
14	315	286	283	295	467	302	571	384	360
15	311	240	326	314	547	353	579	424	381
16	312	223	440	404	544	405	771	513	443
17	307	226	563	477	559	480	537	523	450
18	284	219	622	633	622	601	579	611	509
19	256	218	471	427	457	523	403	456	394
20	219	177	222	275	267	304	271	268	248
21	118	118	163	142	192	193	177	173	158
22	59	76	106	101	104	106	107	105	94
23	60	52	54	55	89	90	75	73	68
24	58	28	35	44	33	44	60	43	43

7-19	3366	2501	4746	4494	5670	4634	6150	5139	4509
6-22	3828	2898	5404	5186	6417	5407	6880	5859	5146
6-24	3946	2978	5493	5285	6539	5541	7015	5975	5257
0-24	4083	3077	5692	5501	6758	5778	7233	6192	5446



Channel 1 - Northbound

### Average Speed

Week 1

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	40.4	41.5	39.2	34.2	36.9	37.2	36.0
2	40.5	38.0	40.7	37.2	38.5	37.4	36.2
3	39.8	42.0	36.8	36.3	38.0	36.9	38.5
4	37.7	39.5	40.9	37.1	36.1	37.9	36.8
5	34.5	43.0	39.4	36.0	36.8	38.0	39.0
6	40.2	39.7	40.1	39.0	37.9	38.9	37.4
7	37.8	37.8	38.7	38.9	37.9	38.8	39.4
8	40.3	39.1	39.5	39.2	38.9	38.8	38.5
9	39.7	40.6	38.2	39.9	39.2	39.0	38.6
10	40.3	39.5	38.7	38.2	38.0	38.5	38.2
11	40.6	39.9	37.1	36.6	37.8	38.3	36.5
12	40.6	40.8	37.5	36.9	37.5	38.2	38.7
13	40.3	41.7	38.6	38.0	38.0	37.9	39.4
14	40.2	40.8	39.3	38.8	37.9	38.8	39.0
15	41.3	41.0	39.1	38.4	37.9	39.3	38.4
16	40.7	42.2	39.0	39.9	38.3	40.2	38.5
17	41.1	41.5	39.1	39.7	37.3	39.4	39.1
18	41.8	42.2	39.3	40.5	40.2	40.8	40.1
19	42.7	41.3	39.5	39.8	40.3	40.3	40.3
20	42.4	41.4	39.9	39.5	40.4	39.9	41.0
21	42.0	41.6	40.7	41.0	40.6	40.9	40.0
22	41.7	39.9	38.6	40.6	41.8	41.0	40.8
23	40.1	40.0	41.0	41.8	40.9	41.0	39.1
24	41.8	38.6	38.8	37.1	40.1	38.1	39.1
10-12	40.6	40.3	37.3	36.7	37.7	38.3	37.6
14-16	41.0	41.6	39.0	30.3	38.1	39.8	38.5

