

APPENDIX 3 – Oxfordshire County Council Single Response (response and appendices A-D)

COUNTY COUNCIL'S RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell

Application no: 24/00539/F

Proposal: Erection of a stadium (Use Class F2) with flexible commercial and community facilities and uses including for conferences, exhibitions, education, and other events, club shop, public restaurant, bar, health and wellbeing facility/clinic, and gym (Use Class E/Sui Generis), hotel (Use Class C1), external concourse/fan-zone, car and cycle parking, access and highway works, utilities, public realm, landscaping and all associated and ancillary works and structures

Location: Land To The East Of Stratfield Brake And West Of Oxford Parkway Railway Station, Oxford Road, Kidlington

Response Date: 30th May 2025

This report sets out the officer views of Oxfordshire County Council (OCC) on the above proposal. These are set out by individual service area/technical discipline and include details of any planning conditions or Informatives that should be attached in the event that permission is granted and any obligations to be secured by way of a S106 agreement. Where considered appropriate, an overarching strategic commentary is also included. If the local County Council member has provided comments on the application these are provided as a separate attachment.

Assessment Criteria

Proposal overview and mix /population generation

OCC's response is based on a development as set out in the table below. The development is taken from the application form.

F2	16,306
C1	6,616
Other	2,313
E (a)	315

Application no: 24/00539/F

Location: Land To The East Of Stratfield Brake And West Of Oxford Parkway
Railway Station, Oxford Road, Kidlington

General Information and Advice

Recommendations for approval contrary to OCC objection:

If within this response an OCC officer has raised an objection, but the Local Planning Authority are still minded recommending approval, OCC would be grateful for notification (via planningconsultations@oxfordshire.gov.uk) as to why material consideration outweighs OCC's objections, and to be given an opportunity to make further representations.

Outline applications and contributions

The anticipated number and type of dwellings and/or the floor space may be set by the developer at the time of application which is used to assess necessary mitigation. If not stated in the application, a policy compliant mix will be used. The number and type of dwellings used when assessing S106 planning obligations is set out on the first page of this response.

In the case of outline applications, once the unit mix/floor space is confirmed by reserved matters approval/discharge of condition a matrix (if appropriate) will be applied to establish any increase in contributions payable. A further increase in contributions may result if there is a reserved matters approval changing the unit mix/floor space.

Where a S106/Planning Obligation is required:

- **Index Linked** – in order to maintain the real value of S106 contributions, contributions will be index linked. Base values and the index to be applied are set out in the Schedules to this response.
- **Administration and Monitoring Fee**

A fee to cover the cost of monitoring and administration associated with the S106 agreement will be secured in the S106 agreement. The fees for the period 1st April 2025 to 31st March 2026 are set out below. The fees are revised annually and approved by Cabinet.

Aggregate of contributions secured in S106	Up to £10K	Up to £25K	£25,001 - £50K	£50,001 - £150K	£150,001 - £500K	£500,001 - £1m	£1,000,001 - £2m	Over £2m
Admin and Monitoring Fee	£158	£390	£765	£2,310	£5,680	£7,675	0.945% of aggregate of contribution amount	£18,900 + 0.1% of any amount over £2m

- **OCC Legal Fees** The applicant will be required to pay OCC's legal fees in relation to legal agreements. Please note the fees apply whether a S106 agreement is completed or not.

Security of payment for deferred contributions - Applicants should be aware that an approved bond will be required to secure a payment where a S106 contribution is to be paid post implementation and

- the contribution amounts to 25% or more (including anticipated indexation) of the cost of the project it is towards and that project cost £7.5m or more
- the developer is direct delivering an item of infrastructure costing £7.5m or more
- where aggregate contributions towards bus services exceeds £1m (including anticipated indexation).

A bond will also be required where a developer is direct delivering an item of infrastructure.

The County Infrastructure Funding Team can provide the full policy and advice, on request.

Application no: 24/00539/F

Location: Land To The East Of Stratfield Brake And West Of Oxford Parkway
Railway Station Oxford Road Kidlington

Transport Development Control

Recommendation:

No objection subject to conditions

Key issues:

- This response is from Oxfordshire County Council acting as the Local Highway Authority (LHA) and relates solely to the highway elements of the planning application with Cherwell District Council (CDC). This is independent from the property team who are responsible for Oxfordshire County Council's interest as the landowner.
- Throughout the planning process productive discussions have taken place with stakeholders including Thames Valley Police, National Highways, Oxford Bus Company, Stagecoach, Chiltern Railways, Network Rail, British Transport Police and multiple internal teams amongst others to ensure the planning application is acceptable.
- The site is in a highly sustainable location with good access to public transport with further public transport and active travel improvements coming forward in the future, to be delivered by Oxfordshire County Council and surrounding development sites.
- The club and their consultant team have developed a transport strategy which utilises the sustainable transport options available and further improves the infrastructure for sustainable transport in the area. This approach is welcomed and is in line with national and local policy which favours sustainable development that promotes modal shift.
- At the request of Oxfordshire County Council, the club has undertaken micro-simulation transport modelling to demonstrate the impact of the proposal on the Local Highway Network and Strategic Road Network (A34). Whilst this modelling does show delays on some routes, the network operates adequately. Network impact is for relatively short periods with an average of 28 occurrences per year. As such, the impact is not considered severe in the context of NPPF para. 116.
- On the advice of Thames Valley Police, Oxford Road will require a diversion 35 minutes before and after matches with high ticket sales (quantum subject to agreement by Safety Advisory Group) with Hostile Vehicle Mitigation installed on the carriageway. Emergency vehicles and buses will be able to gain access with the latter operating in shuttle running arrangement which has been agreed by the county council and bus operators. This is in line with Oxfordshire County Council's user hierarchy and further helps achieve the modal shift required. Oxfordshire County Council and Chiltern Railways have agreed additional measures at Oxford Parkway to further discourage match day car use and promote sustainable transport. This, supported by the club's

traffic and crowd management company and Variable Messaging Signs across the network.

Financial Contributions Required via Section 106 Agreement

Contribution	Amount £	Price base	Index	Towards (details)
Oxford Parkway Junction	£587,778	April 2025	Baxter	Active Travel Improvements at or in the vicinity of the junction with Oxford Parkway and Oxford Road.
Traffic Management	£260,550	April 2025	Baxter	Variable Messaging Signs
Speed Management	£260,550	April 2025	Baxter	Average Speed Cameras
Public Transport Services	£722,264	April 2025	RPIX	Public Transport Services in the vicinity of the site
Public Transport Infrastructure (1)	£932,519	April 2025	Baxter	Cowley Branch Line Passenger Line Stations
Public Transport Infrastructure (2)	£1,838,959	April 2025	Baxter	New Mobility Hub at Oxford Airport
Public Transport Infrastructure (3)	£29,786	April 2025	Baxter	2 real time information boards for new bus stops on Oxford Road
Height Barriers	£20,224	April 2025	Baxter	Replacement height barriers at Oxford Parkway.
Ticket Machines	£28,313	April 2025	Baxter	Replacement ticket machines at Oxford Parkway
Parking Restrictions (1)	£10,112	April 2025	Baxter	‘Clearway’ on Frieze Way
Parking Restrictions (2)	£20,224	April 2025	Baxter	Double Yellow Lines on Oxford Road and Bicester Road.
Parking Enforcement	£184,120	April 2025	RPIX	Additional enforcement officers
Matchday Controlled Parking Zone	£102,160	April 2025	Baxter	Matchday Controlled Parking Zone within approximately 2km of site
Additional Matchday Controlled Parking Zone	£51,080	April 2025	Baxter	Additional Controlled Parking Zone up to

				approximately 3km from site if required.
Framework Travel Plan	£3,347	April 2025	RPIX	Travel Plan Monitoring
Matchday Travel Plan	£2,035	April 2025	RPIX	Travel Plan Monitoring
Non Matchday conference & Exhibition use Travel Plan	£2,035	April 2025	RPIX	Travel Plan Monitoring
Public Restaurant/Bar Travel Plan	£2,035	April 2025	RPIX	Travel Plan Monitoring
Health and wellbeing facility/clinic, and gym Travel Plan	£2,035	April 2025	RPIX	Travel Plan Monitoring
Hotel Travel Plan	£2,035	April 2025	RPIX	Travel Plan Monitoring
Total	£5,062,161			

Works Required via Section 278 Agreement

- New at-grade signalised ped/cycle crossing on Frieze Way.
- 2 new at-grade signalised crossings on Oxford Road.
- New at-grade signalised crossing on A44 adjacent to Loop Farm roundabout.
- Access works and works at site frontages, incorporating 'Cycle Superhighway' on Oxford Road.
- Creation of bus lay-bys on Frieze Way.
- New 3m off-carriageway shared footway/cycleway on Frieze Way with additional 500mm buffer (minimum, depending on speed reduction).
- Implementation of reduced speed limit on Frieze Way to 40mph
- Installation of Hostile Vehicle Mitigation (HVM) on Oxford Road.
- New signage on the Local Highway Network (as agreed by Signage Strategy condition).
- 2 new bus stops with shelters on Oxford Road.
- New steps between Oxford Road and Oxford Parkway including signage and lighting.

Notes:

This is to be secured by means of S106 restrictive obligation not to implement development (or occasionally other trigger point) until S278 agreement has been entered into.

The trigger by which time S278 works are to be completed shall also be included in the S106 agreement.

Identification of areas required to be dedicated as public highway and agreement of all relevant landowners will be necessary in order to enter into the S278 agreements.

S278 agreements include certain payments, including commuted sums, that apply to all S278 agreements however the S278 agreement may also include an additional payment(s) relating to specific works.

Hostile Vehicle Mitigation (HVM) will require detailed maintenance, emergency response and replacement agreement which will be built into the S278 agreement together with the commuted sum.

Conditions:

Construction Traffic Management Plan (CTMP)

A Construction Traffic Management Plan should be submitted to the Local Planning Authority and agreed prior to commencement of works. This should identify;

- The CTMP must be appropriately titled, include the site and planning permission number.
- Routing of construction traffic and delivery vehicles is required to be shown and signed appropriately to the necessary standards/requirements. This includes means of access into the site.
- Details of and approval of any road closures needed during construction.
- Details of and approval of any traffic management needed during construction.
- Details of wheel cleaning/wash facilities – to prevent mud etc, in vehicle tyres/wheels, from migrating onto adjacent highway.
- Details of appropriate signing, to accord with the necessary standards/requirements, for pedestrians during construction works, including any footpath diversions.
- The erection and maintenance of security hoarding / scaffolding if required.
- A regime to inspect and maintain all signing, barriers etc.
- Contact details of the Project Manager and Site Supervisor responsible for on-site works to be provided.
- The use of appropriately trained, qualified and certificated banksmen for guiding vehicles/unloading etc.
- No unnecessary parking of site related vehicles (worker transport etc) in the vicinity – details of where these will be parked and occupiers transported to/from site to be submitted for consideration and approval. Areas to be shown on a plan not less than 1:500.
- Layout plan of the site that shows structures, roads, site storage, compound, pedestrian routes etc.
- A before-work commencement highway condition survey and agreement with a representative of the Highways Depot – contact 0845 310 1111. Final correspondence is required to be submitted.
- Local residents to be kept informed of significant deliveries and liaised with through the project. Contact details for person to whom issues should be raised with in first instance to be provided and a record kept of these and subsequent resolution.
- Any temporary access arrangements to be agreed with and approved by Highways Depot.

- Details of times for construction traffic and delivery vehicles, which must be outside network peak and school peak hours.

Reason: In the interests of highway safety and to mitigate the impact of construction vehicles on the surrounding highway network, road infrastructure and local residents, particularly at morning and afternoon peak traffic times.

Travel Plan

Prior to the first occupation of the site an updated, comprehensive, framework travel plan shall be submitted to and agreed in writing by the local planning authority, together with a supplementary travel plan or travel plan statement for each of the ancillary land uses within 3 months of first occupation.

Reason: To promote sustainable modes of transport.

Public Transport Information System

Prior to commencement of development details of the Public Transport Information System should be provided and agreed by the Local Planning Authority. The development should not be brought into use until the Public Transport Information System has been provided within the site in accordance with the approved details. Thereafter and for the life of the development, the applicant must ensure retention and adequate maintenance of the Public Transport Information System.

Reason: To promote sustainable modes of transport.

Signage Strategy

Prior to commencement of development the Signage Strategy shall be submitted to and approved by the Local Planning Authority. This should set out all signage on the Local Highway Network, Strategic Road Network, including Variable Messaging Signs as well as signage at Oxford Parkway, Peartree Park & Ride and within the site. The development shall not be brought into use until the approved signage has been installed.

Reason: In the interests of highway safety.

Communication Strategy

Prior to commencement of development the Communication Strategy shall be submitted to and approved by the Local Planning Authority. This should set out the measures to be provided to make residents aware in advance of when matches will be taking place and of any route diversions. The development shall not be brought into use until the Communication Strategy has been provided in accordance with the approved details. Thereafter the Communication Strategy shall be implemented in accordance with the approved details.

Reason: In the interests of highway safety.

Car Park Management Plan

Prior to commencement of development the Car Park Management Plan shall be submitted to and approved by the Local Planning Authority. This should set out how

car parking will be controlled, monitored and enforced on site for the different uses. Thereafter and for the life of the development, the Car Park Management Plan shall be implemented in accordance with the approved details.

Reason: In the interests of highway safety.

Crowd & Traffic Management Strategy

Prior to commencement of development the Crowd & Traffic Strategy shall be submitted to and approved by the Local Planning Authority. This should set out the different forms of crowd and traffic management, the enforcement, monitoring and reporting methods and location of marshals. The development shall not be brought into use until the Crowd & Traffic Management Strategy has been agreed.

Thereafter and for the life of the development, the Crowd and Traffic Management Strategy shall be implemented in accordance with the approved details.

Reason: In the interests of highway safety.

Evacuation Strategy

Prior to commencement of development the Evacuation Strategy shall be submitted to and approved by the Local Planning Authority. The development shall not be brought into use until the Evacuation Strategy has been agreed. Thereafter and for the life of the development, the Evacuation Strategy shall be implemented in accordance with the approved details.

Reason: In the interests of highway safety.

Cycle Parking

Before the development permitted is commenced details of the cycle parking areas, including dimensions and means of enclosure, shall be submitted to, and approved in writing by, the Local Planning Authority. The development shall not be brought into use until the cycle parking areas and means of enclosure have been provided within the site in accordance with the approved details and thereafter the areas shall be retained and maintained solely for the purpose of the parking of cycles.

Reason: To encourage the use of sustainable modes of transport.

Informatives:

Please note If works are required to be carried out within the public highway, the applicant shall not commence such work before formal approval has been granted by Oxfordshire County Council by way of legal agreement between the applicant and Oxfordshire County Council. This is separate from any planning permission that may be granted and will be dealt with through S106 and S278 agreement as noted above. Works delivered via S278 agreement will need to also consider Oxfordshire County Council's [Tree](#) and [Street Lighting](#) policies along with the [Oxfordshire Flood Toolkit](#).

Signage to be placed on the public highway can be installed as part of the Section 278 agreement, however, signage to be installed on the SRN or on private land (Peartree & Parkway) will need a separate agreement.

The following items will require a separate legal (Traffic Regulation Order) process, which includes public consultation, and which will require sign off by the cabinet member for highways:

- Oxford Road diversion route.
- Parking measures at Oxford Parkway.
- Matchday Controlled Parking Zone.
- Speed limit reduction on Frieze Way.
- Parking restrictions on Bicester Road, Oxford Road and Frieze Way.
- New cycle paths and signalised crossings.

The access steps from Oxford Parkway to Oxford Road and the cycle parking at Oxford Parkway are not fully within public highway land. As such the land outside of the public highway will need to be dedicated along with land either side for maintenance and illumination. As such Chiltern Railways will need to be party to the S106 agreement.

A mechanism will also be required in the S106 agreement to monitor and review the effectiveness or otherwise of matchday shuttles/bus services. This should set out the stakeholders within the Matchday Steering Group, the frequency the group will meet and should provide a baseline level of service (in line with the planning application) that must be provided/achieved as a minimum and all in accordance with the travel plan and transport assessment.

Detailed Comments:

Site Location

The site is located in the triangle of land directly south of Kidlington Roundabout, between the A4165 Oxford Road and the A4260 Frieze Way, and the Oxford to Oxford Parkway railway. Oxford Road is a 30mph road which connects Kidlington to Oxford via Kidlington and Cutteslowe Roundabouts, it also connects to Oxford Parkway train station and park & ride.

Frieze Way is a national speed limit dual carriageway which connects Kidlington Roundabout to Loop Farm Roundabout, this then connects the Local Highway Network (LHN) to the A44 traveling north-west and Peartree and Wolvercote Roundabouts via the A44 south-east. Peartree Roundabout forms part of the Strategic Road Network (SRN) as it connects to the A34 which is maintained by National Highways (NH).

Wolvercote Roundabout connects to the A40 west towards Witney and Carterton. To the east it connects to the Cutteslowe Roundabout which takes you back to Oxford Road to the north or carries on east to east Oxford and then further to Wheatley, High Wycombe and London. North-east of the Kidlington Roundabout is Bicester Road which again connects the site to the A34.

There are a number of allocated strategic development sites which are coming forward in the area which will significantly increase housing numbers and employment areas. These sites will deliver significant pieces of infrastructure to help

mitigate the impact of their developments and improve active travel and public transport in the area. Although there are some smaller sites also coming forward, Oxford North and the Cherwell Local Plan Partial Review sites (PR6a, PR6b, PR7a, PR7b, PR8 & PR9) will be constructing over 5000 new dwellings along with significant employment areas.

The recent Kidlington Roundabout Improvement Scheme has improved provision for active travel considerably, by signaling the roundabout and installing parallel crossings on the Bicester Road, Frieze Way and Oxford Road arms. There are existing shared paths along either side of Oxford Road for the majority of the length of the corridor, however, these are not in line with LTN 1/20 standards and are in relatively poor condition. Along with the new parallel crossings at Kidlington Roundabout there is also a toucan crossing adjacent to the existing ramp down to Oxford Parkway.

The A44 Corridor Scheme has also improved active travel in the area by providing a new 4.5m shared path on the western side of the road along with additional crossings and public transport improvements. Similarly the Peartree Roundabout scheme and improvements brought forward by Oxford North have improved the environment for active travel users and buses by creating bus lanes and shared paths between Peartree and Wolvercote Roundabout and creating/improving crossings in the area. Particularly relevant for this application are new toucan crossings on the A44 (east) and A34 (south) arms of Peartree Roundabout.

The existing active travel and public transport infrastructure through Kidlington is of relatively high quality with shared paths and southbound bus lanes for different parts of the corridor. The intention is to improve sustainable travel through Kidlington in the future with additional bus and cycle lanes, however, designs are at an early stage.

In addition to the above, the Partial Review (PR) sites and Oxford North are also required to deliver/contribute towards the following infrastructure which would benefit the stadium:

- New Cycle Superhighway between Kidlington and Cutteslowe Roundabouts (2.5m cycle lanes and 2m footways either side of Oxford Road)
- New 2.5m cycle path through Cutteslowe Park connecting to the A40 overbridge.
- Pedestrian/cycle improvements to Cutteslowe Roundabout.
- New southbound bus lane on Bicester Road.
- New 1000 space mobility hub (park & ride) on the A44.
- Multiple new active travel crossings on Bicester Road and Oxford Road.
- New footbridge across the canal and improvements to the canal towpath.
- New LTN 1/20 compliant bridge from PR6b (currently North Oxford Golf Club) to Peartree P&R (subject to planning permission for PR6b and Peartree).
- Exploring the possibility of a station at Begbroke Science Park
- New southbound bus lane on A44 from Langford Lane to Cassington Road roundabout (bus lane already in place from Cassington Rd to Loop Farm)
- New shared paths from Bladon Roundabout to tie in with A44 Corridor Scheme.