7 Day Ave 39.6

38.9

Channel 1 - Northbound

#### 85th Percentile

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	48.7	48.6	49.0	38.7	48.9	43.7	43.2
2	48.5	43.3	53.4	43.9	48.7	48.9	48.5
3	48.6	48.3	43.3	43.8	43.5	43.5	43.3
4	43.3	48.8	48.2	43.0	43.4	43.1	43.3
5	43.3	48.8	43.2	43.5	43.1	43.8	43.0
6	43.8	48.6	48.6	48.9	48.8	48.4	48.5
7	43.0	49.0	48.4	43.4	43.5	48.5	48.2
8	48.8	48.9	43.4	48.7	43.8	48.5	43.9
9	48.8	48.2	43.7	43.5	43.6	43.2	43.6
10	48.7	43.7	48.3	43.5	43.8	43.3	43.8
11	43.0	44.0	43.6	43.5	43.0	43.1	43.9
12	48.4	43.2	43.2	43.4	43.2	43.6	43.3
13	43.9	48.5	43.2	43.4	43.1	43.2	43.5
14	43.8	43.1	48.6	43.3	43.1	43.9	43.1
15	48.4	49.0	43.1	43.1	43.3	43.1	43.6
16	49.0	48.7	43.5	43.2	43.1	43.4	43.4
17	48.9	48.0	43.9	44.0	43.0	43.3	44.0
18	48.1	48.6	43.3	43.1	43.5	48.9	48.1
19	48.9	48.1	43.8	48.4	48.7	48.8	48.9
20	48.4	48.1	43.4	48.4	48.5	48.3	48.6
21	48.5	48.8	48.3	48.5	48.8	48.7	48.3
22	48.8	43.3	43.9	48.2	48.1	48.3	48.1
23	48.1	43.0	48.6	48.5	48.2	48.1	48.5
24	48.6	48.3	48.6	43.3	48.7	48.0	43.2
	•	•		•		•	
10-12	48.5	43.4	43.4	43.6	43.5	43.3	44.0
14-16	48.3	48.3	43.1	43.5	43.4	43.8	43.1
0-24	48.6	48.9	43.6	43.2	43.1	48.3	43.0

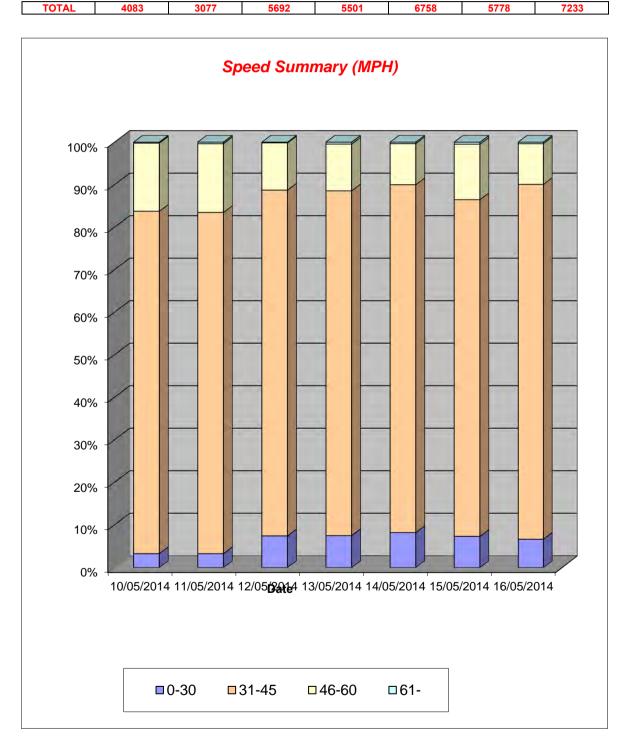
7 Day Ave 45.5

Channel 1 - Northbound

#### **Speed Summary**

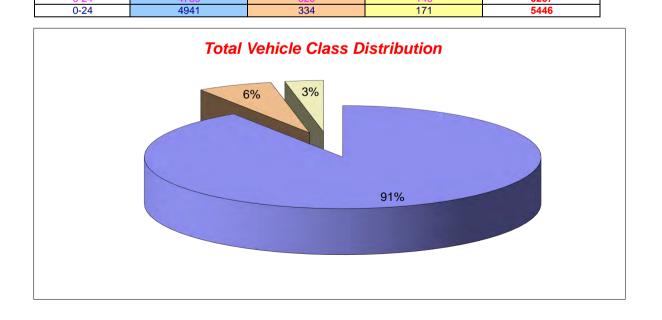
Week 1

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Speed (MF	PH) Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
0-30	133	100	423	412	554	422	480
31-45	3287	2469	4628	4460	5529	4575	6035
46-60	654	497	632	605	652	754	693
61-	9	11	9	24	23	27	25



Channel 1 - Northbound Vehicle Class Week 1

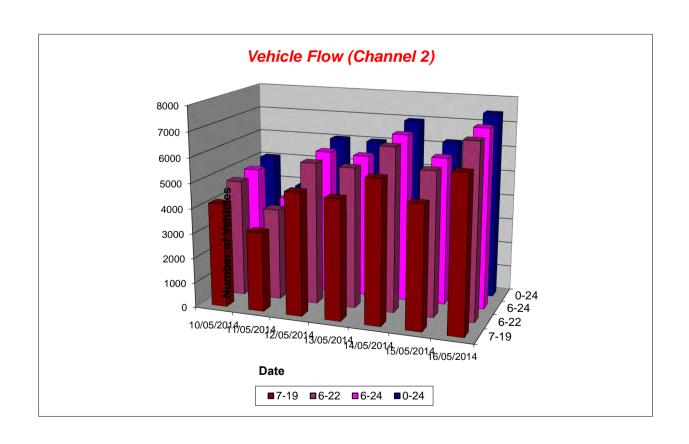
Classes		OGV1 / Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
10/05/2014				
7-19	3157	158	51	3366
6-22	3587	181	60	3828
6-24	3702	184	60	3946
0-24	3805	198	80	4083
11/05/2014				
7-19	2401	73	27	2501
6-22	2773	88	37	2898
6-24	2842	91	45	2978
0-24	2935	93	49	3077
12/05/2014				
7-19	4238	342	166	4746
6-22	4825	372	207	5404
6-24	4899	375	219	5493
0-24	5055	389	248	5692
13/05/2014				
7-19	4047	321	126	4494
6-22	4684	349	153	5186
6-24	4770	350	165	5285
0-24	4937	365	199	5501
14/05/2014				
7-19	5093	423	154	5670
6-22	5789	449	179	6417
6-24	5898	453	188	6539
0-24	6073	470	215	6758
15/05/2014				
7-19	4173	318	143	4634
6-22	4885	350	172	5407
6-24	5004	354	183	5541
0-24	5203	372	203	5778
16/05/2014				
7-19	5616	401	133	6150
6-22	6284	433	163	6880
6-24	6405	435	175	7015
0-24	6580	450	203	7233
Average				
7-19	4104	291	114	4509
6-22	4690	317	139	5146



Channel 2 - Southbound Vehicle Flow Week 1

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014		
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5 Day Ave	7 Day Ave
1	58	41	31	24	28	45	29	31	37
2	26	18	8	18	22	21	27	19	20
3	23	9	15	23	21	21	24	21	19
4	26	12	29	39	36	38	37	36	31
5	29	11	54	52	57	51	48	52	43
6	44	27	90	115	98	121	115	108	87
7	72	39	289	249	241	247	239	253	197
8	123	63	519	459	521	487	507	499	383
9	216	118	627	651	617	598	622	623	493
10	279	170	349	294	346	362	472	365	325
11	418	290	315	279	317	329	496	347	349
12	471	351	345	301	413	329	461	370	382
13	481	381	327	380	462	316	516	400	409
14	445	333	315	312	445	353	451	375	379
15	362	298	305	295	501	293	551	389	372
16	346	298	401	445	579	399	577	480	435
17	378	324	477	462	512	482	563	499	457
18	357	287	509	512	516	523	505	513	458
19	285	255	405	385	453	397	415	411	371
20	239	198	238	278	271	295	271	271	256
21	133	152	145	171	189	176	195	175	166
22	92	121	112	138	158	163	135	141	131
23	69	60	75	88	98	112	107	96	87
24	70	36	59	51	69	44	90	63	60
7-19	4161	3168	4894	4775	5682	4868	6136	5271	4812

7-19	4161	3168	4894	4775	5682	4868	6136	5271	4812
6-22	4697	3678	5678	5611	6541	5749	6976	6111	5561
6-24	4836	3774	5812	5750	6708	5905	7173	6270	5708
0-24	5042	3892	6039	6021	6970	6202	7453	6537	5946