The above information not only describes the transport improvements coming forward within this part of the network but also demonstrates the change of character in the area. Once Oxford North and the PR sites, along with the infrastructure improvements come forward, this will no longer be a rural/inter-urban location as it is now but will have urbanised characteristics, particularly in the emerging transport infrastructure. This will encourage driver behaviour change, slower vehicle speeds, encourage walking and cycling and contribute to making the highway network safer for all users.

Taking all of the above into consideration, I consider the proposed location to be highly sustainable in transport terms and an appropriate location for development which can make use of the high quality active travel routes which are in place and coming forward and the high public transport availability which will be discussed further in the next section and multiple routes vehicles have available (including access to the SRN).

Public Transport

The proposed site is well served by public transport with 13 buses per hour in each direction (26 total) with additional buses in the peak hours which will serve the proposed ancillary uses. These services connect the site with the city centre, Banbury, Bicester and Witney along with Marston and Headington via the 700 service which is due to be upgraded as part of the 'Eastern Arc' route. This will also improve connections to Cowley and Littlemore which will better serve fans from those areas.

In addition to these services the club also run matchday services, which are listed in table 5.3.5 of the TA Addendum and cover areas such as Didcot, Abingdon, Thame, Wheatley, Bicester, Witney and Carterton. These services will be monitored and improved if required, for example, as the stadium is moving north and there are not as many public transport services from the south of the county it could be beneficial to run an additional service or shuttle from the south.

However, the county council agrees with the approach of monitoring and surveying how fans travel and then providing any additional services at that point. This will be monitored and communicated via the Match Day Steering Group and Match Day Travel Plan, which will cover all matches not just those at capacity. The county council would like to see Kidlington Parish Council as well as fan groups such as OxVox and the Oxford United Supporters Panel included in the Steering Group to feedback any issues with match day operations.

For fans that wish to drive to games (parking at park and ride sites), the proposed strategy is to provide shuttle buses from the park and rides. The club has confirmed that this includes Peartree and Thornhill sites. This is in addition to shuttles from Eynsham, Redbridge and Seacourt. The same will apply for any future mobility hubs that come forward, such as those proposed on the A44 near the Oxford Airport and the A4074 near Grenoble Road.

The club has indicated the number of shuttles which would be running from each P&R and OCC is initially content with this number, however, this would need to be monitored as mentioned above, and shuttles can be reassigned between games if required.

Oxfordshire County Council are currently drafting an ambitious rail strategy which includes enabling new services, increased capacity and improved frequency. There are currently 2 trains per hour that go through Oxford Parkway on the Oxford-Marylebone line (stopping at Bicester Village, Thame and High Wycombe). East West Rail (EWR) which is coming forward in 2033 and will connect Oxford Parkway with Bletchley, Milton Keynes, Bedford and Cambridge, will increase this number by at least an additional 2 trains per hour.

Furthermore, the county council are working with Network Rail to bring the Cowley Branch Line back into operation as a passenger service by 2030. Whilst not confirmed, this would connect the site with Cowley and Littlemore and would offer fans from those areas along with the city centre an attractive option. As housing in east Oxford comes forward this adds greater importance for this route as we already know a large number of fans live in these areas.

There are plans in the future to increase frequency of the Oxford/Marylebone service (which the Cowley Branch Line would form part of) to 3 trains per hour, as well as potentially running at least 1 of the EWR trains to Didcot which could greatly help fans from the south of the county travel to the stadium. Additionally, there is also the potential for the new Bristol-Oxford service stopping at Oxford and then traveling onto Parkway before turning around.

In total, this would bring the total number of trains travelling to Parkway up to 6 per hour which would offer home and away fans frequent, fast and attractive travel options from a number of locations around within and outside the county. An important point which needs to be emphasised is the desire of football fans to use rail as their primary travel choice; the Campaign for Better Transport's Door to Turnstile report states that home fans are fairly evenly split between car and rail use, over half of away fans use train for at least some games and 36% of fans said they would like to use rail more. When considering that this takes into account all fans, including those of clubs where the stadium is not located close to a train station, it would suggest that train is likely to be a key mode of travel to the stadium for both home and away fans.

It should also be noted that PR8 (Begbroke Science Park) are currently exploring a new rail halt which would connect to Parkway and then continue to Oxford City and the Cowley Branch Line. This again would be beneficial to the club and the county council are supporting this by including within the emerging rail strategy, however, this is still at an early stage, as is the proposed station at Grove which could help fans from south/west of the county travel to the stadium sustainably. It should be noted that travel and transport planning for the stadium are not dependant upon these longer term measures.

Chiltern Railways have provided information on the requirements at the station and the queuing system. Pedestrian flows have been modelled in and out of the station

and are deemed acceptable. Additionally, when Oxford United played at Wembley in May 2024 all trains to Wembley went from Oxford Parkway; this transported significantly higher numbers of rail users than predicted for a standard matchday at the proposed stadium and operated successfully. The county council are therefore confident in the arrangements and support Chiltern Railways requests to further improve Oxford Parkway for all users.

Oxfordshire County Council welcomes the proposal to include public transport tickets with season and match day tickets and would work with the club and public transport operators to help facilitate this. The county council have recently introduced a multi-operator bus ticket covering most bus routes in Oxfordshire "MyBus Oxfordshire" - although this only covers bus, the arrangements behind it may be of use for the proposed season/match public transport tickets.

The county council also welcome the proposal to include a public transport information system to inform supporters of travel news or delays – a condition is recommended to secure this.

New bus stops on Oxford Road are proposed for the use of the stadium and its ancillary uses. These are welcome and would need to be equipped with real time passenger information - a S106 contribution will be required for this. The cost of a real time information sign is £14,893 per stop, therefore a contribution of £14,893 x 2 = £29,786 (Baxter April 2025) is required.

Current Stadium

The existing Oxford United stadium is located on Grenoble Road in south Oxford, adjacent to the areas of Greater Leys and Littlemore. The primary flow of traffic for fans accessing the stadium is from the A4074 although it can also be accessed from the B480 to the west and Brick Kiln Lane which allows access to Sandford-on-Thames. Grenoble Road is generally a single carriageway, 40mph road although the section between the A4074 and the first science park roundabout has 2 lanes either side. Despite the 40mph speed limit, speeds are often in excess of 50mph.

There are 8 large roundabouts in the 3.5km between the B480 and A4074 and 6 priority junctions, none of which have pedestrian/cycle priority. There are no signalised crossings for active travel users and little in the way of cycle infrastructure. There is a 2m footway on the northern side of Grenoble Road, although there are sections of this (around the old Priory pub which is not public highway and can therefore not be enforced) which get cars parked on them on matchdays. The wider cycle network is also generally poor in the area with very few formal cycle paths or priority for cyclists/pedestrians.

There is very little cycle parking at the ground (approximately 160 spaces). The provision is not well used despite the number being well below the modern standard required. This is likely due to the form and location. The cycle parking is located in an area which is not well overlooked or has surveillance, it is not covered and it is in the form of wheel racks which can be difficult to use and incompatible with some bikes.

The public transport options are also some of the poorest in the city with only 2 non-matchday services stopping at the stadium. The 3A which goes from the city centre twice an hour and takes approximately 30 minutes although does not go from the train station so is difficult to use for away fans, and the recently added 600 which forms part of the 'Eastern Arc' route and travels from Redbridge P&R to Thornhill P&R and goes through areas of Littlemore, Cowley and Headington. Fans who know the area are more likely to use the Blackbird Leys services which are more frequent and then walk to the stadium.

There are 1,942 free car parking spaces at the existing stadium. This includes 1095 in the main car park, 648 in the over-flow car park and 199 on Grenoble Road (which further adds the potential for conflict and worsens the environment for cyclists). With such high parking numbers and as a result traffic generation before and particularly after games it puts significant pressure on the Heyford Hill and Littlemore Roundabouts along with the Cowley Interchange.

Oxfordshire County Council's traffic data at the Littlemore and Heyford Hill Roundabouts and on the Southern By-Pass between Heyford Hill and Kennington Roundabouts (survey location numbers 00000280, 00000131, 00007210 & 00000514) shows that on Saturdays there is generally no increase in vehicle numbers before or after matches and in some cases the traffic flows on match days are lower than non-match days. On Tuesday evening games there is generally a small increase in traffic between 18:30pm and 19:00pm and a more noticeable increase between 21:30pm and 22:30pm on match days with all other time periods comparable.

Given the poor quality of active travel provision and public transport availability, combined with the large number of free parking spaces, it is clear why such a high percentage of fans travel by car (85%) to the existing stadium, although this figure is not representative of a match day.

Despite it not being the subject of this planning application, it should be recognised that relocating the stadium offers an opportunity to reduce a significant number of vehicular trips on the network, particularly around the junctions mentioned previously which would not only benefit residents in that area but also the wider highway network.

Site Strategy

Oxford United are adopting a vision-led approach to their transport strategy which is in line with the National Planning Policy Framework (NPPF) and is supported by the county council. This is required in order to achieve the modal shift required. With the sustainable travel options available, as discussed elsewhere, the county council believe this is achievable.

The strategy sets out key principles which will determine how fans travel and help to promote the use of active and sustainable travel, this is in line with Decide & Provide principles. Whilst some details will need to be finalised at condition and planning obligation stage through the Match Day Travel Plan, these key principles are:

- Delivering and contributing towards active travel infrastructure to ensure high-quality walking and cycling is an attractive and primary option for fans.
- Prioritising public transport infrastructure (delivering, contributing towards and ensuring good access) and working with public transport operators to ensure public transport is appealing and highly visible to fans.
- Providing a clear communication strategy, including VMS signs (conditioned) which directs vehicles away from the stadium and Oxford Parkway and to their closest P&R. Operating free shuttle services from these P&Rs to the stadium to make it a faster and cheaper option.
- Crowd and traffic management planning, using trained marshals. Managing pedestrian and cycle access to the stadium from Peartree and Oxford Parkway and into the ground. Controlling traffic on the roads around the stadium and at Oxford Parkway to ensure the safety of fans is prioritised.
- Implementation of a diversion on Oxford Road (except for emergency vehicles and buses) and parking measures at Oxford Parkway to ensure the safety of pedestrians and cyclists is prioritised and buses can operate effectively without being held up in queues for private vehicles. This will be discussed further in the following section.
- Implementation of a Match Day Steering Group with all relevant local stakeholders to help feedback any issues or changes that need to be made week to week.

This approach is in line with national and local policy, including Local Transport and Connectivity Plan (LTCP) policies 1, 10, 15, 18, 31, 33 & 35. The applicant's strategy, combined with the sustainable transport options proposed, enables opportunity for a significant shift in the way fans travel to games. This approach encouraging a reduction in vehicular trips on the network and helping to meet the targets within the LTCP.

The strategy increases use significantly on the Park & Rides which is in line with Oxfordshire County Council policy. There is expected to be a 6% increase in the use of the P&R's once the traffic filters are implemented. The county council have undertaken an exercise adding these numbers to the surveys undertaken by OUFC to understand if the P&R's have capacity.

The only Park & Ride that does not have sufficient capacity (34 spaces short) on a Saturday is Peartree, however, this calculation is based on no vehicles driving to Parkway. The county council does not believe this is a realistic scenario even with the measures in place which will be discussed in the following section, so capacity is not considered to be a material issue. It is also considered that future development of additional park and ride sites will provide significant additional capacity. All existing Park & Ride sites have spare capacity on weekdays.

Throughout the application process there have been multiple comments on the capacity at the Park & Rides noting that spaces should be reserved for city centre use and Oxfordshire residents. However, there is no policy wording that states the P&Rs are solely for city centre use and it is worth noting that the majority of fans attending an Oxford United match will be Oxfordshire residents. The P&Rs are intended to reduce impact on the highway network and promote sustainable modes

which is what would be achieved by implementing the club's transport strategy. Therefore, the use of these sites is considered acceptable.

Oxford Road & Oxford Parkway

Pedestrian modelling has been undertaken, by the applicant, for fans entering and exiting the stadium. Images of this modelling are shown in the TA and TA Addendums. This modelling indicates, particularly post-match, that the number of fans walking between the stadium and Oxford Parkway requires a large amount of carriageway space in addition to the footways. Thames Valley Police (TVP) are concerned with risk or conflict between vehicles and pedestrians and the risk of terrorist hostile vehicle attacks and have therefore stated that the road would need to be closed before and after matches, and Hostile Vehicle Mitigation (HVM) installed. This to ensure clear and safe movement of large volume of fans.

The county council have been working with TVP and OUFC, along with a number of other stakeholders (British Transport Police, Stagecoach, Oxford Bus Company, Chiltern Railways, Network Rail etc) throughout the consultation stage. Whilst understanding the need for the route diversion, the county council have been concerned about the original proposal to close the road to all vehicles and have required buses to be allowed through the diversion. This is vital for the transport strategy of the stadium and to allow the public transport network, including the Park & Ride, to be reliable and to continue to operate through diversion periods.

The club has now found an acceptable (to OCC, TVP and public transport operators) method of accommodating buses during the diversion, which involves installing hostile vehicle mitigation (HVM) either side of the temporary closure (at Kidlington Roundabout and north of the Oxford Parkway junction) and this includes an 'airlock' system which allows buses to enter an area where their authorisation can be checked and they can be held before being guided through the road closure by trained motorcycle escorts in a shuttle running system (up to 3 at a time). Marshals would be stationed throughout the closure to ensure fans are aware of buses and cleared from the route to ensure the safety of all users. This was discussed at a workshop with the bus operators who confirmed they were happy with the approach and the impact on their services. A number of financial contributions have been requested which will improve public transport journey time on the network as a whole, which will also mitigate the impact on public transport journey times.

The club have updated the pedestrian modelling to include the bus access; this shows that a 35-minute diversion would be needed for a full stadium. The transport modelling includes a 45-minute diversion allowing for set up and some contingency, which is considered sufficient to test the impact on the network, which will be discussed in the following section.

Throughout the consultation stage, several questions have been raised around the method of the pedestrian modelling. Officers have therefore sought advice from external third parties to ensure it is appropriate and sound. The club have used VisWalk as the software and followed the Fruin method; The Head of Travel Demand Management for the Olympic Delivery Authority for London 2012 who also worked

for Tottenham and Arsenal on their new stadiums, has confirmed that this is the same methodology used for those and is therefore considered appropriate.

It is worth noting that a large number of stadiums around the country have road closures before and after matches of varying lengths and forms, often including suspension of parking bays or holding of vehicles to allow priority for pedestrians and public transport. For example, Tottenham have a 65,000-seat stadium which includes agreement by Transport for London (TfL) to close the A1010 High Road (along with some minor roads) for up to an hour after matches. The A1010 is an important transport corridor in north London which is heavily used by buses and most fans would need to use to access the tube stations and bus stops. Despite the size of the stadium and the agreement in place, on average the road closure is only needed for 30 minutes.

Although the county council are satisfied in the use of the pedestrian modelling for assessing pedestrian flows before and after matches, it has not been demonstrated how pedestrians would exit the stadium during evacuation procedures. The applicant will require a certificate from the Safety Advisory Group (SAG) before they can bring the stadium into use, the SAG will need to see evacuation procedures along with all other safety protocols. The applicant has stated that this information is not currently available but that their confident evacuation protocols are acceptable. As the SAG certificate is provided post-planning, leaving this to that stage is at the applicant's risk as without the certificate they will not be able to hold events. However, Oxfordshire County Council and Thames Valley Police would like to see the details of this prior to commencement of development and as such a condition has been included.

In terms of Oxford Parkway, it is important for the county council's transport strategy that the site stays open as it is a key mobility hub with access for residents to both buses and trains. Oxford Road would be closed for a maximum of 35 minutes before and after matches, during which time residents and other users are able to access Oxford Parkway via the diversion route along Frieze Way, the A44 and A40. Before and after the diversion residents and users can access Parkway as usual.

The matter of fans potentially using Oxford Parkway as a car park for the proposed stadium has been considered. Measures are proposed to mitigate the opportunity for fans to use Parkway as a car park for the stadium (as they do at the current stadium). This is to support the transport strategies of both the club and the County Council, and to lessen the impact on the local highway network; certain measures would be implemented to discourage parking around match times as follows

The club will include information on their website around how to get to the ground: Oxford Parkway would not be included in this or in the information sent when fans purchase tickets. The Variable Messaging System (VMS) signs on local and strategic highway networks would also be directing fans to their closest P&R's rather than Parkway. Additionally, for fans travelling from the north or west, once the temporary closure is in place fans would need to follow the diversion which would add time to their journey and pass other P&R's where they could get a free shuttle bus to the ground which would likely be an incentive with the other measures the county council and Chiltern will be implementing.

It has been agreed in principle between the county council's network management team that manage Oxford Parkway (P&R) and Chiltern Railways that parking charges would be increased on match days in the car parks run by both organisations. The price and the timing is still to be determined which would need to go through a separate process post-planning but would be likely to increase from 2-3 hours before kick-off.

This should help mitigate the impact of the stadium whilst also allowing residents to still access the P&R for other uses (bus and train journeys). The county council have assessed the data using a permanent traffic count on the access road to Oxford Parkway and in 2023 67% of the total cars in for the day are already parking by 1pm (2 hours before 3pm kick-off). The percentage is lower for early kick offs but is still 33% by 10:30 (2 hours before 12:30 kick-off). For weekday evening games that percentage rises to 95% by 6pm.

Lastly, it has been agreed in principle that cars would be held in Parkway for 45 minutes after games (although this will be monitored and is subject to change). This not only discourages fans from driving and parking at Parkway but also creates a safer environment for fans and prioritises bus movements, such that they do not get held up in queues.

In terms of how that would impact other users, 7% of vehicles using Parkway on Saturdays (based on 2023 data) exit between 14:30-15:30 (hour after early kick-off games finish). For standard 3pm kick offs the percentage rises to 13% during the hour after the full-time whistle (17:00-18:00). These figures suggest that the proposed measures would have limited impact on other Parkway users. However, it is important that adequate signage and parking management is provided to ensure other users are aware of the measures and when matches are taking place. As such, Communication Strategy and Signage Strategy conditions have been included. With Peartree P&R and the proposed P&R on the A44 nearby it is important to note that users also have other options available.

Other measures proposed at Parkway include Chiltern Railways upgrading facilities at the station and reallocating parking bays on match days to ensure there is adequate space for queuing systems etc. Chiltern Railways have submitted their own response outlining these proposals, which the county council fully support. The club will be providing new steps down to the station from Oxford Road which is supported and will be included in the S278 agreement, however, land is required to be dedicated for this and as such Chiltern Railways will need to be party to any S106 agreement.

OUGC are aware of OCC proposals to develop a new transport depot at this site, which if implemented would lead to approximately 150 spaces being removed. This space reduction has been included in the club's transport assessment, along with the loss of up to 457 further spaces which the club has requested to reserve for match day officials etc (although the number of spaces is still to be agreed with the Council). There is sufficient capacity remaining for the existing users plus the expected increase in the future as a result of the Traffic Filters.

Traffic Generation

To understand the impact of the development on the Local Highway and Strategic Road Networks (SRN), the club has used the North Oxford VISSIM Model on advice from the county council. This model was produced by a consortium including all of the PR sites and was used to demonstrate their impact as part of their planning applications. The use of the model has been accepted at planning committee (for other developments) several times and been signed off previously by the Local Highway Authority and National Highways.

Whilst the club has been predominantly able to use the same base model for the ancillary uses, such as the conference centre, for weekdays, they have been required to develop evening and weekend scenarios to understand the impact of matches on the network.

Oxfordshire County Council has commissioned Pell Frischmann to assist in the development and assessment of the model as they were also used to audit the original model developed by the PR sites. Pell Frischmann were involved in meetings with the club and National Highways on the scope of the model, which is standard practise for any strategic site where a third-party auditor is being used; this allows any issues or changes required to be raised at the earliest opportunity. Pell Frischmann have also audited every stage of the modelling process and have provided reports to the county council on the Local Model Validation Report (LMVR), base model, future year scenarios and further amendments. These reports are included in Appendices A-C of this report.

Following each audit and report produced by Pell Frischmann, meetings have taken place between the club, Pell Frischmann and the county council to address the comments and understand any changes that need to be made in order for the model to be approved as a tool to assess the impact on the highway network. There are some outstanding issues which have not been addressed which can be found on Page 15 of Appendix C, these will be addressed below.

The Local Highway Authority is satisfied that the methodology used to assess the impact of the proposed development is appropriate to provide a reasonable prediction of the traffic impact of the development.

Oxfordshire County Council requested the following scenarios to be modelled:

- Weekday AM peak to understand impact of ancillary uses
- Weekday PM peak to understand impact before and after matches
- Saturday PM (to understand impact before and after standard 3pm matches)

As 12:30 kick-offs are now more common there was a discussion around whether or not this should also be a modelled scenario. However, having looked at the traffic data, although average flows are higher which would be expected, the increase is not significant enough to warrant an entire additional scenario. An example of the flow increase is the permanent traffic counter Oxfordshire County Council have on Oxford Road (00000174) adjacent to the proposed site. The county council have assessed the data for 2022, 2023 & 2024, removing the months of June and July

which are outside of the football season, in the half hour preceding matches (i.e. when the diversion would be in place) there is only a 0.7% increase in vehicle numbers at the earlier time.

It was therefore considered unnecessary to request this in addition to the scenarios mentioned above. However, this has been an issue which has been raised several times through the process by stakeholder groups and councillors. Therefore, to help demonstrate that the impact on the network at the earlier time is not significantly higher, the county council requested that the club undertake a sensitivity test using a factoring exercise based on the traffic data collected. This demonstrates that although there would be a slight increase in traffic and worsening of performance across the network (159.98 second delay for 11:30am-12:30pm compared to 145.61 second delay at 14:00pm-15:00pm) this is not considered significant or severe in highway terms.

The club has used Decide and Provide (D&P) Scenario 3 to model their impact plus the additional scenario modelling trips to Parkway as requested. It is important to stress that although the county council are content with this scenario, this is only acceptable on the basis of the required mitigation listed earlier in the document being provided. Only with this mitigation in place do the county council feel that the vehicular trip rates would lower enough to be in line with the mode split for Scenario 3.

The traffic modelling has assumed a 10-15% reduction in background traffic and this is considered acceptable on the basis of evidence from other sporting venues.

The county council asked the club to look into reductions in background traffic and the impact of VMS which would be implemented across the Local Highway Network and Strategic Road Network should permission be granted. The club provided some information in the original TA regarding impact of VMS signs and reduction in background traffic but to try and understand this in more detail the county council spoke to officers who had previously worked on other stadia and events as discussed previously.

Tottenham and Arsenal did not undertake traffic modelling for their stadiums as it was agreed that there would be a neutral effect on traffic and the highway network, although Tottenham did confirm that they have met their target of reducing car trips to the stadium from 60% in 2003 (old 36,000 capacity stadium) to 23% at the new 65,000 capacity stadium mainly due to traffic management and the communication strategy. However, London Olympics did put a lot of effort into reducing background traffic and developed a high-quality communication strategy to make residents and commuters aware of events so they could change their behaviour. The following is an extract from the monitoring report with further information provided within the '*Olympic Legacy Monitoring: Personal Travel Behaviour during the Games*' report:

As far as the success of the TDM programme is concerned, evidence indicated that Londoners listened to TDM advice and modified their behaviour. An average of 35% of Londoners changed their most important regular journeys on any given weekday during the Olympic Games. For example, data gathered as part of the Step Change programme indicated that 47% of Government staff made some modification to their work travel behaviour.

The club has also provided traffic data for the A33 outside Reading Football Club's stadium (24,000 capacity). The traffic flows on weekend and weekday matches are very similar and in some cases are lower when matches are on. This indicates that there is a significant reduction in background traffic caused by behavioural change to accommodate matches, assisted by the communication strategy in place.

The club has provided further information on the impact of VMS in Section 3 of the TA Addendum (April 25). 3.4.2 states *"The evidence provided above indicates that the level of diversion/reduction could be in the region of 30%, with the implementation of VMS assuming a number of variable message signs are installed, VMS information is corroborated by additional sources (for example advance messages on previous days, SAT-NAV and website/text alerts)."*

Pell Frischmann have raised that the core scenario should have been with 0% reduction in background traffic, however, with the proposed mitigation and alternative routes available in addition to the findings presented in the TA Addendum and above, the county council feel that the 10-15% reduction is robust. The LHA are therefore content with this approach.

Other outstanding points raised by Pell Frischmann on Page 15 of Appendix C which need addressing are:

- Vehicles driving through the temporary closure past the cut-off time – this has been discussed with Pell Frischmann who have explained this not a significant amount of vehicles which would not severely impact network and is likely to just be a quirk of the model.
- Pedestrian demand from crossings on Frieze Way and Oxford Road are low despite significant increase in pedestrians. Crossing cycle time operates at 120s which is top end of what might be expected – this has been discussed with the club and due to marshals being present to help crowd and traffic management on match days this is considered realistic. Outside of match days there will not be significant numbers of users so again this is acceptable. Oxford Road crossings can be amended and do not impact model, Frieze Way crossing will only be used heavily for 30 minutes so unlikely to have severe impact on the network. It would have been useful to demonstrate the impact at a shorter cycle time as this would likely have an impact, however, it is not deemed fundamental to the operation of the highway network.
- Remaining points raised are reporting issues that although should have been amended do not impact operation of model.

In the 'Without Parkway' scenarios, the modelling results show a worse impact in the weekday evenings than the weekends which is to be expected when taking into account the traffic flows of the PM peak hours in the week compared to weekend flows. Overall, the weekday evenings show a 116 second delay in the hour 19:00-20:00 across the modelled area compared to the reference case (without OUFC). The biggest impact is on Route 3 (A4144 Woodstock Road to A44 Woodstock Road) which shows a 389 second (42%) increase in journey time in the first hour (6pm-7pm) and an 889 second (128%) delay in the second hour (7pm to 8pm).

This route is approximately 9 kilometres long so at its worst time (19:00 or 20:00) the delay equates to a 98.7 second (1.6 minute) delay per kilometre. However, this is with only a 10% reduction in background traffic, if background traffic reduces further which is likely based on evidence, then this delay will also reduce.

On weekends the largest impact is on Route 5 (A34 Kidlington turn to Loop Farm Roundabout) which sees a 116 second (43%) increase in journey time in the first hour and a 643 second (241%) increased journey time in the second hour. Similarly to above when split per kilometre (approximately 4.5km) this equates to a 143 second delay per kilometre. There are impacts on bus journey times in the weekday scenarios (weekends are negligible), particularly to the 2 and 2A which is a concern, however, this is mainly due to the shuttle working during the temporary closure. Bus operators were content with this at the workshops and therefore the delays are considered acceptable.

The additional modelling undertaken for the scenario including vehicles driving to Parkway again shows an impact on the highway network but with the worst hour being 20:00-21:00 in the weekday evenings, this is likely due to the model now including more vehicles travelling on Oxford Road which is affected by the diversion which creates a latent impact on the network, whilst this worsens the network in general the impact is at a time where less essential trips are occurring. This shows the delay is 154.47 seconds for all vehicles across the modelled network.

On a Saturday the worst delay across the network for all vehicles is 41.1 seconds between 12:30 and 13:30. Delays in the other modelled hours are not significant. Route 5 (A34 SB to A4260 Frieze Way) is particularly impacted between 12:30-13:30 where there is a 262% increase in journey time from the reference case. This again shows the need for the mitigation requested which would reduce vehicles from the network by helping to provide sustainable travel choices.

The weekday AM modelling for ancillary uses (primarily conference centre) does not show a significant impact on the network. National Highways have stated that their primary concern is the weekday impact, however, have confirmed that queuing does not extend onto the A34 off-slips and that MOVA and UTC takeover, which are already in place but not included in the model, will further help control build up of traffic.

The proposed mobility hub (P&R) on the A44 will directly impact Route 3 and Route 5 by reducing the number of vehicles on those corridors which should reduce delays and the impact of the development. As such contributions have been requested.

The modelling generally shows bigger impacts in terms of journey time delays before matches due to the level of background traffic. The impact of matchday traffic after matches is significantly less with the network performing worse in the first hour and then dropping significantly in the second hour. This aligns with traffic data for Littlemore Roundabout, Heyford Hill Roundabout and on the Southern-By-Pass which was discussed previously which shows higher traffic flows before matches than after, although comparable to non-match days (on Saturdays) and shows that on Tuesdays there is a spike in traffic for the first 30 minutes after games before dropping back to base line levels.

The club have noted in Paragraph 7.5.4 of the TA Addendum how further improvements could be made to the model, this includes adding MOVA to Peartree, Cutteslowe and Wolvercote Roundabouts which would improve the performance and better reflect existing operation of the junctions (MOVA is already in place which makes green time more efficient between arms). It should also be added that the requested financial contributions to the new mobility hub on the A44, Average Speed Cameras on the ring road, and contributions towards the Cowley Branch Line, amongst others, would help reduce background traffic whilst also further improving the sustainability of the area.

Overall, in the opinion of the Local Highway Authority, whilst there is a traffic impact from the development, it could not be considered severe in NPPF para. 116 terms; in part because it is largely outside of network peak hours when more essential trips are taking place and the impact it does show it is for a relatively short period of time and only 28 times on average across a season. Therefore, Oxfordshire County Council do not object to the proposal on highway impact grounds.

Cycle Parking

446 new cycle parking bays would be provided at the stadium which could be used by fans and users of the ancillary uses. An additional 75 spaces would also be provided at Oxford Parkway which could be used by fans on match days but would also benefit the station on non-match days. This is particularly important for when the new rail services are operational.

There are currently 150 cycle spaces at Parkway with utilisation being on average under 50%. This leaves at least 75 spaces available in addition to the new cycle parking provision mentioned above. This brings the total provision to 596 which is in line with Oxfordshire County Council standards. Additionally, further cycle parking improvements at Oxford Parkway will be coming forward through East West Rail.

Although the county council would prefer all spaces to be provided at the stadium, there are benefits to providing some at Parkway and if cycling to the ground from the south it may be easier to walk from Parkway once the road is closed and there are higher numbers of pedestrians. Therefore, the county council accepts the level of cycle provision proposed. A condition has been added to agree the details of the provision which will need to be covered, secure and accessible for all users and bikes.

Car Parking

161 car parking bays are proposed at the stadium including 80 accessible bays (on match days, outside of match days there would be 10) and 41 EV bays. There would need to be passive EV provision for the remaining bays and this will be conditioned.

Fans will be advised there is no match day parking at the stadium or Oxford Parkway (to be agreed with Chiltern Railways through the Signage Strategy Condition) when purchasing tickets and through VMS signs and will be directed to their closest P&R's. On-site parking would be monitored through Automatic Number Plate Recognition (ANPR) cameras; the county council would need to see details of this and therefore have included a condition.

A match day Controlled Parking Zone (CPZ) will be required for a 2km (approximate) distance from the site, similar to the existing matchday CPZs around the current stadium which are managed effectively by the county council. Contributions have been requested for the design, consultation and implementation of this along with costs towards additional enforcement. Residents within this zone would need to apply to the county council for permits, although these are lower than standard residential permits (currently £20 annually in the existing matchday CPZs but subject to review). It is at the clubs discretion if they wish to pay for residents permits within this zone for a set time, however, this is not something the county council can request through the planning process. It should be noted that the PR sites are coming forward with CPZ's built in but will need to also cover matchday timings, should planning permission be granted.

Parking will be monitored through the S106 agreement and should it be required a further CPZ for an additional kilometre will be implemented. There are a number of privately managed car parks in the area such as the Cutteslowe Park car park on Harbord Road and Sainsburys in Kidlington which could be used by supporters. However, these will need to be managed by the operators as the Local Highway Authority do not have powers to enforce private land. The club will need to help manage car parking at Stratfield Brake through the Crowd & Traffic Management Strategy.

The club would also be requesting to reserve up to 457 spaces at Oxford Parkway. Whilst this has been agreed in principle the number of spaces is still to be agreed and it would need to go through a separate process post-planning similar to the temporary closure and other measures at Parkway. Any spaces reserved would be charged the higher matchday fee and are expected to be filled before the modelled period and diversion.

Site Access

Any access works or works to be carried out on the public highway would require a Section 278 Agreement and require technical approval. This is a separate process post-planning and would require additional road safety audits and further work alongside Oxfordshire County Council's Highway Agreements team. However, an engineer has assessed the proposed works and is satisfied they are feasible and

can progress to detailed design. The following comments will need to be taken into account at detailed design stage.

- Vehicle tracking for both the primary access off Frieze Way and the emergency access off Oxford Road has been assessed and is considered acceptable. This allows emergency access from both directions as emergency vehicles will be permitted from Oxford Road at any time. The tracking also shows emergency vehicles can also safely manoeuvre around the perimeter of the stadium.
- The paths along Frieze Way will need to tie-in with existing arrangements at Kidlington Roundabout.
- Need to carefully consider the interaction of cycle lanes at bus stops to avoid any potential conflict.
- The proposed crossings and the shared path on the western side of Frieze Way will require street lighting. The main carriageway does not require lighting other than in areas of potential conflict. Lighting specifically for the shared path can use shorter columns to assist with ecological protection. A full street lighting design will be required at technical approval stage.
- High friction surfacing will be required on approach to proposed crossings.
- The break in the Vehicle Restraint System (VRS) on the central reserve on Frieze Way will need to be shown and must show how the VRS terminals are to be accommodated.
- The speed limit on Frieze Way should be reduced to 40mph, this will require a variation of the Traffic Regulation Order which can be done before the S278 works are signed off. Although this process is separate to planning permission.
- The shared path along Frieze Way should have priority over any farm accesses, however, this can be discussed further at detailed design stage.
- Hostile Vehicle Mitigation needs to be considered carefully. This will need to be agreed between the county council, the club and Thames Valley Police prior to the Section 278 agreement being completed. Commuted sums will be applied to any apparatus on the highway that needs to be maintained by the county council.
- As the steps between Oxford Parkway and Oxford Road are not solely within public highway land, Chiltern Railways who own the land will need to be party to the S106 agreement and dedicate the land to Oxfordshire County Council to maintain. The principle of this has been agreed with Chiltern Railways. The steps will require illumination and will be subject to agreement from the county council's Structures team.

Travel Plans

Travel Plans will play an important part in ensuring the operation of the site is in line with the strategy as set out above. The travel plans for the individual elements will be conditioned and monitored as is standard practise. Oxfordshire County Council have seen sufficient detail of the match day operations to feel confident in the acceptability and deliverability of the Matchday Travel Plan and are content with this being progressed to condition stage.

The Applicant has submitted a framework travel plan with this application, this plan is acceptable for this stage of the application however it would need to be updated to a full travel plan prior to the first occupation of this site. Details of the information required in the full travel plan can be obtained from the Oxfordshire County Council guidance document; *Transport for new developments, Transport Assessments and Travel Plans* (March 2014). This travel plan would need to provide baseline travel information, modal shift targets and a detailed action plan and budget for the delivery of these targets.

Each of the land uses over the threshold set out in the OCC guidance document would require a supplemental travel plan or travel plan statement, these plans should outline how they will contribute to archiving the overall targets in the framework travel plan. Conditions are recommended for each of the travel plans.

Summary

The application site is in a highly sustainable location in highway and connectivity terms, as discussed throughout the report, and in transport terms meets all the criteria to be considered acceptable. The benefits of the site include:

- Availability of public transport services, both in terms of bus and rail, with further services coming forward over the next few years.
- Proximity to multiple Park and Rides which can intercept fans travelling by car to the site.
- High quality active travel infrastructure coming forward which would make walking and cycling to site easy and attractive.
- A highway network which has good access to the Strategic Road Network and multiple routes to the site.
- Adjacent to large residential developments which may mean a higher number of fans living within walking and cycling distance.

In terms of impacts, whilst the temporary closure of Oxford Road is beneficial for pedestrians it does impact the highway network which is demonstrated by the micro-simulation modelling.

Whilst the modelling does show delays, it also shows that these delays do not last for a significant amount of time are largely outside of peak times and on average take place 28 times per year (total split between Saturday's and weekday evenings). This corresponds with the impact of the existing stadium which despite having a smaller capacity, due to the sustainability of the proposed site and the measures to be implemented to prevent car use, generates a higher number of trips than predicted at the proposed stadium. The impact will be further reduced by the mitigation requested, such as the Cowley Branch Line and proposed A44 mobility hub which will further reduce vehicular trips on the highway network.

The impact demonstrated is considered acceptable in highway terms, as is the impact on Oxford Parkway. The club has a clear vision-led approach to the transport strategy which the Local Highway Authority supports. This promotes active and

sustainable transport modes and in partnership with local stakeholders prioritises the safety of fans.

The sustainable location, combined with the proposed transport strategy for the site is in line with national and local transport policy. This offers fans and Oxfordshire residents the opportunity to travel sustainably to a site situated in an area of growth with an already high-quality integrated transport network which will only improve in the future.

As such, Oxfordshire County Council as the Local Highway Authority do not object to the proposal on highway grounds.

Officer's Name: Will Madgwick

Officer's Title: Technical Lead

Date: 23/05/2025

Appendix A: Pell Frischmann Base Model Audit

Appendix B: Pell Frischmann Base & Forecast Model Audit

Appendix C: Pell Frischmann Model Addendum Audit

Appendix D: Draft Heads of Terms Table – Highways

Application no: 24/00539/F

Location: Land To The East Of Stratfield Brake And West Of Oxford Parkway Railway Station, Oxford Road, Kidlington

Lead Local Flood Authority

Recommendation:

No Objection Subject to conditions (see OCC's LLFA comments in OCC's responses dated 09/04/24 and 07/03/25).

Comments:

In our previous responses we requested planning conditions requiring the approval of a drainage strategy and detailed drainage design prior to the commencement of development. The comments in the responses from Cherwell District Council's drainage officer dated 19/03/24 and Thames Water dated 12/03/2025 must be taken into consideration when applying to discharge these conditions.

Officer's Name: Shada Hasan

Officer's Title: Technical Lead – SUDs drainage engineer

Date: 03/04/2025

Application no: 24/00539/F

Location: Land To The East Of Stratfield Brake And West Of Oxford Parkway Railway Station, Oxford Road, Kidlington

Archaeology

Recommendation:

No objection subject to conditions

Detailed comments:

Thank you for reconsulting us on this application. The newly submitted documents do not alter our previous advice.

Officer's Name: Oxfordshire County Archaeological Service

Officer's Title: Planning Archaeologist

Date: 19/03/2025

RESPONSE TO CONSULTATION ON THE FOLLOWING DEVELOPMENT PROPOSAL

District: Cherwell

Application No: 24/00539/F

Proposal: Erection of a stadium (Use Class F2) with flexible commercial and community facilities and uses including for conferences, exhibitions, education, and other events, club shop, public restaurant, bar, health and wellbeing facility/clinic, and gym (Use Class E/Sui Generis), hotel (Use Class C1), external concourse/fan-zone, car and cycle parking, access and highway works, utilities, public realm, landscaping and all associated and ancillary works and structures

Location: Land To The East Of Stratfield Brake And West Of Oxford Parkway Railway Station, Oxford Road, Kidlington

LOCAL MEMBER VIEWS

Cllr: Ian Middleton

Division: Kidlington East

Comments:

Response to ALTERNATIVE SITE ASSESSMENT ADDENDUM March 2025

Ian Middleton – Member for Kidlington East Division

The Alternative Site Assessment Addendum (ASA Addendum) for Oxford United Football Club's proposed stadium development raises significant concerns regarding the adequacy of evidence supporting the consideration of alternative sites and the justification for development on a Green Belt site. Namely :

1. Insufficient Evidence of Availability:

The ASA Addendum repeatedly states that certain sites are unavailable based on limited or anecdotal evidence, such as landowner intentions being "unknown" or "understood" to be unwilling to sell. For example, Site 28 (Land north of Oxford Parkway Station) is discounted based on an alleged refusal by the landowner, but no formal documentation or detailed negotiations are provided to substantiate this claim.

Similarly, Site 30 (Land near Pear Tree Park and Ride) is dismissed based on an email from Merton College stating the site is not available for a stadium. The

Council has requested further evidence, such as whether market value was offered, which has not been provided.