Channel 2 - Southbound

### Average Speed

Week 1

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	42.7	43.7	40.9	40.4	43.7	43.4	43.0
2	44.5	44.4	42.4	43.4	45.3	41.0	40.1
3	40.9	46.1	39.0	42.3	41.6	45.5	44.6
4	42.1	43.0	45.2	40.8	41.5	41.7	41.4
5	39.4	43.0	42.2	42.9	42.7	43.2	41.9
6	42.9	44.7	44.7	43.4	43.7	43.7	44.2
7	44.6	50.2	43.4	44.5	45.7	45.0	45.2
8	45.1	46.5	43.3	43.1	43.3	42.9	42.9
9	45.5	47.7	40.8	42.2	42.3	43.4	41.4
10	44.3	45.4	41.6	43.4	42.9	41.9	42.6
11	43.0	44.1	43.7	42.5	42.6	43.3	39.5
12	43.8	43.5	43.6	41.8	42.6	42.3	42.1
13	44.9	44.3	42.1	42.7	42.0	42.5	42.7
14	42.5	44.7	43.4	43.7	41.6	42.5	42.0
15	43.4	44.7	43.0	43.3	42.1	43.9	42.7
16	43.5	44.9	42.6	43.3	41.9	44.6	41.9
17	44.0	44.8	44.0	43.6	41.7	43.7	44.4
18	44.6	44.2	44.2	44.7	43.2	44.7	43.7
19	45.4	46.0	43.3	44.9	43.7	44.5	44.2
20	45.7	45.0	44.0	44.3	45.3	45.2	44.7
21	45.2	44.1	45.0	46.1	46.3	44.7	44.4
22	44.0	43.9	41.3	43.3	42.8	43.7	43.3
23	43.7	43.3	43.4	43.7	42.8	43.5	43.7
24	44.9	43.6	43.2	43.9	44.2	44.1	42.2
•		•	•		•	•	
10-12	43.4	43.8	43.7	42.2	42.6	42.8	40.8
14-16	43.4	44.8	42.8	43.3	42.0	44.3	42.3

10-12	43.4	43.8	43.7	42.2	42.6	42.8	40.8
14-16	43.4	44.8	42.8	43.3	42.0	44.3	42.3
0-24	44.1	44.7	43.0	43.4	42.8	43.6	42.7

7 Day Ave

Channel 2 - Southbound

0-24 48.4

#### 85th Percentile

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	48.3	48.3	48.7	48.6	48.2	48.6	48.8
2	53.5	53.3	48.5	48.3	53.2	48.8	48.3
3	48.9	58.2	43.6	48.1	48.3	53.5	53.7
4	48.5	53.5	53.2	43.2	48.8	48.2	48.4
5	43.4	53.2	48.5	48.1	48.1	48.9	48.8
6	48.8	53.6	53.7	48.4	48.5	53.4	48.7
7	53.8	65.9	53.8	54.0	53.8	53.3	48.4
8	53.7	53.9	48.4	48.5	48.8	48.8	48.1
9	53.7	53.5	48.9	48.5	48.3	48.2	48.4
10	49.0	53.2	48.7	49.0	49.0	48.4	48.3
11	48.3	48.7	48.1	48.2	48.8	48.2	48.7
12	48.5	48.7	48.6	48.4	48.7	48.9	48.3
13	48.4	53.6	48.7	48.4	48.9	48.6	48.8
14	48.7	48.8	48.0	48.3	48.9	48.4	48.2
15	48.2	53.2	48.4	48.5	48.4	53.4	48.6
16	48.4	48.8	48.4	48.1	48.1	48.9	49.0
17	48.5	48.2	48.3	48.5	49.0	48.6	48.2
18	48.8	49.0	49.0	49.0	48.8	48.9	48.9
19	53.5	53.1	48.8	48.6	48.7	48.5	48.1
20	53.4	53.1	48.7	48.9	53.4	53.3	54.0
21	53.5	48.8	53.4	53.7	53.0	53.9	53.6
22	48.2	48.4	48.7	48.4	48.2	48.3	48.6
23	48.6	53.5	53.3	48.7	48.2	48.3	48.9
24	48.5	48.1	53.4	53.1	53.5	48.2	48.6
10-12	48.7	48.1	48.4	48.8	48.4	48.3	48.2
14-16	48.9	48.2	48.9	48.7	48.1	48.0	48.9

53.0 48.1 48.5

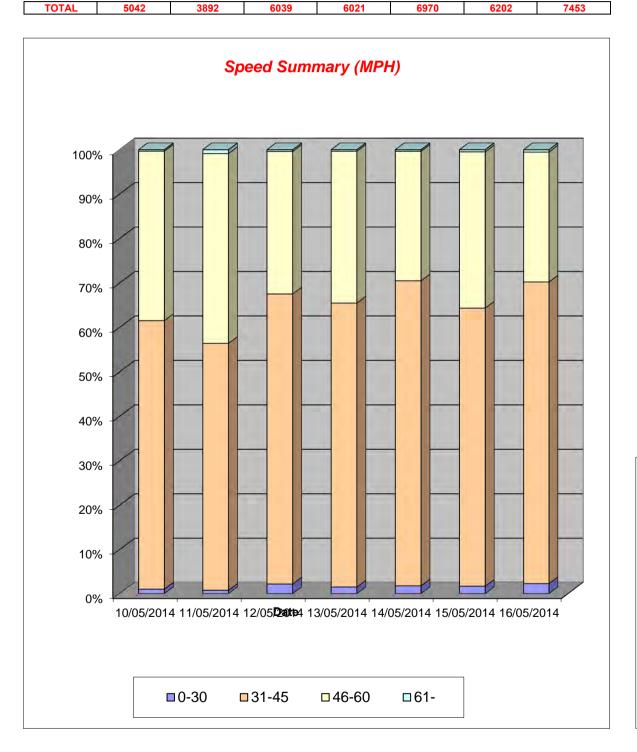
	.010	.0.0
48.3	48.7	48.1
		<u>.</u>

Channel 2 - Southbound

#### **Speed Summary**

Week 1

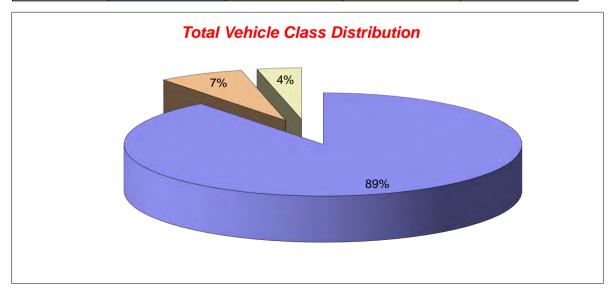
	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Speed (MPH)	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
0-30	52	30	133	91	124	106	170
31-45	3052	2167	3947	3854	4792	3887	5066
46-60	1922	1662	1937	2056	2030	2180	2178
61-	16	33	22	20	24	29	39



**Vehicle Class** Channel 2 - Southbound Week 1

Classes	Car / LGV /	OGV1 / Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
10/05/2014				
7-19	3913	184	64	4161
6-22	4399	217	81	4697
6-24	4528	223	85	4836
0-24	4652	266	124	5042
11/05/2014				
7-19	3014	107	47	3168
6-22	3479	133	66	3678
6-24	3556	139	79	3774
0-24	3644	151	97	3892
12/05/2014				
7-19	4411	327	156	4894
6-22	5099	382	197	5678
6-24	5203	391	218	5812
0-24	5326	454	259	6039
13/05/2014				
7-19	4287	338	150	4775
6-22	5016	391	204	5611
6-24	5128	397	225	5750
0-24	5270	473	278	6021
14/05/2014				
7-19	5131	406	145	5682
6-22	5904	456	181	6541
6-24	6041	465	202	6708
0-24	6182	533	255	6970
15/05/2014				
7-19	4400	343	125	4868
6-22	5183	399	167	5749
6-24	5315	409	181	5905
0-24	5475	490	237	6202
16/05/2014				
7-19	5595	401	140	6136
6-22	6357	445	174	6976
6-24	6529	456	188	7173
0-24	6691	515	247	7453
Average	4000	201	1110	4040
7-19	4393	301	118	4812
6-22	5062	346	153	5561
6.24	E400	054	100	E700