2. Inconsistent Methodology:

The report lacks consistency in its methodology for assessing sites. I would agree with Cherwell District Council's criticism of the RAG system that has been used for being unclear and not well-reasoned. This undermines the robustness of the site selection process.

The Green Belt analysis is grouped with landscape and visual considerations, which conflates spatial planning issues with qualitative assessments. This approach fails to provide a nuanced understanding of each site's suitability.

3. Exclusion of Potentially Suitable Sites:

The ASA Addendum excludes certain sites without sufficient justification. For instance, Site 24 is not assessed for landscape impacts because the Heritage Assessment deemed it unsuitable. However, this exclusion prevents a comprehensive evaluation of all potential sites.

The Campaign to Protect Rural England (CPRE) has questioned the exclusion of brownfield sites, such as the Unipart site in Oxford, which could potentially meet the club's needs without encroaching on the Green Belt.

4. Limited Engagement with Landowners:

The Addendum does not demonstrate proactive engagement with landowners to explore the availability of sites. CDC has requested more comprehensive evidence regarding the availability of Site 27 (Kassam Stadium), but the ASA Addendum fails to address public claims that the landowner may be willing to allow continued use of the stadium.

I have had previous contact with Firoz Kassam about the club's relationship with him and the stadium company (see annex 1). He has confirmed that no approaches have been made to him or his company with regard to re-negotiating the lease or licence on the stadium for the club to remain beyond 2026. This contradicts the club's claim that they have tried to negotiate an extension of the licence but the Mr Kassam has refused.

It's also notable that the club is currently in negotiations with the Stadium Company to remain at the Kassam for at least another 2 years whilst the new stadium was built (assuming it received planning consent). All this appears to fly in the face of the club's claims that they have no choice but to leave.

There is also clear documented evidence that OUFC put themselves in the position of losing their right to renew their existing licence when they enacted the Force Majeure clause in their previous licence which contained a right to renew for a further 20 years (see annex 2). By doing so, they gave the stadium company the opportunity to cancel their licence and so essentially made themselves homeless leading to the necessity to sign another licence with no renewal clause and more onerous conditions.

Recent messaging from the club appears to pivot away from claims that they could not re-negotiate their remaining at the Kassam Stadium and instead cites problems with the terms of their current licence which they say prevent them from gaining supplementary income from merchandising and food concessions at the stadium. That may well be the case, but financial restrictions on the club are a commercial matter that they agreed to when signing their current licence. Lack of commercial advantage is not a valid special circumstance by which to justify development on Green Belt.

Lack of Justification for Green Belt Development

1. Failure to Demonstrate Very Special Circumstances:

The ASA Addendum does not adequately justify why the proposed development on a Green Belt site is necessary. While it acknowledges the Green Belt designation as a constraint, it does not provide compelling evidence that no other feasible alternatives exist.

The National Planning Policy Framework (NPPF) requires "very special circumstances" to justify Green Belt development. The ASA Addendum's reliance on the site's availability and proximity to sustainable transport modes does not meet this high threshold.

2. Environmental and Visual Impacts:

The ASA Addendum acknowledges that the proposed site would lead to harm to the Green Belt and landscape. The Landscape and Visual Alternative Sites Assessment (LVASA) highlights significant adverse effects on the site's openness and visual character, which contradicts the claim that the site is suitable for development.

3. Inadequate Mitigation Strategies:

The ASA Addendum does not provide sufficient detail on how the environmental and visual impacts of the development would be mitigated. For example, the southern parcel of the site is deemed unsuitable due to landscape constraints, yet the northern parcel is proposed for development without addressing the broader impacts on the Green Belt.

While the Alternative Site Assessment (ASA) and its Addendum provide a detailed evaluation of potential sites for the proposed stadium, there are several areas where the argument that all alternative sites have been properly considered can be challenged. These include the methodology, transparency, and exclusion of certain sites that may warrant further investigation.

4. Methodology and Scope

The methodology used in the ASA relies heavily on predefined criteria, such as proximity to sustainable transport nodes, availability, and planning constraints. However:

5. Exclusion of Sites Based on Proximity to Transport Nodes:

The ASA prioritizes sites within 2km of a sustainable transport node, but this criterion may unnecessarily exclude sites that could be made accessible through infrastructure improvements. For example, the Campaign to Protect Rural England (CPRE) has questioned the exclusion of brownfield sites like the Unipart site in Oxford, which may be viable despite not meeting this criterion.

6. Green Belt Considerations:

While the ASA acknowledges the Green Belt designation as a constraint, it does not fully explore whether "Very Special Circumstances" could be demonstrated for certain sites. This is particularly relevant given the precedent of Green Belt releases for significant developments in other areas.

7. Transparency of Availability

The ASA discounts several sites based on availability, but the evidence provided is inconsistent and insufficient in some cases:

- **Land near Pear Tree Park and Ride (Site 30):** The ASA relies on an email from Merton College stating the site is unavailable, but it does not clarify whether market value was offered or whether negotiations were pursued to overcome this objection.
- **Kassam Stadium (Site 27):** The ASA states the landowner is unwilling to allow continued use or sell the site, but public statements from the landowner suggest otherwise. This inconsistency undermines the credibility of the availability argument.
- **Sites with Unknown Landowner Intentions:** Several sites are discounted with the justification that "landowner intentions are unknown." This lack of proactive engagement with landowners raises questions about whether all reasonable efforts were made to confirm availability.

8. Exclusion of Sites

The ASA does not provide sufficient justification for excluding certain sites from the assessment:

- **Unipart Site in Oxford:** This brownfield site was mentioned by CPRE as a potentially suitable location but was excluded from the ASA. The rationale for its exclusion is unclear, as proximity to transport nodes may not be an overriding constraint if infrastructure improvements are considered. Further investigation could reveal its feasibility.
- **Other Brownfield Sites:** The ASA does not appear to have comprehensively assessed all brownfield sites within the search radius, which could align with national planning policy favouring brownfield development over Green Belt releases.
- **Sites Outside the 7-Mile Radius:** The ASA limits its search to a 7-mile radius based on discussions with the EFL, but this constraint may exclude sites that could be viable with improved transport links or other mitigation measures.

9. Lack of Detailed Investigation

For some sites, the ASA relies on high-level assessments without conducting detailed investigations:

- **Landscape and Visual Impacts:** While the ASA includes landscape assessments, it does not always provide sufficient evidence to justify the exclusion of sites based on visual impacts. For example, sites like Land south of Thornhill Park & Ride (Site 8) are deemed unsuitable due to landscape harm, but mitigation measures such as screening or design adjustments are not fully explored.
- **Flood Risk:** Sites in Flood Zone 3 are excluded without considering whether flood mitigation measures could make them viable.

10. Public and Stakeholder Concerns

The ASA does not adequately address concerns raised by stakeholders and the public:

- **Public Comments:** A significant number of public comments have questioned the exclusion of certain sites, including the Kassam Stadium and other brownfield locations. These concerns suggest that the ASA may not have fully considered all reasonable alternatives.

- **Stakeholder Feedback:** CPRE and other organizations have raised valid points about the methodology and site exclusions, which have not been sufficiently addressed in the ASA Addendum.

11. Sites Excluded Due to Planning Constraints

- **Sites in Flood Zone 3:**

Sites such as Seacourt Park and Ride (Site 35) and Land adjacent to Binsey Lane (Site 38) were excluded due to significant flood risk constraints without exploring potential mitigation measures. However this is a concern that the applicants have addressed on the site under application.

- **Sites with Green Belt Designation:**

Many sites were excluded due to their location in the Green Belt, including Site 24 (Land West of Oxford Airport) and Site 29 (Land near Marston). While the ASA acknowledges the need for "Very Special Circumstances," it does not fully explore whether these could be demonstrated for certain sites. It's notable that the site under application is also located within Green Belt but this has not deterred the applicant from pursuing it. The question then is why have they not followed a similar rationale and excluded this site?

Comments on specific sites considered unsuitable

1. Site 2: Oxford City Sports Park

Reason for Discounting: The site is unavailable as it is currently used as Oxford United's training facility and provides community sports facilities. It is also in the Green Belt, and development would lead to harm to its openness.

All these concerns could also apply to the site under consideration. It's arguable that if this site is already being used by OUFC for training purposes, it would be even more suitable as a site for a potential stadium.

2. Site 3: Land to the North of Horspath Road

Reason for Discounting: The site is unavailable as it is in active use by sports clubs, including Oxford Quins RFC. It is in the Green Belt, and development would lead to harm to the openness and landscape.

However there is no evidence that this site has been properly considered or that the landowners have been approached.

3. **Site 5: Land West of Marston**

Reason for Discounting: The site is unavailable as part of it is allocated for residential development, and another part is let to an occupier with a life interest. It is in the Green Belt and adjacent to Old Marston Conservation Area, with potential harm to heritage assets.

No evidence has been provided that the landowners have been approached

4. **Site 8: Land South of Thornhill Park & Ride**

Reason for Discounting: The site is unavailable as it is being promoted for alternative uses (biomedical research campus). It is in the Green Belt, with significant landscape and heritage constraints.

No evidence has been provided that the landowners have been approached

5. **Site 12: Land to the East of Heyford Hill Lane**

Reason for Discounting: The site is unavailable as it is actively being promoted for residential development. It is in the Green Belt, with significant visual impacts and proximity to sensitive ecological areas.

No evidence has been provided that the landowners have been approached. The description says that the landowners intentions are unknown. The restrictions due to ecological sensitivity and visual impacts could also be applied to the site under application. No consideration appears to have been given to mitigation options.

6. **Site 27: Kassam Stadium**

Reason for Discounting: The site is unavailable as the landowner has confirmed they are unwilling to sell or allow continued use of the stadium. It is allocated for residential development in the local plan.

No evidence that the landowners have been approached. In fact there is evidence that they haven't been approached in any meaningful way (see appendix 1)

7. **Site 28: Land North of Oxford Parkway Station**

Reason for Discounting: The site is unavailable as the landowner is unwilling to sell, and the majority of the land is safeguarded for East-West Rail development. It is also in the Green Belt.

No evidence that the landowners have been approached. Again, green belt designation also applies to the site under application.

8. Site 29: Land Near to Marston

Reason for Discounting: The site is unavailable as part of it is allocated for access improvements and public open space for the Bayswater Brook development. It is in the Green Belt, with significant landscape and visual constraints.

Further engagement with the landowner does not appear to have been pursued. Again the same restrictions with regard to green belt designation and visual constraints could be applied to the site under application

9. Site 30: Land Near to Pear Tree Park and Ride

Reason for Discounting: The site is unavailable as Merton College has confirmed it is being promoted for mixed-use development. It is no longer in the Green Belt but is allocated for residential use.

No evidence is provided confirming the position with Merton.

10. Site 32: Land at Oxford Airport

Reason for Discounting: The site is unavailable as the landowner is pursuing alternative development. It is in the Green Belt and within an airport safeguarding zone, where height restrictions and lighting constraints make stadium development unfeasible.

No evidence that the landowners have been approached or that such restrictions apply.

Key Themes in Discounting Sites

- **Availability:** Many sites were deemed unavailable due to active use, landowner unwillingness, or promotion for alternative uses. However in most case no evidence is provided to confirm this.
- **Green Belt Constraints:** Several sites were discounted due to their location in the Green Belt, where development would harm openness and require "very special circumstances". Similar restrictions apply to the site under application but this has not stopped the applicant from pursuing it.
- **Planning and Environmental Constraints:** Sites were discounted due to flood risk, proximity to heritage assets, ecological sensitivity, or visual impacts. Yet again some of these issues also apply to the site under application, particularly

the ecological sensitivity and visual impacts. This has not prevented the applicant from pursuing it.

1. Availability

- **Kassam Stadium (Site 27):**

The applicant continues to claim that the landowner has confirmed they are not willing to allow continued use or sell the site. They also claim that additionally, the restrictive covenant requiring football use expires in October 2026, and the site is allocated for residential development.

The covenant could easily be extended and the site is not 'allocated' for residential development. The City Council local plan has simply stated that, should the stadium site become available, it could be suitable for residential development. That is a very different position to that being claimed.

Appendix 1 (below) also suggests that no formal approaches have been made to the landowner to allow the club to stay at this location.

2. Planning Constraints

- **Green Belt Designation:** This also applies to the site under consideration
- **Flood Risk:** This also applies to the site under consideration.

3. Environmental and Visual Impacts

- **Landscape Sensitivity:** Sites such as Land south of Thornhill Park & Ride (Site 8) and Land near Marston (Site 29) were deemed to have significant landscape and visual impacts, including harm to the openness of the Green Belt and views from surrounding areas. Although this could also apply to the site under consideration.
- **Proximity to Protected Areas:** Some sites are near sensitive ecological designations, such as Port Meadow SAC and SSSI, which further restrict development potential. But again the site under consideration is adjacent to a Woodland Trust site and has significant biodiversity value in itself.

4. Suitability

- **Size and Shape:** Some sites, such as Oxford Greyhound Stadium (Site 25), do not meet the minimum size requirements for a stadium and associated facilities. But it should be noted that the site under consideration does also not meet the size requirements originally stipulated in the applicants site assessment. This has led to the exclusion of a number of sites of similar size whilst this one remains

the favourite.

- **Accessibility:** Claims that site like the Land off Henley Road (Site 11) and Land near Marston (Site 29) are not within walking distance (2km) of a major sustainable transport node, make them less accessible by sustainable modes of transport. This may be the case, but the site under consideration is also limited in access to sustainable transport because of the requirement for road closures between it and Parkway Station in order to access the rail network.

All alternative sites have not been properly considered

The report claims to be a comprehensive assessment of available sites. However this is questionable because of issues with methodology, transparency, and the exclusion of certain sites:

1. Methodology Concerns

- **Limited Search Radius:** The ASA restricts its search to a 7-mile radius based on discussions with the EFL. This arbitrary boundary may exclude potentially viable sites outside this radius, especially if transport infrastructure improvements could make them accessible. The applicant has provided no evidence or precedent to prove that the 7 mile radius is an EFL requirement. It also seems to be entirely based on an arbitrary naming principle whereby the club claim that they could no longer call themselves Oxford United if they exceed the 7 mile limit. Even if this was true (an no evidence has been provided to support this), it would seem fairly expedient to simply change the name of the club to Oxford County to enable it to cast a much wider net in its search for available sites. This would not be the first time a club has made such a change. Even the current name of OUFC is not their original designation.
- **Proximity to Transport Nodes:** The ASA prioritizes sites within 2km of a sustainable transport node, potentially excluding sites that could be made accessible through infrastructure upgrades. For example, brownfield sites like the Unipart site in Oxford.
- **Green Belt Analysis:** The ASA groups Green Belt considerations with landscape and visual impacts, rather than assessing them separately. This approach may overlook opportunities to demonstrate "Very Special Circumstances" for Green Belt release, as required by national policy.

2. Transparency Issues

- **Availability of Sites:** The report discounts several sites based on availability without providing sufficient evidence:

Site 30 (Land near Pear Tree Park and Ride): The ASA relies on an email from Merton College stating the site is unavailable but does not clarify whether market value was offered or whether negotiations were pursued.

Site 27 (Kassam Stadium): The ASA states the landowner is unwilling to allow continued use or sell the site, but public statements from the landowner suggest conflicting information.

Sites with Unknown Landowner Intentions: Several sites are excluded with the justification that "landowner intentions are unknown," raising questions about whether proactive engagement with landowners was undertaken.

Exclusion of Sites: The ASA does not provide sufficient justification for excluding certain sites, especially those identified as a potentially suitable brownfield locations.

3. Exclusion of Viable Sites

- **Brownfield Sites:** The ASA does not appear to have comprehensively assessed all brownfield sites within the search radius, which could align with national planning policy favouring brownfield development over Green Belt releases.
- **Flood Risk Sites:** Sites in Flood Zone 3, such as Seacourt Park and Ride (Site 35), are excluded without exploring whether flood mitigation measures could make them viable.
- **Sites Outside the 7-Mile Radius:** The exclusion of sites outside the 7-mile radius may overlook locations that could be made viable with improved transport links.

4. Lack of Detailed Investigation

- **High-Level Assessments:** For some sites, the ASA relies on high-level assessments without conducting detailed investigations into constraints such as flood risk, landscape impacts, or heritage concerns. For example:
- **Site 8 (Land south of Thornhill Park & Ride):** Excluded due to landscape harm, but mitigation measures such as screening or design adjustments are not fully explored.
- **Flood Risk:** Sites in Flood Zone 3 are excluded without considering whether flood mitigation measures could make them viable.

5. Stakeholder and Public Concerns

- **Public Comments:** A significant number of public comments have questioned the exclusion of certain sites, including the Kassam Stadium and other brownfield locations. These concerns suggest that the ASA may not have fully considered all reasonable alternatives.
- **Stakeholder Feedback:** CPRE and other organizations have raised valid points about the methodology and site exclusions, which have not been sufficiently addressed in the ASA Addendum.

6. Inconsistencies in Evidence

- **Conflicting Statements:** The ASA's conclusions about site availability sometimes conflict with publicly available information. For example, the Kassam Stadium's exclusion is based on the landowner's unwillingness to sell, but public statements suggest otherwise (see Appendix
- **Insufficient Evidence:** The ASA does not provide detailed evidence to support claims of site unavailability, particularly for sites like Site 30 (Land near Pear Tree Park and Ride) and Site 28 (Land north of Oxford Parkway Station).

7. Limited Exploration of Mitigation Measures

- **Flood Risk Mitigation:** Sites excluded due to flood risk constraints, such as Seacourt Park and Ride (Site 35), are not assessed for potential flood mitigation measures.
- **Landscape and Visual Impacts:** Sites excluded due to landscape harm, such as Site 8 (Land south of Thornhill Park & Ride), are not assessed for potential mitigation strategies like screening or design adjustments.

Exclusion of other sites

1. Unipart Site in Oxford

- **Reason for Exclusion:** CPRE raised concerns that the Unipart site, a brownfield location, was excluded despite its potential suitability. The ASA does not provide a clear rationale for its exclusion, other than proximity to transport nodes not being an EFL requirement.
- **Potential Viability:** As a brownfield site, it aligns with national planning policy favouring redevelopment over Green Belt releases. Infrastructure improvements could address accessibility concerns.

2. Sites Outside the 7-Mile Radius

- The report states that the 7-mile radius was adopted based on discussions with the English Football League (EFL). It mentions that this radius aligns with the EFL's expectations for accessibility and proximity to Oxford United Football Club's fan base. No detailed documentation or correspondence from the EFL is included in the report to substantiate this requirement. The justification appears to be based on informal discussions rather than formal criteria.
- As a result the ASA limits its search to a 7-mile radius. This arbitrary boundary excludes sites that may be viable with improved transport links. The report provides limited evidence to justify the 7-mile radius as a real consideration for the site search. Expanding the search radius could identify sites with fewer planning constraints, such as those outside the Green Belt or flood zones.
- The report emphasizes the importance of accessibility for fans, particularly by sustainable transport modes. It suggests that sites within 7 miles of Oxford are more likely to meet these criteria. The report does not provide specific data or analysis to demonstrate why sites beyond 7 miles would be unsuitable or inaccessible, nor does it explore whether transport infrastructure improvements could make more distant sites viable.
- The report explicitly excludes sites outside the 7-mile radius without assessing their potential suitability or accessibility. This exclusion is presented as a fixed boundary without further exploration. No detailed analysis is provided to explain why the 7-mile radius is critical or whether it is based on fan travel patterns, transport studies, or other objective criteria.
- CPRE (Campaign to Protect Rural England) questioned the exclusion of sites beyond the 7-mile radius, particularly brownfield sites. The report does not address these concerns in detail.
- The report does not provide a response to CPRE's critique or justify why the 7-mile radius is a reasonable limitation.
- The evidence provided to support the 7-mile radius as a real consideration is minimal and largely anecdotal. The report does not include formal documentation from the EFL specifying the 7-mile radius as a requirement or data analysis demonstrating why sites beyond 7 miles would be unsuitable. There is also no exploration of whether transport infrastructure improvements could make more distant sites viable.

This lack of evidence undermines the validity of the 7-mile radius as a strict boundary for the site search. Expanding the search radius and providing detailed justification for its limitations would strengthen the report's conclusions.

3. Other Brownfield Sites

- **Reason for Exclusion:** The ASA does not appear to have comprehensively assessed all brownfield sites within the search radius. Brownfield sites are often preferred for development under national planning policy.
- **Potential Viability:** Brownfield sites may offer fewer environmental and planning constraints compared to Green Belt locations.

4. Sites with Unknown Landowner Intentions

- **Examples:** Sites such as Site 29 (Land near Marston) and Site 28 (Land north of Oxford Parkway Station) were excluded due to "unknown landowner intentions."
- **Potential Viability:** Proactive engagement with landowners could clarify availability and potentially unlock these sites for consideration.

5. Sites Excluded Due to Green Belt Designation

- Sites such as Site 24 (Land West of Oxford Airport) and Site 8 (Land south of Thornhill Park & Ride) were excluded due to Green Belt constraints.
- The ASA does not fully explore whether "Very Special Circumstances" could justify Green Belt release, as required by national policy. However the applicant is pursuing such an argument over the site under application. This raises questions as to why they are focusing on this one site to exclusion of those others if green belt designation was a justifiable reason for exclusion.

6. Sites Excluded Due to Flood Risk

- **Examples:** Sites such as Seacourt Park and Ride (Site 35) and Land adjacent to Binsey Lane (Site 38) were excluded due to flood risk constraints.
- **Potential Viability:** The ASA does not explore whether flood mitigation measures could make these sites viable.

7. Kassam Stadium

- The ASA excludes the Kassam Stadium based on the landowner's unwillingness to sell, but public statements and communications from the site owners suggest conflicting information. Further engagement with the landowner could clarify whether the site could remain a viable option for OUFC.

8. Sites with Existing Recreational Use

Sites such as Burgess Field (Site 16) and Stratfield Brake (Site 40) were excluded due

to their current use for recreation or sports. The ASA does not explore whether alternative arrangements or compensatory measures could make these sites available.

Conclusions

The ASA Addendum fails to provide robust evidence that alternative sites have been seriously considered or that the proposed development on a Green Belt site is justified.

The lack of evidence of comprehensive engagement with landowners, inconsistent methodology, and insufficient justification for Green Belt development undermine the credibility of the site selection process. Without addressing these deficiencies, the proposal to build on designated green belt land is inadequately supported by evidence.

The ASA excluded several sites based on availability, planning constraints, or high-level reviews. However, the exclusion of some sites, such as the Unipart site and others with unknown landowner intentions, raises questions about whether all reasonable efforts were made to confirm their feasibility. Additionally, the exclusion of sites due to constraints like flood risk or Green Belt designation may warrant further investigation to explore mitigation measures or "Very Special Circumstances."

The argument that all alternative sites have been properly considered is not fully substantiated. The ASA's methodology, transparency, and scope leave significant room for doubt about whether all viable options have been explored.

The report excludes several sites that could have been considered, either due to methodological limitations, insufficient exploration, or lack of proactive engagement with landowners.

The report's claim to be a comprehensive assessment of available sites is undermined by methodological limitations, transparency issues, and the exclusion of potentially viable sites. To strengthen its credibility, the ASA should:

1. Reassess excluded sites, including brownfield locations and those outside the 7-mile radius that may be acceptable to the EFL either as is or with minor changes to the local designation of the club such as the inclusion of 'County' in the club's name.
2. Provide clearer evidence of landowner engagement and availability.
3. Explore mitigation measures for sites with constraints such as flood risk or landscape impacts.
4. Address public and stakeholder concerns more comprehensively.

Without these steps, the report's conclusions remain open to challenge.

Cllr Ian Middleton – Member for Kidlington East Division
08/05/2025

APPENDIX 1

Evidence that OUFC triggered the Force Majeure clause in their licence which eventually lead to their licence being terminated **“In the current arbitration you have contended that a Force Majeure event for the purposes of clause 6.1 of the licence commenced...”** (my emphasis). This is clear evidence that the club made themselves homeless by an ill-advised use of this clause.



Oxford United Football Club Limited
The Kassam Stadium
Grenoble Road
Oxford
OX4 4XP

Our Ref
Direct Dial No
Direct e-mail
Date

AGM /F1266/6

09 April 2021

By hand

Dear Sirs

**FIROKA (OXFORD UNITED STADIUM) LIMITED
LICENCE DATED 21 MARCH 2006**

As you are aware, we act for Firoka (Oxford United Stadium) Limited ("Firoka"), the Licensor of The Kassam Stadium under your Licence dated 21 March 2006.

In the current Arbitration you have contended that a Force Majeure Event for the purposes of clause 6.1 of the licence commenced on or around 13 March 2020 and is continuing at today's date. Firoka has today, in its submissions to the Arbitrator, acknowledged and admitted this to be the case.

Accordingly, since the Force Majeure Event has now continued beyond 12 months, and indeed looks set to continue for at least the remainder of the 2020/21 season, we are instructed on behalf of Firoka by this letter to give you one month's notice of termination of the Licence under clause 6.4 so that it will terminate on 9 May 2021.

Yours faithfully

A black rectangular box redacting the signature of the sender.

Clarkslegal LLP

APPENDIX 2

Email forwarded to me by Mr Kassam concerning the lack of contact from OUFC with regard to the sale of the stadium to the club or the extension of their licence. He clearly

states he has not been approached to negotiate either a sale of the stadium or an extension or renewal of the club's current licence. There is likely to still be an option to explore either of these options if the club were open to negotiation. In any event it should be incumbent on the applicants to show that they have explored all possible avenues with Firoka which is currently not the case.



Firoz Kassam <firoz.kassam@firokagroup.com>

To: clrsbrown@oxford.gov.uk; layla.moran.mp@parliament.uk; andrew.colley@newsquest.co.uk; O Rice, Liam - Newsquest; Paul Peros <paulperos1@gmail.com>; jerome.sale@bbc.co.uk; gferguson@oufc.co.uk; tmjwilliams@oufc.co.uk; +1 other
Cc: Anne Lowry <anne.lowry@firokagroup.com>; Noman Akber <noman.akber@firokagroup.com>; Nilu Kanani <nilu.kanani@firokagroup.com>; Raisa Kassam <raisa.kassam@firokagroup.com>; Michael Doyle <mdoyle@thekassamstadium.com>

Dear all,

I realise that you're all biased towards Oxford United Football Club rather than the Kassam Stadium however I feel compelled to write to you so that you have a fair, honest and transparent picture of what's going on.

Might I remind you that our stadium company were the original saviours of OUFC and the club wouldn't even be around if it wasn't for us. But in the interest of the truth being told, here are some questions I would like to pose:

1. Has anyone bothered speaking to the stadium company to know the true situation? No
2. Who negotiated the short license, the football club or the stadium? The football club
3. Were any of the people in place now there at the time of the negotiation? No
4. Has anyone from OUFC tried to speak to the stadium company about this in the last 2 years? No.
5. Has anyone from the city council or the county council ever spoken to the stadium company about this situation? No

It's all very well for a school teacher to talk out of his backside and make a big drama about saving the club but I sincerely hope that the council members and fans are clever enough to know the truth. I can understand the football club having aspirations of owning their own stadium and I am supportive of that but we have to speak truthfully rather than passing the buck. If OUFC manage to find another site then I will be very happy to support that but my only ask is that the stadium's name and reputation isn't tarnished in the process.

I've been following these events for some time now but have patiently sat back and not made any comments, however this is now getting out of hand and I feel my position should be made clear to the public.

Kind regards,
Firoz Kassam

**Response to OXFORD UNITED FOOTBALL CLUB – NEW STADIUM
DEVELOPMENT 24/00539/F**

ADDENDUM TRANSPORT ASSESSMENT - OPTION AND SENSITIVITY TESTS

20th March 2025

The document outlines the transport strategy and modelling for Oxford United Football Club's proposed new stadium development. While it provides a comprehensive plan, several negative impacts on the local transport system can be identified:

1. Increased Traffic Congestion

- **Match Day Traffic**

The stadium's capacity of 16,000 and the projected 28 first-team matches per year will significantly increase traffic volumes, particularly on match days. The sensitivity tests show delays of up to 3 minutes 51 seconds on key routes during peak times, which could exacerbate congestion on already busy roads like Frieze Way, A44 Woodstock Road, and the A40.

- **Queue Build-Up**

Queues at critical junctions, such as Peartree and Wolvercote roundabouts, are expected to increase, with some queues reaching up to 214 meters. This could lead to spillover effects on the A34 mainline and other surrounding roads.

- **Shuttle buses**

the report doesn't take into account the potential for traffic to back up along Frieze way as shuttle buses queue to get into the site and on to adjacent bus stops. It would only take 2 or 3 buses to back up and completely block the Kidlington roundabout which would mean traffic would have nowhere to go other than down the Oxford Road towards Kidlington centre. This would be a recipe for total gridlock in the area.

2. Impact on Public Transport

- **Bus Delays**

Public transport journey times are projected to increase by up to 12 minutes for northbound buses during peak match times. This could disrupt regular bus services and inconvenience non-match-day commuters.

- **Rail Capacity Issues**

Chiltern Rail currently lacks sufficient capacity to handle the predicted number of

supporters traveling via Oxford Parkway. The reliance on future rail upgrades leaves a gap in the short-term, potentially leading to overcrowding and delays. There are no guarantees that increased capacity will happen in the medium to long-term.

3. Parking Challenges

- **Oxford Parkway Parking**

The sensitivity test assumes up to 738 spaces at Oxford Parkway could be used by supporters, but this could displace regular users and lead to parking shortages. High parking charges and restricted egress for 45 minutes post-match may deter usage but could also create frustration among more regular and local users.

- **Figure 2.4 includes the legend “Oxford Parkway – No match day parking”**

Chiltern Rail are on record as saying they will have no way of distinguishing between vehicles being driven by football fans and other users of the car park. So this claim is meaningless. The reality is that car drivers will likely attempt to park in the station car park which could lead to long queues both before and after matches. This would not only create further traffic issues outside the station on the Oxford Road but it would deter travellers who are not attending matches from using the station and the car park.

- **Controlled Parking Zones (CPZs)**

The implementation of CPZs up to 2km from the stadium may inconvenience local residents and require active enforcement, adding administrative burdens.

- **Controlled Parking Zones**

There is still little or no detail on how these will be implemented and operated and who would be responsible for enforcing them. The report gives the vague explanation that “It is expected that the Controlled Park Zones will be actively enforced [...] funded either by the OUFC or the PR sites” That is far too ill-defined to give any confidence that CPZs would be actively enforced. The expectation that developers on the PR sites would fund these is highly speculative. Not only is it likely to be a number of years before these site will be fully developed, it’s unlikely that the developers would commit to a long term enforcement of parking restrictions that would not benefit the new residents and would arguably greatly inconvenience them. Why would they commit to such an expense to support a football stadium that they have no commercial interest in? If CPZs are going to be relied on by OUFC, they should commit unequivocally to operating and enforcing them along with full funding.

4. Pedestrian and Crowd Management Risks

- **Road Closures**

The need for 35-minute pre- and post-match road closures on Oxford Road to accommodate pedestrian movements will disrupt local traffic flow and access for residents and businesses.

- **Safety Concerns**

The reliance on marshals and temporary systems for pedestrian management may not be sufficient to ensure safety during high-density events.

- **Bus 'air-locks'**

This is again a highly presumptive proposal which would involve bus companies committing to a vague and undefined operating procedure which the report says is *"to be agreed"*. It further assumes that the provision of Police Accredited Traffic Officers on motorcycles to escort buses through these 'air-locks' at a safe speed whilst closing off the road to fans who will be trying to cross the road. This will involve the closure and movement of barriers to prevent pedestrians entering the road. All this is likely to require a high degree of co-ordination during which time pedestrians will be unable to access the road crossing. Not only would this create a potential crowd management issue, it would also generate additional delays in getting fans across the road into the stadium which in turn would mean that the road would need to stay closed for longer. The report claims that this process is used at *"many major events and stadia elsewhere in England"* but omits to provide any details of where these stadia are or the circumstances in which these procedures are used.

5. Environmental Impact

- **Increased Vehicle Emissions**

The additional traffic and delays will contribute to higher greenhouse gas emissions, particularly during peak match times. The reliance on private vehicles (with an average car occupancy of 2.7) further exacerbates this issue.

- **Limited Active Travel Options**

While new pedestrian and cycle routes are proposed, their effectiveness depends on timely implementation and user adoption. The reliance on shuttle buses for less mobile supporters may limit the shift toward sustainable travel modes.

6. Reliance on Future Infrastructure

- **Rail Upgrades**

The strategy heavily depends on future rail improvements, such as East-West Rail and the reopening of the Cowley branch line, which are not expected until 2028 or later. This leaves a gap in the transport network's ability to handle increased demand in the interim.

- **Variable Message Signs (VMS)**

These are proposed as being the answer to the potential traffic chaos that road closures around the stadium will create. Whilst VMS systems are effective in some circumstances, the effectiveness of VMS in reducing background traffic is uncertain, with research indicating compliance rates as low as 11% in some cases. They are also not a long term solution to repeated road closures and diversions. This would be especially the case in the area concerned as there are few alternatives to those using the roads in that are to get to where they want to be. They would not be able to avoid the area if they wanted to access Parkway Station for example or if residents in Kidlington wanted to drive towards Oxford. There are simply too few alternative routes for a VMS system to be of much practical use beyond telling local motorists to not travel at all on match days.

7. Disruption to Local Communities

- **Noise and Congestion**

Increased traffic, road closures, and crowd movements will disrupt the daily lives of residents in Kidlington, Gosford, and Water Eaton.

- **Economic Impact**

Businesses near the stadium may face reduced accessibility during match days, potentially affecting their operations.

8. Operational Challenges

- **Traffic Management**

The reliance on active traffic management, including marshals and temporary signage, may not be sustainable for frequent events. The document acknowledges the need for improvements in signal coordination and MOVA operation, which are not yet implemented.

- **Coordination with Stakeholders**

The success of the strategy depends on effective collaboration with multiple stakeholders, including Chiltern Rail, Oxfordshire County Council, and local bus operators. Any delays or disagreements could hinder implementation.

- **Impact on emergency service hubs**

It should be borne in mind that the Kidlington area hosts service hubs for all three major emergency services, including Thames Valley Police, the Ambulance Service and Fire and Rescue. Anything that potentially disrupts and delays transport corridors in the area could compromise the ability for these services to respond in a timely manner.

Conclusion

While the document supposedly provides a detailed transport strategy, the proposed stadium development poses significant risks to the local transport system, including increased congestion, public transport delays, parking challenges, and environmental impacts. The reliance on future infrastructure improvements and temporary measures further highlights the challenges and difficulties that this development would pose to the local community and transport network.

Cllr Ian Middleton - Member for Kidlington East Division
08/05/2025

Response to claims that a football pitch has BNG value RESPONSE TO CONSULTEE COMMENTS – APRIL 2025

Ian Middleton – Member for Kidlington East Division

A football pitch, particularly one designed as a hybrid grass pitch, may not have a meaningful biodiversity net gain (BNG) value for the following reasons:

1. Limited Habitat Diversity

A football pitch is a monoculture dominated by a single type of grass species, often selected for durability rather than ecological value. This lack of plant diversity restricts the range of species that can utilize the pitch as a habitat, making it unsuitable for supporting a wide variety of wildlife.

2. Frequent Disturbance

The pitch undergoes regular maintenance, including re-seeding, cleaning, and replacement of the grass layer. These activities prevent the establishment of stable ecosystems and disrupt any potential biodiversity gains. The annual re-establishment of the pitch means it cannot reach a target condition that would contribute to long-term biodiversity.

3. Low Ecological Function

While the grass layer may provide some minimal ecological functions, such as soil stabilization and water drainage, these benefits are negligible compared to natural grasslands or other habitats. The pitch does not support pollinators, nesting birds, or other species that rely on diverse vegetation and natural soil conditions.

4. BNG Metric Limitations

The statutory BNG metric requires habitats to meet specific criteria to be considered for biodiversity net gain. The pitch's artificial components and frequent disturbance may prevent it from achieving even a "poor" condition under the metric. Additionally, the synthetic fibres and engineered drainage systems reduce the pitch's ability to contribute to biodiversity.

5. Misalignment with Grassland Definitions

The UK Habitat classification system defines grassland as vegetation that is predominantly herbaceous and not on waterlogged soils. While the pitch may meet some of these criteria, its artificial nature and lack of ecological function make it a poor fit for classification as "Modified Grassland." The Council's ecologist has described the pitch as "effectively a sort of carpet," highlighting its limited ecological value.

6. Comparison to Natural Habitats

When compared to natural grasslands, meadows, or other habitats, a football pitch offers significantly less biodiversity value. Natural habitats support a wide range of species, including insects, birds, and mammals, and contribute to ecosystem services such as carbon sequestration and water filtration. A football pitch does not provide these benefits.

7. Precedents in BNG Assessments

While some developments have included sports pitches in BNG strategies, these cases often involve compromises that do not fully reflect the ecological limitations of such habitats. The inclusion of artificial surfaces in BNG assessments can dilute the overall biodiversity value of a project.

Conclusion

A football pitch does not have a meaningful biodiversity net gain value due to its artificial nature, limited habitat diversity, frequent disturbance, and low ecological function.

While it may meet some technical criteria for inclusion in BNG assessments, its contribution to biodiversity is negligible compared to natural habitats, making it an unsuitable candidate for achieving genuine biodiversity net gain.

Cllr Ian Middleton – Member for Kidlington East Division
08/05/2025

Response to PLANNING STATEMENT ADDENDUM: NEW STADIUM DEVELOPMENT and arguments that the site could be designated as 'Grey Belt'.

The assertion that the site proposed for development could be defined as "grey belt" is flawed and does not align with the criteria for Green Belt designation. A closer examination of the site's characteristics reveals that it conforms to Green Belt purposes and plays a significant role in maintaining the integrity of the Green Belt, particularly in terms of biodiversity and the Kidlington Gap.

1. Contribution to Green Belt Purpose A: Checking Unrestricted Sprawl

The site is assessed as making a moderate contribution to Purpose A, which aims to check the unrestricted sprawl of large built-up areas. While the site is not directly adjacent to Oxford's large built-up area, its proximity to Oxford Parkway Station and the "Welcome to Oxford" sign creates a clear perception of arrival to the city. This perception reinforces the site's role as a transitional buffer between urban and rural areas, helping to prevent urban sprawl. The assertion that the site does not strongly contribute to this purpose ignores its strategic location and the role it plays in maintaining separation between Oxford and surrounding settlements.

2. Contribution to Green Belt Purpose B: Preventing Neighbouring Towns from Merging

The site lies within the Kidlington Gap, a critical area of Green Belt that prevents the physical and visual merging of Oxford and Kidlington. The Planning Practice Guidance (PPG) states that Purpose B applies to towns, not villages, and dismisses Kidlington as a village. However, this narrow interpretation overlooks the importance of the Kidlington Gap in maintaining the distinct identities of Oxford and Kidlington. Development on this site would significantly reduce the width of the Green Belt in this area, eroding the separation between the two settlements and undermining the Green Belt's function as a buffer. The site's role in preserving the Kidlington Gap is vital, and its development would compromise this purpose.

3. Contribution to Green Belt Purpose C: Safeguarding the Countryside from Encroachment

The site exhibits characteristics of countryside, including a central field parcel free of built form and surrounded by vegetated boundaries. While urbanizing influences such as road corridors are present, the site retains a sense of rurality and openness. The proposed development, which includes a large stadium and associated facilities, would introduce significant built form and activity, fundamentally altering the site's character and encroaching on the countryside. This directly conflicts with Purpose C, which seeks to safeguard the countryside from urban encroachment.

4. Contribution to Green Belt Purpose D: Preserving the Setting and Special Character of Historic Towns

Although the site is not directly connected to the historic aspects of Oxford, it contributes to the broader rural setting of the city. The site's openness and green character enhance the approach to Oxford, particularly along the A4165 Oxford Road. Development on this site would detract from the visual and experiential qualities of this approach, diminishing the setting of Oxford as a historic town.