Average				
7-19	4393	301	118	4812
6-22	5062	346	153	5561
6-24	5186	354	168	5708
0-24	5320	412	214	5946

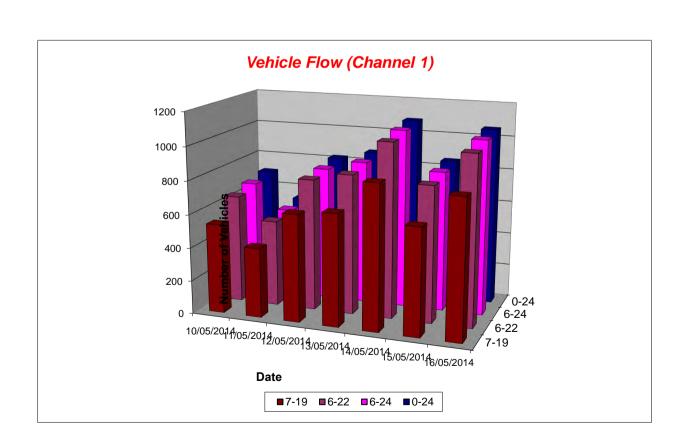


### **Bicester ATC 2, Gavray Drive**

Channel 1 - Northbound Vehicle Flow Week 1

_	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014		
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5 Day Ave	7 Day Ave
1	11	8	5	3	5	6	3	4	6
2	4	4	2	1	2	2	5	2	3
3	4	1	3	1	4	1	2	2	2
4	2	1	3	0	2	2	0	1	1
5	1	2	1	3	1	1	2	2	2
6	3	0	5	4	3	2	5	4	3
7	14	8	48	37	43	40	39	41	33
8	22	15	41	48	54	46	37	45	38
9	18	12	46	56	49	51	54	51	41
10	35	21	36	41	42	52	60	46	41
11	46	26	38	38	58	35	59	46	43
12	36	38	39	40	60	35	56	46	43
13	49	50	39	42	66	37	56	48	48
14	54	41	44	54	76	49	52	55	53
15	46	38	36	40	68	33	59	47	46
16	53	45	82	68	109	72	142	95	82
17	54	39	69	65	88	56	83	72	65
18	62	51	86	88	87	79	75	83	75
19	60	41	85	88	104	92	93	92	80
20	41	43	60	64	59	60	62	61	56
21	31	29	28	39	44	39	46	39	37
22	26	18	11	28	35	37	38	30	28
23	19	9	10	16	23	20	14	17	16
24	10	4	5	8	2	5	17	7	7
7 10	525	117	6/11	669	961	627	926	727	655

7-19	535	417	641	668	861	637	826	727	655
6-22	647	515	788	836	1042	813	1011	898	807
6-24	676	528	803	860	1067	838	1042	922	831
0-24	701	544	822	872	1084	852	1059	938	848



### **Bicester ATC 2, Gavray Drive**

Channel 1 - Northbound

### Average Speed

Week 1

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	28.2	32.4	28.4	29.7	25.4	24.7	18.7
2	26.8	29.2	40.5	33.0	33.0	35.5	35.0
3	16.5	23.0	23.0	33.0	24.2	13.0	20.5
4	30.5	43.0	26.3	-	20.5	30.5	-
5	38.0	28.0	38.0	31.3	33.0	38.0	30.5
6	31.3	-	32.0	28.0	33.0	35.5	31.0
7	33.4	33.6	34.4	33.1	33.3	33.2	35.2
8	31.2	33.3	32.4	31.4	32.2	32.6	31.6
9	32.7	31.3	29.5	28.3	30.6	31.7	30.5
10	31.0	32.0	29.9	29.7	29.7	29.9	30.6
11	32.0	31.3	30.5	28.7	30.9	27.9	29.1
12	31.5	30.5	29.4	28.8	29.8	30.3	29.9
13	31.9	30.9	30.2	29.3	30.1	31.0	29.8
14	32.9	31.3	30.5	29.9	29.3	29.0	30.7
15	33.3	32.5	30.9	29.6	29.4	32.2	31.9
16	30.9	30.8	31.2	30.4	30.2	30.8	31.5
17	30.3	31.1	30.6	32.2	31.4	31.6	32.9
18	31.2	31.5	30.4	30.8	32.2	31.7	31.6
19	31.2	31.5	31.4	32.3	30.9	31.0	31.6
20	33.4	31.4	31.4	31.6	31.1	32.7	32.2
21	30.3	32.1	30.9	32.2	31.0	31.3	31.6
22	31.5	31.9	31.2	31.4	31.9	32.6	32.3
23	32.2	32.4	30.0	32.1	30.0	30.2	31.2
24	34.0	23.0	30.0	35.5	33.0	30.0	30.1
10-12	31.8	30.8	29.9	28.7	30.4	29.1	29.5
14-16	32.0	31.6	31.1	30.1	29.9	31.3	31.6

7 Day Ave 31.1

31.3

Channel 1 - Northbound

#### 85th Percentile

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Hr Ending	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1	33.7	38.6	38.9	33.6	33.5	33.4	28.8
2	28.5	33.3	49.0	33.7	33.2	38.1	38.3
3	28.6	23.3	28.4	33.9	33.9	13.7	28.2
4	33.3	43.8	38.3	-	28.7	33.9	-
5	38.3	28.8	38.2	38.8	33.5	38.5	33.5
6	33.8	-	38.2	33.0	38.4	38.1	38.3
7	38.0	38.6	43.6	38.5	38.1	38.8	38.3
8	38.8	39.0	38.4	38.9	38.8	38.4	38.0
9	38.8	38.9	33.4	33.4	38.5	38.5	38.5
10	38.7	33.2	33.7	33.7	33.8	33.5	33.2
11	38.0	33.7	33.3	33.5	33.6	33.2	33.9
12	38.4	34.0	33.6	33.5	33.8	33.3	33.6
13	38.9	33.2	33.2	33.5	33.0	33.1	33.8
14	38.8	38.5	33.2	33.4	38.2	33.6	33.9
15	38.4	38.1	33.6	33.4	33.1	38.2	38.3
16	39.0	34.0	33.1	33.3	33.1	33.9	38.5
17	33.9	33.7	38.5	38.1	38.3	38.1	38.1
18	38.1	38.0	33.9	33.2	38.1	38.4	33.6
19	33.9	33.6	38.3	39.0	33.0	33.3	38.4
20	38.4	38.1	38.8	33.1	33.5	38.9	39.0
21	33.5	38.1	33.4	43.4	38.7	38.8	38.1
22	38.8	38.8	33.3	38.4	38.5	38.3	38.9
23	38.1	38.3	33.9	38.5	38.8	38.7	38.6
24	38.6	28.0	38.6	38.2	38.1	33.3	38.3
	•						
10-12	38.5	33.3	33.6	33.5	33.2	33.1	33.1
14-16	38.3	33.4	33.4	33.3	33.7	33.0	38.5
0-24	38.6	38.3	38.1	33.6	38.5	38.3	38.2

7 Day Ave 37.7

## **Bicester ATC 2, Gavray Drive**

Channel 1 - Northbound

#### **Speed Summary**

Week 1

	10/05/2014	11/05/2014	12/05/2014	13/05/2014	14/05/2014	15/05/2014	16/05/2014
Speed (MPH)	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
0-20	11	3	19	16	29	18	15
21-35	557	461	690	746	907	703	874
36-50	133	80	113	110	148	131	167
51-	0	0	0	0	0	0	3