5. Significant Biodiversity Value

The site contains important ecological features, including Priority Habitat woodland and vegetated boundaries that support local biodiversity. The proposed development would disrupt these habitats, leading to a loss of biodiversity and ecological connectivity. The Green Belt is intended to protect areas of environmental importance, and the site's biodiversity value further reinforces its conformity to Green Belt criteria. The assertion that the site qualifies as grey belt fails to account for the ecological harm that would result from development.

6. Impact on the Kidlington Gap

The Kidlington Gap is a fragile and narrow section of the Green Belt that plays a crucial role in maintaining separation between Oxford and Kidlington. The Cherwell Green Belt Study (2017) identified this area as making a high contribution to Green Belt purposes, particularly in preventing settlement coalescence. Development on this site would significantly weaken the Kidlington Gap, reducing its width and compromising its ability to serve as a meaningful buffer. The assertion that the site is grey belt ignores the strategic importance of the Kidlington Gap and the harm that would result from its erosion.

Conclusion

The site clearly conforms to Green Belt criteria, including its role in preventing urban sprawl, safeguarding the countryside, and maintaining the Kidlington Gap. Its ecological value and contribution to the rural setting of Oxford further reinforce its importance within the Green Belt. The assertion that the site qualifies as grey belt is based on selective interpretations of Green Belt purposes and fails to account for the broader implications of development on the area's openness, biodiversity, and strategic function. Development on this site would undermine the integrity of the Green Belt and set a concerning precedent for future encroachment.

Cllr Ian Middleton – Member for Kidlington East Division
08/05/2025

Response to STADIUM DEVELOPMENT RESPONSE TO SECURITY COMMENTS

The use of Oxford Road as an emergency muster point

While the document outlines a detailed strategy for emergency evacuation and the use of Oxford Road as a muster point for Exceptional Egress, it fails to address a critical concern: the time required to close Oxford Road during an emergency. The reliance on Oxford Road as a safe refuge assumes that the road can be promptly secured and cleared of traffic, but the document does not provide any specific measures or contingency plans to ensure this can be achieved swiftly.

Given the complexity of managing crowd movement, bus shuttles, and traffic stewards, the process of closing the road could introduce delays, potentially compromising the safety of evacuees. Emergencies often require immediate action, and any delay in securing the road could result in congestion, confusion, or exposure to hazards. Furthermore, the document does not address how the coordination between traffic officers, stewards, and emergency responders would be streamlined to minimize delays.

To strengthen the evacuation plan, the document should include a detailed timeline for road closure, contingency measures for unexpected delays, and alternative muster points in case Oxford Road cannot be secured in time. Without these considerations, the reliance on Oxford Road as a safe refuge remains a significant vulnerability in the emergency evacuation strategy.

Movement of buses through the closed section of the Oxford Road

While the strategy for bus movement along the Oxford Road temporary diversion is detailed, it raises several concerns regarding practicality and safety.

1. Potential for Delays and Congestion

The reliance on a single coned-off shuttle lane for bus movement could lead to bottlenecks, especially during peak crowd movement times. The strategy allows for up to three buses to move at a time, but the process of opening and closing barriers at crossing points for pedestrians introduces a risk of delays. This could disrupt the flow of buses and create confusion among both pedestrians and bus operators. It is also likely to introduce significant increases in the time period that the Oxford Road would need to remain closed due to the disruption in the flow of pedestrians.

2. Safety Concerns for Pedestrians

The document mentions the use of Chapter 8 barriers and Traffic Management Stewards to manage pedestrian crossings. However, the effectiveness of these measures in controlling large crowds during high-pressure situations, such as

event days, is questionable. The reliance on stewards and a Police Accredited Traffic Officer Motorcyclist to manage bus speeds and hazards may not be sufficient to prevent accidents, especially if crowd behaviour becomes unpredictable.

3. Limited Speed and Operational Efficiency

The buses are restricted to a maximum speed of 10 mph, which, while prioritizing safety, could significantly slow down operations. This low speed may not align with the bus companies' timetable considerations, potentially causing disruptions to public transport schedules. Again this will also cause additional delays in pedestrian movements meaning that road closures will be extended beyond the stated maximums.

4. Communication Challenges

The strategy mentions the use of PA systems by the PATO Motorcycle and stewards to warn crowd members. However, the effectiveness of these warnings in a noisy, crowded environment is uncertain. Clear and consistent communication is critical, and the document does not elaborate on how this will be ensured.

5. Lack of Contingency Planning

The strategy does not address potential scenarios where the shuttle lane becomes obstructed or where crowd control measures fail. Contingency plans for such situations are essential to ensure the safety and efficiency of bus movement.

Conclusion

To improve the strategy, the document should include more robust crowd management measures, alternative routes or backup plans for bus movement, and a clearer framework for communication and coordination among all stakeholders. Without these enhancements, the proposed strategy may struggle to balance safety, efficiency, and practicality.

Cllr Ian Middleton – Member for Kidlington East Division

08/05/2025

Appendix A

P e l l F r i s c h m a n n

OUFC VISSIM Model

Audit Summary Report – Base Model / LMVR

October 2024

This report is to be regarded as confidential to our Client and is intended for their use only and may not be assigned except in accordance with the contract. Consequently, and in accordance with current practice, any liability to any third party in respect of the whole or any part of its contents is hereby expressly excluded, except to the extent that the report has been assigned in accordance with the contract. Before the report or any part of it is reproduced or referred to in any document, circular or statement and before its contents or the contents of any part of it are disclosed orally to any third party, our written approval as to the form and context of such a publication or disclosure must be obtained.

Report Ref.		PF Audit Summary Report - OUFC Base VISSIM Model.Docx				
File Path		P:\Data\106862 - North Oxford VISSIM Model Audit\01 - WIP\Documents\Reports\PF Audit of OUFC Base Models\PF Audit Summary Report - OUFC Base VISSIM Model.docx				
Rev	Suit	Description	Date	Originator	Checker	Approver
A		Initial Draft for Comment	30/10/24	MH	HQ	MH

Ref. reference. Rev revision. Suit suitability.

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**OXFORDSHIRE
COUNTY COUNCIL**

Pell Frischmann

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1 Introduction

Ridge and Partners LLP (Ridge) has been appointed by Oxford United Football Club (OUFC) to provide transport advice to support the development of a new stadium at 'Land to the east of Stratfield Brake and west of Oxford Parkway Station, known as 'The Triangle' ('the Site') – Planning Application Reference 24/00539/F.

The County Council's Oxfordshire Strategic Model (OSM), a SATURN model, is coming to the end of its life. Work on the Oxfordshire Mobility Model (OMM) is currently ongoing and may not be available for use by the development sites. The North Oxford Corridor / Partial Review sites study includes a VISSIM model that will be available for use by the developers.

Oxfordshire County Council (OCC) has requested that OUFC undertake transport modelling using the North Oxford VISSIM Model to assess the impact of development generated by OUFC new stadium proposals and associated match day traffic management.

OCC has appointed Pell Frischmann (PF) to provide audit support for the modelling work submitted by the applicants.

1.1 Work Undertaken to Date

The North Oxford VISSIM model has previously been used for the assessment of the North Oxford site and subsequently for the Partial Review sites in 2023.

PF worked with OCC and Ridge to agree on the scope of works for the VISSIM model and a final draft of the scoping report was produced in August 2024¹.

1.2 Scope of Audit

This Technical Note sets out a review of the base models and associated Local Model Validation Report (LMVR) that have been submitted as follows:

- Base Model submitted (11th October 2024);
- Supporting output spreadsheets and shapefiles (28th October 2024); and;
- LMVR (11th October 2024).

The review includes checking of the input and output spreadsheets as well as an assessment of the assumptions made in the inputs.

The models have been audited using our standard model audit process.

1.3 Model Input Spreadsheets Review

The model inputs have not been provided, therefore, at this stage they cannot be fully checked. The input spreadsheets to derive the matrices and resulting inputs and routes in the model should be provided for review.

¹ OUFC – New Stadium Development – North Oxford VISSIM Model Scoping Report – August 2024.

2 VISSIM Model Files

2.1 Introduction

VISSIM model files were provided under scenario management for two scenarios as follows:

1. 2023/2024 Weekday Base
2. 2023/2024 Saturday Base

The models have been audited using our standard model audit process and the full summary is provided in Appendix A. The audit checks a number of items under distinct headings and adopts a RAG scoring with red items needing attention, amber needing review and green with no action required.

2.2 Derivation of the new Base Model (for Scenario Management)

A comparison between the previous PR sites model and the new OUFC model has been undertaken to determine if the changes listed in section 7 and Figure 7.1 of the LMVR cover all of the changes made. The following locations also contain changes that were not documented in the LMVR.

- Just west of A44/Cassington Road roundabout;
- Banbury Road / Golf Course entrance;
- A44 / Begbroke HI;
- A44 / Sandy Lane roundabout;
- A34 near Kiddlington exit;
- Elizabeth Jennings Way / A4144;
- Blandford Ave;
- Oxford Parkway Park and Ride;
- Rutten Lane / A44;
- Springhill Road / A44;
- Woodstock Road / Langford Lane;
- A4620 / Langford Lane;
- A44/A4095

Explanations for the changes made at these locations and anywhere not mentioned in the LMVR, should be provided and included in the LMVR.

2.3 Base Model Review

There main issues identified in the audit review are as follows:

- There are entries in the modification files that should be included in the base file instead (links, reduced speed areas, priority rules).
- The lane change distances need reviewing particularly on the A34 as they are too short and result in vehicles making late lane changes.
- Linked to the above, the placement of routes in particularly at the A34 SB link should be updated so that they allow vehicles sufficient time to weave.
- The coding of priority rules at the new Bicester Road roundabout does not follow best practice and is inconsistent with the rest of the roundabout coding in the network.
- A new signal head has been added to the northbound left turn at the new Bicester Road junction (this is not present in Google Streetview² so is assumed to be incorrect?).

² [Bicester Rd - Google Maps](#)

- The new RSAs coded are too long (as vehicles are aware of RSAs before reaching them so they should be a maximum of 5m as they are treated as an object in terms of the number of objects for priority rules etc in the driving behaviour).
- The presence of the speed camera on the Oxford Road is missing (should have RSAs or speed decisions). Any speed cameras in the network should also be coded.
- The input spreadsheets have not been provided to check demand inputs and routes and the general methodology of the matrix development;
- The model is missing some bus services (2C/2D, 7, 233, 250, 500) when compared to openstreetbrowser³ and the Oxford bus spider map⁴.
- Most bus dwell times have been set to calculation not distribution (resulting in zero dwell time at bus stops).
- The model output files (db files) have not been provided for the PM peak.
- Signal errors are shown at SC106 and SC1001 in the error files that should be resolved.

³ [OpenStreetBrowser](#)

⁴ https://portal.oxfordshire.gov.uk/content/publicnet/council_services/roads_transport/public_transport/timetables_maps/Public_Transport_in_Oxford.pdf

3 Local Model Validation Report

3.1 Introduction

The interim LMVR submitted on 11th October 2024 has been reviewed and the issues set out in the sections below identified.

3.2 Base Data

On page 12, a comparison of the data should be presented including evidence that the MCCs were typical of flows during the ATC collection in both the Nov/Dec 2023 and June 2024 collection periods and comparison between the two datasets.

On page 13, the exact parameters of the source observed TomTom journey times has not been stated. Given that the flow data is a mix of Nov/Dec 2023 and June 2024 this is important to understand.

3.3 Model Development

On page 16, please can you provide a comparison of the trip ends for the common hours (original model vs new model) so we can determine what the factors are to the trip ends. The input spreadsheets for the matrix development should be provided for review and checking.

On page 17, linked to the previous point, more details on the matrix development process are required including the assumptions made for each hour within each model period. In the conclusions in paragraph 9.2.1, it is stated that mainly 2024 data has been used in the furnishing process but there is little difference between the datasets. Evidence of this should be presented as mentioned above.

3.4 Model Calibration

On page 18, this seems to elude the existing model signal data has been retained, however, this is not accurate as Peartree has been changed and this should be stated along with any assumptions in the coding (the use of VISSIG vs PCMOVA for instance).

On page 19, maximum queue lengths are not a good indication for comparison as they represent the absolute worst case over all random seed runs and could occur for a short period in the model, versus observations where enumerators may not be able to see the back of the queue and are estimating lengths at set periods rather than continuous evaluation. Given this, average queues are considered a better comparison and typically due to the differences in collection, the modelled average queues should sit in between the observed average and maximum queues.

3.5 Network Alternations

On page 20, as discussed above, the signal controllers have been changed to VISSIG fixed time, this should be stated including details of the signal programme sources along with any assumptions in the coding (the use of VISSIG vs PCMOVA for instance).

3.6 Model Validation

On page 21, it is stated that the model uses an average of 10 random seeds, however, the model itself is set for 20 seeds in the PM peak. However, the outputs files (db files) for the PM peak have not been provided, so if the 20 seeds have been reduced to 10 seeds then please provide details of the methodology for removing seeds. The methodology adopted should be consistent for all models runs and ideally avoid removing any random seeds.

The journey times have been reported based on TAG criteria whereby a route is deemed to pass if the modelled journey time is within 15% of the observed or 60 seconds. However, the latter should only apply to routes that are between 3-15km in length (TAG Unit M3.1 para 4.3.3 and C.3.10). The route 6 journey times are both less than 3km so should only be assessed based on the 15% criteria and not the 60 seconds.

3.7 Link Flow Validation

It is noted that the hours shown in the LMVR are incorrect in Table 8.2 that appears to show the Saturday labels but the data is correct for the weekday peak.

The results on page 23 for the weekday model, show that the 1800-1900 hour could do with improvement as well as the 2000-2100 hour. The former is particularly important due to the weekday game scenario. They only require a couple more sites to improve in order to pass the GEH criteria (and it is note that some are only marginally over the threshold with GEHs of 5.1 or 5.2).

The results on page 24 for the Saturday model are again concerning that the pre-game hours are not validating well.

3.8 Turning Flow Validation

The results on page 26 for the weekday models show that again it is concerning that it is the pre-game period that performs poorly.

The results on page 27 show that all hours could do with improvement but especially the pre and post game hours.

3.9 Journey Time Validation

Paragraph 8.3.3 uses the word GEH which should presumably be removed as this section relates to journey times. Given the model performance has the observed data been reviewed for consistency and related back to the earlier comment what time period does it represent?

As discussed earlier, the 60 second rule should not be applied to route 6. This changes the weekday results so that the last row of Table 8.7 is also a fail and the overall pass rate for the final hour is 83% rather than 92%. The Saturday peak is unaffected by the change.

For bus journey times, para 8.4.2 states that observed information was provided by the bus service operators. This should be listed as a difference source in section 4 of the LMVR.

None of the PT routes are greater than 3 km, therefore, they should only be assessed based on the 15% criteria. Tables 8.9 and 8.10 should be updated accordingly and the text updated to reflect the new pass rates.

The summary presented in paragraphs 8.4.3 and 8.4.4 do not make sense and should be reworded, following the updates to the models and new results.

3.10 Model Performance

No outputs are provided on the overall junction performance. These should be provided to summarise the flow throughput, average and maximum queue lengths, delays and level of service. This will provide an indication of the level of capacity available within the network.

Similarly, a presentation of the network performance by random seed should be presented to demonstrate that no outliers have been included in the average results.

4 Conclusion

There are a number of issues that have been raised. These should be addressed in the model and reporting and updated versions resubmitted.

Appendix A – Model Audit

Code	Item	Comments [Auditor]	Actions Required [Auditor]
A Project Setup			
A1	Are scenarios sensibly named?	Yes	No
A2	Correct modifications applied?	No - there are several entries in mod 1 that shouldn't be present including link changes, desired speed changes and priority rules. These should be incorporated in the base network.	Yes
A3	Are modifications named sensibly?	Only two modifications which is fine for the base model, please use different modification files for infrastructure and demand changes in the forecast scenarios.	No
A4	Were unused modifications removed?	N/A	No
A5	Were all modifications checked in a text editor?	Yes	No
B Backgrounds			
B1	Background drawing/aerial photos placed correctly	Only jpgs for Oxford North provided.	No
B2	Scale and rotation of the background/aerial photos	Bing maps used which is known to have scale and rotation issues, but inherited from previous model.	Check
B3	Seamless transition between the background drawing / aerial photo tiles	N/A	No
B4	Background legibility/resolution	Jpgs are clear	No
B5	Located correctly in relation to native VISSIM background?	Appears fine	No
C Driving Behaviour and Functions			
C1	Link behaviour types definitions	No new behaviours added compared to previous model	No
C2	Display types	One new one added from previous base	No
C3	Car following behaviour	No change from previous model	No
C4	Lane change behaviour	No change from previous model	No
C5	Lateral behaviour	No change from previous model	No
C6	Acceleration/deceleration functions	No change from previous model	No
D Simulation Parameters and Network Settings			
D1	Simulation time (evaluation + warm up + cool off)	6 hour simulation with 5 one hour evaluations. 30min warm up and cooldown	No
D2	Time steps per sim second	10 steps used	No
D3	Left-side traffic rule has been applied?	Yes	No
D4	Units (length, speed, acceleration) configuration	All metric except length in miles and speed in mph.	No
D5	Gradients source (attribute gradient or Z-coordinates)	None coded, spot check of the area using online tools shows that there are no particularly steep gradients	No
E Vehicle Data			
E1	Vehicle types definitions	Default used with new ones added. Cars have been split into small and large but not used instead a default car type has been used, LGV has been added along with OGV1 and OGV2	No
E2	Vehicle classes definitions	Default used, several additional added to group vehicles	No
E3	Vehicle compositions	Compositions for Cars, LGV, HGV and peds	No
E4	2D/3D models and 2D/3D model distributions	Same as previous model, simplistic	No
E5	Realistic power and weight distributions?	Default	No
F Links and Connectors			
F1	Assigned correct behaviour type?	Spot checks look fine	No
F2	Assigned correct display type?	Spot checks look fine	No
F3	Lanes placed correctly	Spot checks look fine, albeit on a Bing maps base	No
F4	Connector/link structure	Spot checks look fine	No
F5	Links/connectors gradients	Spot checks look fine	No
F6	Emergency stop distances	Looks like some have been changed from the default.	No
F7	Lane change distances	Nearly all set to default of 200m but some changed including the A34. Some haven't been changed that should have including the A34 slips at the new Kidlington/Water Eaton junction (#20101). Also consider using the by lane value and distribution rather than fixed distance to increase the effectiveness.	Yes
F8	Lane bans & bus lanes	Spot checks look fine	No
F9	Lane change bans	Spot checks look fine	No
G Priority Behaviour			
G1	Placement of priority rules	The coding of the new roundabout priority rules, only contains a single rule for all vehicles with different times applied to different vehicle classes for the green bar only. It is best practice to place two rules one for HGVs/Buses and one for general traffic, with the former having a higher gap time (see coding for the Kidlington roundabout for example).	Yes
G2	Headways and gap times	Gap times range from 2.0-3.9 for cars and 3.0-4 for HGVs which is similar to the previous model.	No
G3	Blocking back (yellow boxes) coded?	Spot checks look fine	No
G4	Conflict areas	Used at a Wolvercote and Cutteslowe	No
G5	Consistency between peaks	Both models contain changes in the mod files for links, speed decisions and priority rules that should be coded in the base and remain consistent. Also some extra detectors have been added to the Saturday peak?	Yes
H Signalised Junctions			
H1	Signal controllers configuration	All on VAP except for Peartree and Oxford North that are fixed time. Note these have changed from the previous model where they were coded in VAP, please explain why?	Check
H2	Signal group min greens. Red/amber, amber	Red/amber & amber coding is fine.	No
H3	Intergreens	Specs not provided to check intergreens.	No
H4	Green and cycle times, offsets	Not checked as specs not provided	No
H5	Placement of signal heads	Most look fine, but a signal head has been added to NBL at the new Bicester Road junction, this doesn't appear in Google streetview so should be removed unless it is new?	Yes
H6	Heads correspondence with groups/controller	Not checked as specs not provided	No
H7	Pedestrian impacts / stages	Spot checks look fine	No
H8	Pua files	Not checked	No
H9	VAP/visVAP files	Not checked	No
H10	Detector locations	Spot checks look fine	No
H11	Detector configuration	Not checked	No
H12	Amber signal behaviour	Most set to One decision (TfL prefer Continuous check but I prefer one decision)	No
I Desired Speed Decisions and Reduced Speed Areas			
I1	Speed distributions	Bespoke used not sure where they came from	No
I2	Desired speed decisions - position	Spot checks look fine against openstreetbrowser	No
I3	Desired speed decisions - distribution	Not checked	No
I4	Reduced speed areas - curve locations - position	New RSAs are unnecessarily long. Vehicles are aware of RSAs before reaching them so they should be a max of 5m as they are treated as an object in terms of the number of objects for priority rules etc in the driving behaviour.	Yes
I5	Reduced speed areas - curve locations - distribution	Spot checks look fine	No
I6	Reduced speed areas - give-way locations - position	The speed camera on Oxford Road before the bus lane is missing and should be added. Other speed camera locations should be checked.	Yes
I7	Reduced speed areas - give-way locations - distribution	Spot checks look fine	No
I8	Consistency between peaks	No changes made other than those mentioned above that should be incorporated into the base.	Check
J Parking			
J1	Parking lot location	N/A	No
J2	Parking lot configuration	N/A	No

J3	Parking routes	N/A	No
K Static Routing			
K1	Vehicle input flows	Spreadsheet not provided to check the inputs, this should be provided.	Yes
K2	Vehicle input compositions	Simple compositions applied.	No
K3	Vehicle input (composition) speeds	All set to low 25mph speed so speed decisions need to be applied near all inputs which it looks like they have from spot checks (as required for dynamic assignment).	No
K4	Placement of routing decisions and static routes	Many routes started only 1m downstream of input, better practice to make at least 5-10m to ensure vehicles don't miss a route in a timestep. Also exit routes are not completed through to an exit that could lead to vehicles routed back into the network. It is best practice to start a new route as soon as possible so vehicles are aware of lane placement for the next downstream movement. For example on the A34 SB the route decision is 800m downstream of the input and less than 200m before the exit giving vehicles little opportunity to get in the correct lane.	Yes
K5	Static routes proportions	Spreadsheet not provided to check the route proportions, this should be provided.	Yes
K6	Partial routes	None used.	No
L Dynamic Assignment			
L1	Dynamic assignment parameters	N/A	No
L2	Store costs/paths unticked (after convergence)	N/A	No
L3	Parking lot allocation to zones	N/A	No
L4	Closed turns and edges	N/A	No
L5	Matrices definitions	N/A	No
L6	Correct values in matrices	N/A	No
L7	Parking lot speeds	N/A	No
M Public Transport			
M1	Routes	Services coded. Openstreetmap also shows services 2C/2D, 7, 233, 250, 500 that operates within the model extents also. Need to review the existing buses and add additional	Yes
M2	Location of stops	Spot checks look fine	No
M3	Correct stops active?	Not checked	No
M4	Vehicle type/characteristics	Only standard single deckers coded, suspect this is not correct.	Check
M5	Service frequencies/start times	Not checked	No
M6	Initial speeds	Initial speeds depend on speed of entry link	No
N Dwelling			
N1	Dwell time profiles	Most are set to calculation instead of a distribution this needs checking	Yes
N2	Dwell times - gates	N/A	No
N3	Dwell times - parking	N/A	No
N4	Dwell times - public transport	Most are set to calculation instead of a distribution this needs checking	Yes
N5	Dwell times - other	N/A	No
N6	Consistency between peaks	No changes between peaks	No
O Evaluations			
O1	Outputs configuration and activation	Outputs setup for Data Collection, Links, Queues, Nodes, network performance, delays and travel times.	No
O2	Keep results from the current (multi-run only)	Set to all simulation runs (should be current run only)	Yes
O3	Data collections	Yes	No
O4	Delays	Yes	No
O5	Links	Yes	No
O6	Nodes	Yes	No
O7	OD pairs	Not Used	No
O8	Queue Counters	Yes	No
O9	Vehicle network performance	Yes	No
O10	Vehicle travel times	Yes	No
O11	Units of all evaluations	Outputs files not provided for PM Peak, should be provided	Yes
P VISSIM Run Observations			
P1	Lane changing behaviour is sensible	Some instances of lane changes occurring too late and blocking movements caused by the placement of the route decision on the A34 SB as described above.	Yes
P2	Appropriate flare utilisation	Spot checks look fine	No
P3	Appropriate merging behaviour	Some instances of merging occurring too late such as the A34 on-slip, banning all movements from lane 3 should help with this.	Yes
P4	Appropriate diverging behaviour	Some instances of lane changes occurring too late and blocking movements caused by the placement of the route decision on the A34 SB as described above.	Yes
P5	Realistic exit blocking	Spot checks look fine	No
P6	Goods/trailed vehicles do not use the right hand lane on 3+ lane motorway (UK)	N/A	No
P7	Vehicles use appropriate lanes on junction approaches	Spot checks look fine	No
P8	Appropriate speeds (free flow conditions) on links, curves and give-way locations	Spot checks look fine	No
P9	Give way behaviour sensible	Spot checks look fine	No
P10	Vehicles do not overlap excessively	Spot checks look fine although there are a few locations where this is occurring particularly on some of the roundabouts due to blocking back	No
P11	Traffic signal logic responds correctly to vehicular and pedestrian presence	Spot checks look fine	No
P12	Review signal times tables	Not checked	No
Q Output Files			
Q1	Review error files	Lots of signal controller errors at SC1001 and SC 106	Yes
Q2	Expected evaluation files produced	Yes	No
Q3	Cost and path files - created or not created?	N/A	No
Q4	Was model converged	N/A	No
Q5	Sufficient number of random seeds	10/20 seeds	No
R Calibration / Validation / Results Comparison			
R1	Model converged and sufficiently stable?	N/A	No
R2	Link flows (including entry and exit flows)		No
R3	Turning counts		No
R4	Saturation flows	N/A	No
R5	Degree of saturation	N/A	No
R6	Demand dependent stages frequency	Not assessed	No
R7	Variable green and cycle time	Not assessed	No
R8	Journey time for public transport		No
R9	Journey time for general traffic		No
R10	Speeds	Not assessed	No
R11	Queues		No
R12	Correct data imported into comparison tables	Not checked	No
R13	Future/option demand in line with growth/demand change assumptions	N/A	No
S General/Other Comments			
S1	There are a few issues to check/fix above including entries in the modification file that should be included in the base file instead, lane change distances need reviewing, coding of priority rules at the new roundabout, new signal head added to the NBL at the new Bicester Road junction, new RSAs coded are too long, speed camera missing on the Oxford Road, input spreadsheets not provided to check demand inputs, placement of routes in particularly at the A34 SB link, missing some bus services and dwell time set to calculation not distribution, outputs not provided for the PM peak, signal errors at SC106 and SC1001.		

APPENDIX B

Pell Frischmann

OUFC VISSIM Model

Audit Summary Report – December TA Material

March 2025

This report is to be regarded as confidential to our Client and is intended for their use only and may not be assigned except in accordance with the contract. Consequently, and in accordance with current practice, any liability to any third party in respect of the whole or any part of its contents is hereby expressly excluded, except to the extent that the report has been assigned in accordance with the contract. Before the report or any part of it is reproduced or referred to in any document, circular or statement and before its contents or the contents of any part of it are disclosed orally to any third party, our written approval as to the form and context of such a publication or disclosure must be obtained.						
Report Ref.		PF Audit Summary Report - OUFC Base And Forecast VISSIM Model.Docx				
File Path		P:\Data\106862 - North Oxford VISSIM Model Audit\01 - WIP\Documents\Reports\PF Audit of OUFC Base and Forecast Models Dec 24\PF Audit Summary Report - OUFC Base and Forecast VISSIM Model.docx				
Rev	Suit	Description	Date	Originator	Checker	Approver
A		Initial Draft for Comment	30/10/24	MH	HQ	MH
B		Dec 2024 Review	4/3/25	MH	HQ	MH
Ref. reference. Rev revision. Suit suitability.						

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1 Introduction

Ridge and Partners LLP (Ridge) has been appointed by Oxford United Football Club (OUFC) to provide transport advice to support the development of a new stadium at 'Land to the east of Stratfield Brake and west of Oxford Parkway Station, known as 'The Triangle' ('the Site') – Planning Application Reference 24/00539/F.

The County Council's Oxfordshire Strategic Model (OSM), a SATURN model, is coming to the end of its life. Work on the Oxfordshire Mobility Model (OMM) is currently ongoing and may not be available for use by the development sites. The North Oxford Corridor / Partial Review sites study includes a VISSIM model that will be available for use by the developers.

Oxfordshire County Council (OCC) has requested that OUFC undertake transport modelling using the North Oxford VISSIM Model to assess the impact of development generated by OUFC new stadium proposals and associated match day traffic management.

OCC has appointed Pell Frischmann (PF) to provide audit support for the modelling work submitted by the applicants.

1.1 Work Undertaken to Date

The North Oxford VISSIM model has previously been used for the assessment of the North Oxford site and subsequently for the Partial Review sites in 2023.

PF worked with OCC and Ridge to agree on the scope of works for the VISSIM model and a final draft of the scoping report was produced in August 2024¹. The base model was reviewed in October 2024² and concluded that there were still a number of issues raised that should be addressed in a revised version including the following (green have been addressed, partially addressed in orange and red have not been addressed):

- Entries in modification files that should be included in the base file;
- Lane change distances need reviewing;
- Placement of route decisions need reviewing;
- Coding of priority rules at roundabout such as Bicester Road does not follow best practice;
- Signal head included on the northbound left turn at the new Bicester Road junction;
- New RSAs are too long (should be a max of 5m long);
- Presence of speed camera on the Oxford Road is missing;
- Input spreadsheets not provided to check demand inputs and routes and matrix development;
- Model missing some bus services (2C/2D, 7, 233, 250, 500);
- Bus dwell times set to calculation not distribution;
- Model output files not provided for the PM peak; and,
- Signal errors shown at SC106 and SC1001.

The LMVR was reviewed and the following issues were raised:

- Comparison of data should be presented include evidence that the MCCs were typical of flows during the ATC collection;
- The source of the observed TomTom data has not been stated;
- Need to provide a comparison of the trip ends for the common hours (old vs new);
- More details on the matrix development are required;
- Need to state where signal coding has changed such as Peartree;
- Average queues should be used rather than maximum;
- Source of signal data for VISSIG coding should be included;

¹ OUFC – New Stadium Development – North Oxford VISSIM Model Scoping Report – August 2024.

² PF Audit Summary Report – OUFC Base VISSIM Model – October 2024

- Need to clearly state how many seeds have been used and if any have been removed;
- Journey times should only be based on a 15% threshold;
- Some of the labels are wrong in the LMVR (such as Table 8.2);
- The link and turn GEH results are poor, particularly in the pre-game period;
- The source of bus journey times should be stated;
- No outputs on junction performance are provided; and,
- A presentation on network performance by seed should be provided.

1.2 Scope of Audit

This Technical Note sets out a review of the revised base models and associated Local Model Validation Report (LMVR) that have been submitted as well as the forecast models and report as follows:

- Base and Forecast Models submitted (19th December 2024);
- Supporting output spreadsheets and shapefiles (8th January 2025);
- LMVR (December 2024 – Appendix F of the TA); and;
- OUFC – New Stadium Development – Transport Assessment Addendum – December 2024 (containing the Forecast reporting).

The review includes checking of the input and output spreadsheets as well as an assessment of the assumptions made in the inputs.

The models have been audited using our standard model audit process.

2 VISSIM Model Files

2.1 Introduction

VISSIM model files were provided under scenario management for two scenarios as follows:

1. 2024 Weekday Base
2. 2024 Saturday Base
3. Weekday 2031 Reference Case (RC)
4. Saturday 2031 Reference Case
5. Weekday 2031 Do Something (DS)
6. Saturday 2031 Do Something

The base models have been audited using our standard model audit process. The audit checks a number of items under distinct headings and adopts a RAG scoring with red items needing attention, amber needing review and green with no action required.

2.2 Derivation of the new Base Model (for Scenario Management)

As set out in the previous review, a comparison between the previous PR sites model and the new OUFC model has been undertaken to determine if the changes listed in section 7 and Figure 7.1 of the LMVR cover all of the changes made. The following locations also contain changes that were not documented in the LMVR.

- Just west of A44/Cassington Road roundabout;
- Banbury Road / Golf Course entrance;
- A44 / Begbroke HI;
- A44 / Sandy Lane roundabout;
- A34 near Kiddlington exit;
- Elizabeth Jennings Way / A4144;
- Blandford Ave;
- Oxford Parkway Park and Ride;
- Rutten Lane / A44;
- Springhill Road / A44;
- Woodstock Road / Langford Lane;
- A4620 / Langford Lane; and,
- A44/A4095.

Explanations for the changes made at these locations and anywhere not mentioned in the LMVR, should be provided and included in the LMVR. This was mentioned in the previous review and has not been addressed.

2.3 Model Input Spreadsheets Review

Limited model input spreadsheets have been provided that do not include the matrix estimation process and only contain values of the inputs and routes that could just as easily be obtained from exporting them from the model. We need to see the calculations involved in deriving the inputs and routes, not values contained in the model.

2.4 Base Model Review

The remaining issues identified in the previous audit review that have not been addressed are discussed below:

- **Entries in modification files that should be included in the base file** – this has still not been addressed and items that should be in the base should be removed from the mod files and placed in the base file;

- **Placement of route decisions need reviewing** – for example the A34 SB route is still 163m from the entry link when it should be set at around 10m to allow vehicles more time to get in the correct lane to exit;
- **Presence of speed camera on the Oxford Road is missing** – the RSA has been added but it is too far downstream, the end point should be retained but the distance made to be 40m. Also the head can be reversed so the opposite direction should also be coded with an RSA;
- **Model missing some bus services (2C/2D, 7, 233, 250, 500)** – The 250 stopped running, but all other routes appear to still be live ([Route 2C towards Oxford City Centre](#), [Route 2D towards Oxford City Centre](#), [Route 7, 233 - Witney Market Square - Burford Burford Primary School – Stagecoach Oxfordshire – Bus Times](#), [Route 500](#))

In addition, the latest models have been reviewed with further issues identified as follows:

- A vehicle composition has been used at pedestrian inputs at crossings on Banbury Road (links 30623, 30625, 30646) and Woodstock Road (link 30650);
- The latest version of the model runs with 10 seeds (the previous version was set to 20 seed runs). The standard deviation of the results needs to be checked as per our previous request for the network performance results to be presented by random seed.

3 Local Model Validation Report

3.1 Introduction

The updated LMVR submitted as Appendix F of the TA Addendum in December 2024 has been reviewed and the issues set out in the sections below identified.

The remaining issues identified in the previous audit review that have not been addressed are discussed below:

- **Need to provide a comparison of the trip ends for the common hours (old vs new)** – More detail should be provided on this comparison that informs the matrix estimation;
- **Need to state where signal coding has changed such as Peartree** – This still hasn't been included (see paragraph 6.7.1);
- **Source of signal data for VISSIM coding should be included** – Again this still hasn't been included (see paragraph 7.1.1);
- **Need to clearly state how many seeds have been used and if any have been removed** – now states 10 used but should also clarify that none have been removed as outliers and that 10 seeds is suitable with low standard deviations (see paragraph 8.1.3 and Table 8.1);
- **The link and turn GEH results are poor, particularly in the pre-game period** – the results are improved from the previous version but still not full aligned to TAG criteria;
- **The source of bus journey times should be stated** – the source is stated in the main text of the TA in paragraph 4.7.1 but not included in the LMVR in paragraph 4.2.4 and Table 4.1 that only discusses general traffic;
- **No outputs on junction performance are provided** – This still hasn't been included and is important to understand the junction performance; and,
- **A presentation on network performance by seed should be provided** – This still hasn't been included and is important to understand the variation between seeds.

3.2 Additional Comments on the LMVR

In paragraph 5.5.6 it states that the PM matrices from the PR site model were used as the prior matrix for the development of the Saturday peak matrices. This is not ideal and consideration could have been given to using Inrix OD data as another potentially more accurate source.

A comparison of the ATC and MCC data has now been undertaken between 2023 and 2024 and does show some alarming differences such as the A40 EB with a difference of over 400 vehicles and Oxford Road SB with a difference of over 350 vehicles.

3.3 Link and Turning Flow Validation

The model results whilst improved over the previous results do not all meet the TAG criteria for link and turning flow validation. Where they do not meet the criteria, they are generally slightly below with the lowest being 79% (when 85% is required).

3.4 Journey Time Validation

The results show that only the first hour fails to meet the TAG criteria in the weekday PM model. In the Saturday peak model two of the time periods fail to meet the TAG criteria in the hours of 14:00-15:00 and 16:00-17:00. The first of these hours is the pre-match hour which is unfortunate, although it is only just below the TAG threshold. These results are much improved from the previous version.

An overall table summarising the pass/fail by route and time period would make this easier to digest.

3.5 Model Performance

No outputs are provided on the overall junction performance. As previously requested, these should be provided to summarise the flow throughput, average and maximum queue lengths, delays and level of service. This will provide an indication of the level of capacity available within the network.

Similarly, as previously requested, a presentation of the network performance by random seed should be presented to demonstrate that no outliers have been included in the average results.

4 Forecast Models

4.1 Reference Case Models

The model input data spreadsheets have been provided that follow a similar structure to the PR sites models.

It is not clear if the distribution of the existing Kassam Stadium trips in the reference case is based on the existing profile or if it is assumed (see paragraph 6.3.1 bottom of p73). This should be confirmed.

The models have been reviewed, and the following issues have been identified:

- There are bus routes without departure times in the forecast model that are different from that in the Base model? Justification for this is not provided in the TA.
- As per the base model a vehicle composition has been used at pedestrian inputs at crossings on Banbury Road (links 30623, 30625, 30646) and Woodstock Road (link 30650);
- New vehicle types with category Car use Small Car not Large Car have been added consistent with the PR sites models, but more importantly they are not being used. This means it is not possible to identify committed development easily;
- 2031 Ref Sat traffic inputs: some inputs in the model don't match the spreadsheet, for instance, inputs no. 1 (zone 1- car) and no. 115 (zone 16 – car). Either the spreadsheet provided is not the latest or the model has been changed after the spreadsheet was developed. This should be clarified.
- 2031 Ref Wkday Evening traffic inputs: some inputs in the model don't match the spreadsheet, for instance, inputs no. 1 (zone 1- car) and no. 115 (zone 16 – car). Either the spreadsheet provided is not the latest or the model has been changed after the spreadsheet was developed. This should be clarified.

4.2 Do Something Models

Again, the model input data spreadsheets have been provided that follow a similar structure to the PR sites models.

The models have been reviewed, and the following issues have been identified:

- The pedestrian demand on the crossings on the Oxford Road and Freize Road contain very low pedestrian numbers of 10 per hour despite an obvious huge increase in pedestrian numbers in and around match time.
- Keep clear markers have been added that should really have been included from the base model for consistency.
- The shuttle buses have not been included as new public transport routes.
- Traffic has been reduced by 10% but no clear evidence has been provided for selection of 10%. It would have been better to model the core scenario with no reduction in traffic and then present a sensitivity test with reduced traffic using an evidence-based figure.
- The matrices have been combined into one, it would have been better for the committed development and development traffic to have been isolated and modelled with different vehicle types to enable easy identification.
- The main issue with the DS model is the routing for the diversion. The methodology is as agreed however, the implementation contains errors. For partial routes to work they must be 100% within the main route. The following routes still route vehicles through the diversion in both Weekday and Saturday models:
 - o Northbound routes 122-60, 119-1, 119-46 ,120-47. This is due to the partial routes not covering the original routes e.g. at the Kiddlington roundabout the Oxford Road approach connects directly to the Frieze Way exit (link 10160). The main routes for these routes needs to be updated to connect first to the circulatory (link 128) then the exit connector (link 10157) for the partial route to work.

- o Southbound routes 116-37 / 115-41 / 117-42. This is due to the partial route to the A40 West using the bus lane on A44 and then wrong link on the circulatory (10206 instead of 10205) and a missing partial route to Godstow Road (for example for route 116-37). Alternatively, the link on the circulatory could be changed for the individual routes.
- The inputs and routes in the spreadsheet provided do not match the values in the model at all locations (the model is higher). Again, this should be clarified.

5 Forecast Report (TA)

5.1 Reference Case Trip Rates

For the reference case paragraph 6.4.6 states that new trip rates have been calculated for the new periods from TRICS. It is not clear why the same sites that were used by SLR to develop the trip rates for the PR sites were not used to create the new time period trip rates.

5.2 Trip Distribution

Paragraph 6.5.33 states that postcodes within the MSOA for Oxford 001-008 and Cherwell 017-019 are unlikely to be made by car. It seems likely that some trips by car will still be made for instance by elderly spectators.

5.3 Parkway Trips

The model assumes no trips to/from Parkway which is not considered realistic (see paragraph 7.2.5). This scenario modelled should have been a sensitivity test with the core scenario including some trips to Parkway.

5.4 Background Trip Reduction

A 10% reduction in background trips has been assumed. As mentioned earlier it would have been better to model no reduction for the core scenario and present a sensitivity test with a reduction in background traffic based on evidence from other locations.

5.5 Model Outputs

Whilst output spreadsheets have been provided, these are for individual outputs and no comparison spreadsheets have been provided.

Most of the tables presented in the TA just provide the differences from the Reference Case scenario. It is difficult to gauge the impact without the full information. Therefore, the tables should be updated to include the actual Reference Case and Do Something figures then the difference in absolute and percentage terms. For instance, this has been done in Table 7.10 and should be replicated in all other tables.

The average speed and queue length screenshots are hard to compare as presented, but do seem to indicate a reasonable impact with the DS.

The journey time outputs do indicate some large differences in the weekday model for Route 3 A4144 Woodstock Road to A44 Woodstock Road East, including a 42% increase (over 6 minutes) in the 18:00-19:00 period and 128% increase (nearly 15 minutes) in the 19:00-20:00 period.

Similarly, in the Saturday peak some large increases in journey times are noted on Route 5 A34 SB to A4260 Frieze Way, a 43% increase (over 10 minutes) in the 15:00-16:00 hour.

More concerning is the increases to public transport journey times in the 19:00-20:00 hour for the Eynsham P&R SB direction of nearly 3 minutes and on Saturday for the same direction of over 12.5 minutes.

As previously mentioned, and repeated above, no outputs on junction performance are provided. This still has not been included and is important to understand the junction performance.

5.6 Conference Centre Model

Only the model files have been provided with on input or output files.

The models provided did not contain the output database files.

The outputs presented in the TA show average speeds but do not present the RC versions to directly compare against.

The screenshots from the model in the AM peak do appear to show a much more congestion situation in the DS compared to the RC.

6 Summary and Conclusion

This Technical Note summarised a review of the revised base models and associated Local Model Validation Report (LMVR) that have been submitted as well as the forecast models and Transportation Assessment report.

There are a number of issues outstanding from the previous October 2024 review including:

- Missing commentary on the changes made to the network between the PR sites and the new OUFC model;
- The input files provided do not show the full calculations undertaken and in particular do not show the details of the matrix estimation undertaken including a comparison of the trip ends for the common hours between the old and new models;
- The base model placement of routes has not been updated and are too close to the end of the routes;
- The model is missing some bus services still (2C/2D, 7, 233 and 500);
- Vehicles are set to use pedestrian crossings on Banbury Road and Woodstock Road in the base and forecast models;
- The LMVR needs more detail on where the signal coding has changed and where the source signal data was derived, the source of bus journey times needs to be stated (as it is in the TA), no outputs on junction performance are provided (these should be provided to summarise the flow throughput, average and maximum queue lengths, delays and level of service) and a comparison of network performance by speed should be provided;
- The comparison of 2023 and 2024 data does show some concerning differences;
- The model results whilst improved over the previous results do not all meet the TAG criteria for link and turning flow validation; and,
- The journey time validation results show that only the first hour fails to meet the TAG criteria in the weekday PM model. In the Saturday peak model two of the time periods fail to meet the TAG criteria in the hours of 14:00-15:00 and 16:00-17:00. The first of these hours is the pre-match hour which is unfortunate, although it is only just below the TAG threshold. These results are much improved from the previous version. An overall table summarising the pass/fail by route and time period would make it easier to digest.

Specifically for the forecast models, the issues include:

- It is not clear if the distribution of the existing Kassam Stadium trips in the reference case is based on the existing profile or if it is assumed (see paragraph 6.3.1 bottom of p73);
- There are bus routes without departure times in the forecast model that are different from that in the Base model? Justification for this is not provided in the TA.
- New vehicle types with category Car use Small Car not Large Car have been added consistent with the PR sites models, but more importantly they are not being used. This means it is not possible to identify committed development easily (and the same applies to the DS model for OUFC vehicles);
- The forecast inputs in the models do not match the spreadsheets provided. Therefore, either the spreadsheets provided are not the latest or the model has been changed after the spreadsheet was developed. This should be clarified.
- The pedestrian demand on the crossings on the Oxford Road and Freize Road contain very low pedestrian numbers of 10 per hour despite an obvious huge increase in pedestrian numbers in and around match time.
- Keep clear markers have been added that should really have been included from the base model for consistency.
- The shuttle buses have not been included as new public transport routes.
- Traffic has been reduced by 10% but no clear evidence has been provided for selection of 10%. It would have been better to model the core scenario with no reduction in traffic and then present a sensitivity test with reduced traffic using an evidence-based figure.

- The main issue with the DS model is the routing for the diversion. The methodology is as agreed however, the implementation contains errors. For partial routes to work they must be 100% within the main route. The following routes still route vehicles through the diversion in both Weekday and Saturday models:
 - o Northbound routes 122-60, 119-1, 119-46 ,120-47. This is due to the partial routes not covering the original routes e.g. at the Kiddlington roundabout the Oxford Road approach connects directly to the Frieze Way exit (link 10160). The main routes for these routes needs to be updated to connect first to the circulatory (link 128) then the exit connector (link 10157) for the partial route to work.
 - o Southbound routes 116-37 / 115-41 / 117-42. This is due to the partial route to the A40 West using the bus lane on A44 and then wrong link on the circulatory (10206 instead of 10205) and a missing partial route to Godstow Road (for example for route 116-37). Alternatively, the link on the circulatory could be changed for the individual routes.
- Whilst output spreadsheets have been provided, these are for individual outputs and no comparison spreadsheets have been provided.

The above issues should be addressed in the model and reporting and updated versions resubmitted. Notwithstanding the above the model outputs do show some significant increases in journey times on two routes, the A4144 Woodstock Road to A44 Woodstock Road East in the 18:00-20:00 period and A34 SB to A4260 Frieze Way in the 15:00-16:00 hour on Saturday. More concerning is the increases to public transport journey times in the 19:00-20:00 hour for the Eynsham P&R SB direction of nearly 3 minutes and on Saturday for the same direction of over 12.5 minutes.

Appendix C

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OUFC VISSIM Model

Audit Summary Report – Addendum Report

April 2025

This report is to be regarded as confidential to our Client and is intended for their use only and may not be assigned except in accordance with the contract. Consequently, and in accordance with current practice, any liability to any third party in respect of the whole or any part of its contents is hereby expressly excluded, except to the extent that the report has been assigned in accordance with the contract. Before the report or any part of it is reproduced or referred to in any document, circular or statement and before its contents or the contents of any part of it are disclosed orally to any third party, our written approval as to the form and context of such a publication or disclosure must be obtained.						
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1 Introduction

Ridge and Partners LLP (Ridge) has been appointed by Oxford United Football Club (OUFC) to provide transport advice to support the development of a new stadium at 'Land to the east of Stratfield Brake and west of Oxford Parkway Station, known as 'The Triangle' ('the Site') – Planning Application Reference 24/00539/F.

The County Council's Oxfordshire Strategic Model (OSM), a SATURN model, is coming to the end of its life. Work on the Oxfordshire Mobility Model (OMM) is currently ongoing and may not be available for use by the development sites. The North Oxford Corridor / Partial Review sites study includes a VISSIM model that will be available for use by the developers.

Oxfordshire County Council (OCC) has requested that OUFC undertake transport modelling using the North Oxford VISSIM Model to assess the impact of development generated by OUFC new stadium proposals and associated match day traffic management.

OCC has appointed Pell Frischmann (PF) to provide audit support for the modelling work submitted by the applicants.

1.1 Work Undertaken to Date

The North Oxford VISSIM model has previously been used for the assessment of the North Oxford site and subsequently for the Partial Review sites in 2023.

PF worked with OCC and Ridge to agree on the scope of works for the VISSIM model and a final draft of the scoping report was produced in August 2024¹. The base model was reviewed in October 2024² and concluded that there were still a number of issues raised that should be addressed in a revised version.

The revised base model and forecast models were initially reviewed in February/March 2025³ and a meeting took place on 11th March 2025 to discuss the issues and Ridge's actions for a new submission.

The revised models were submitted on 20th March 2025 including new sensitivity scenarios.

1.2 Scope of Audit

This Technical Note sets out a review of the revised forecast models and new addendum report as follows:

- Base and Forecast Models submitted (20th March 2025);
- Supporting output spreadsheet - 2025 March Update - Junction, Network Performance and Q Summary (20th March 2025); and,
- OUFC – New Stadium Development – Addendum Transport Assessment and Sensitivity Tests – March 2025.

The review includes checking the items discussed in the call of 11th March as well as a review of the new addendum report.

¹ OUFC – New Stadium Development – North Oxford VISSIM Model Scoping Report – August 2024.

² PF Audit Summary Report – OUFC Base VISSIM Model – October 2024

³ PF Audit Summary Report – OUFC Base VISSIM Model – Rev B - March 2025

2 VISSIM Model Files

2.1 Introduction

VISSIM model files were provided under scenario management for two scenarios as follows:

1. 2024 Weekday Base
2. 2024 Saturday Base
3. Weekday 2031 Reference Case (RC)
4. Saturday 2031 RC
11. Weekday 2031 Do Something 10% reduction excluding Parkway (DS1)
12. Saturday 2031 DS 10% reduction excluding Parkway
13. Weekday 2031 DS2 10% reduction with Parkway
14. Saturday 2031 DS2 10% reduction with Parkway
16. Weekday 2031 DS1 15% reduction excluding Parkway (NOT REPORTED)
17. Saturday 2031 DS2 15% reduction with Parkway (Early kick-off 12:30)
18. Saturday 2031 DS2 20% reduction with Parkway (NOT REPORTED)
19. Saturday 2031 DS1 15% reduction excluding Parkway (Early kick-off 12:30)
20. Saturday 2031 Reference Case (Early kick-off 12:30)

The new models have not been reviewed in detail due to time constraints, but the key issues from the previous audit have been checked and the outputs have been summarised in a more concise and understandable format.

2.2 Outstanding Issues with the Base Model reporting

2.2.1 Derivation of the new Base Model (for Scenario Management)

As set out in the previous review, a comparison between the previous PR sites model and the new OUFC model has been undertaken to determine if the changes listed in section 7 and Figure 7.1 of the LMVR cover all of the changes made. The following locations also contain changes that were not documented in the LMVR.

- Just west of A44/Cassington Road roundabout;
- Banbury Road / Golf Course entrance;
- A44 / Begbroke HI;
- A44 / Sandy Lane roundabout;
- A34 near Kiddlington exit;
- Elizabeth Jennings Way / A4144;
- Blandford Ave;
- Oxford Parkway Park and Ride;
- Rutten Lane / A44;
- Springhill Road / A44;
- Woodstock Road / Langford Lane;
- A4620 / Langford Lane; and,
- A44/A4095.

Explanations for the changes made at these locations and anywhere not mentioned in the LMVR, should be provided and included in the LMVR. This was mentioned in the previous reviews and has not been addressed.

2.2.2 Model Input Spreadsheets Review

Limited model input spreadsheets have been provided that do not include the matrix estimation process and only contain values of the inputs and routes that could just as easily be obtained from exporting them from the model. More detail around the calculations involved in deriving the inputs and routes, should be provided and described in the LMVR.

2.2.3 Base Model Review

It was agreed that the remaining issues identified in the previous audit review that have not been addressed will not be updated at this stage (see previous March 2025 audit report for details).

However, the following issues were updated:

- A vehicle composition has been used at pedestrian inputs at crossings on Banbury Road (links 30623, 30625, 30646) and Woodstock Road (link 30650);
- The latest version of the model runs with 10 seeds (the previous version was set to 20 seed runs). The standard deviation of the results needs to be checked as per our previous request for the network performance results to be presented by random seed.

Despite these being updated, the LMVR has not been updated to reflect the changes.

3 Previously Identified Issues

3.1 LMVR

A number of issues were raised with the previous LMVR submitted as Appendix F of the TA Addendum in December 2024.

The issues identified in the previous audit are set out below with Ridge's response rated with a RAG scoring.

- Need to provide a comparison of the trip ends for the common hours (old vs new) – More detail should be provided on this comparison that informs the matrix estimation: **There are no common hours between the PR sites models and the OUFC models. The PM PR Sites Model covers the hours between 15:00 to 18:00 with a 30 minute cool down which would not provide any suitable comparison.**
- Need to state where signal coding has changed such as Peartree – This still hasn't been included (see paragraph 6.7.1): **This has been added in Appendix A of the Addendum report – inherited from PR sites model other than new network. However, this should be included in the LMVR.**
- Source of signal data for VISSIM coding should be included – Again this still hasn't been included (see paragraph 7.1.1); **This has been added in Appendix A of the Addendum report. However, this should be included in the LMVR.**
- **Need to clearly state how many seeds have been used and if any have been removed** – now states 10 used but should also clarify that none have been removed as outliers and that 10 seeds is suitable with low standard deviations (see paragraph 8.1.3 and Table 8.1): **Clarified that 10 have been run and standard deviations have been checked.**
- **The source of bus journey times should be stated** – the source is stated in the main text of the TA in paragraph 4.7.1 but not included in the LMVR in paragraph 4.2.4 and Table 4.1 that only discusses general traffic: **This has been added in Appendix A of the Addendum report. However, this should be included in the LMVR.**
- **No outputs on junction performance are provided** – This still hasn't been included and is important to understand the junction performance: **These have now been provided but not in the requested format therefore, PF has adjusted them to a more understandable format.**
- **A presentation on network performance by seed should be provided** – This still hasn't been included and is important to understand the variation between seeds: **Indirectly provided in the spreadsheet provided but no specific output provided and should be included in the LMVR.**
- An overall table summarising the pass/fail by route and time period would make this easier to digest: **This has still not been provided or included in the LMVR.**

A revised LMVR has not been provided despite the models being updated (albeit with minor changes).

3.2 Reference Case Models

The model input data spreadsheets have been provided that follow a similar structure to the PR sites models.

The issues identified in the previous audit are set out below with Ridge's response rated with a RAG scoring.

- As per the base model a vehicle composition has been used at pedestrian inputs at crossings on Banbury Road (links 30623, 30625, 30646) and Woodstock Road (link 30650): **Updated and resolved.**
- New vehicle types with category Car use Small Car not Large Car have been added consistent with the PR sites models, but more importantly they are not being used. This means it is not possible to identify committed development easily: **Still not updated.**

3.3 Do Something Models

The issues identified in the previous audit are set out below with Ridge's response and PF comment rated with a RAG scoring:

- The pedestrian demand on the crossings on the Oxford Road and Freize Road contain very low pedestrian numbers of 10 per hour despite an obvious huge increase in pedestrian numbers in and around match time: Uplifting the number of people crossing is not reflective of what could happen due to marshals controlling crowds. The missing proposed crossings have now been included and fixed timings added. – This is not considered realistic as the number of calls for the crossing is still low compared to reality.
- Keep clear markers have been added that should really have been included from the base model for consistency: Noted - This has not been amended in the base model as it was not identified to be an issue at the time of scoping or effecting the operation of the network. They have been added to the DS scenario to make sure that traffic did not block turning traffic.
- The shuttle buses have not been included as new public transport routes: These have not been included, a manual assessment of journey times on routes that will be used by shuttle buses has been undertaken and presented within the TAA – However, they do appear to have been added in the submitted models with a frequency of 10-30 per hour.
- Traffic has been reduced by 10% but no clear evidence has been provided for selection of 10%. It would have been better to model the core scenario with no reduction in traffic and then present a sensitivity test with reduced traffic using an evidence-based figure: Evidence on VMS impact is provided in the Transport Assessment Options and Sensitivity Report. – Whilst they have provided more evidence to support this but still retained a global change other than the A34 (but it should probably also apply to the A40 and A44).
- The matrices have been combined into one, it would have been better for the committed development and development traffic to have been isolated and modelled with different vehicle types to enable easy identification: The matrices are split, however the vehicle type is set as the same as others. There are new user classes associated with the PR sites and OUFC traffic. – If the colours of vehicles can be updated easily it should be done to make it easier to see the impact.
- The main issue with the DS model is the routing for the diversion. The methodology is as agreed however, the implementation contains errors. For partial routes to work they must be 100% within the main route. The following routes still route vehicles through the diversion in both Weekday and Saturday models:
 - o Northbound routes 122-60, 119-1, 119-46 ,120-47. This is due to the partial routes not covering the original routes e.g. at the Kiddlington roundabout the Oxford Road approach connects directly to the Frieze Way exit (link 10160). The main routes for these routes needs to be updated to connect first to the circulatory (link 128) then the exit connector (link 10157) for the partial route to work.
 - o Southbound routes 116-37 / 115-41 / 117-42. This is due to the partial route to the A40 West using the bus lane on A44 and then wrong link on the circulatory (10206 instead of 10205) and a missing partial route to Godstow Road (for example for route 116-37). Alternatively, the link on the circulatory could be changed for the individual routes.

Noted – amended - Whilst this has been resolved for the routes mentioned, there are still vehicles driving through the diversion well beyond the cut off time (for instance at 1723 in the Friday weekday). This is probably just a function of the distance that vehicles have to travel from the partial route?

4 Forecast Report (TA)

A number of issues were raised with the previous forecast report submitted within the TA Addendum in December 2024. These are listed below with Ridge's response and PF comment rated with a RAG scoring:

- Reference Case Trip Rates - For the reference case paragraph 6.4.6 states that new trip rates have been calculated for the new periods from TRICS. It is not clear why the same sites that were used by SLR to develop the trip rates for the PR sites were not used to create the new time period trip rates: **The trip rates are reported to be the same as the PR sites model.**
- Trip Distribution - Paragraph 6.5.33 states that postcodes within the MSOA for Oxford 001-008 and Cherwell 017-019 are unlikely to be made by car. It seems likely that some trips by car will still be made for instance by elderly spectators: **Noted - the main drop off is at Pear Tree Park and Ride where shuttle buses will be provided for those who are less mobile. These trips are included within the model.**
- Parkway Trips - The model assumes no trips to/from Parkway which is not considered realistic (see paragraph 7.2.5). This scenario modelled should have been a sensitivity test with the core scenario including some trips to Parkway: **Noted - an additional sensitivity test has been undertaken and included in the Transport Assessment Options and Sensitivity Report.**
- Background Trip Reduction - A 10% reduction in background trips has been assumed. As mentioned earlier it would have been better to model no reduction for the core scenario and present a sensitivity test with a reduction in background traffic based on evidence from other locations: **Evidence on VMS impact is provided in the Transport Assessment Options and Sensitivity Report. – Whilst they have provided more evidence to support this but still retained a global change other than the A34 (but it should probably also apply to the A40 and A44).**
- Model Outputs:
 - o Whilst output spreadsheets have been provided, these are for individual outputs and no comparison spreadsheets have been provided: **No Action Required - The spreadsheets provided comparisons between the Reference and Do Something scenarios. – As this was not provided PF have produced them and present them in the next section.**
 - o Most of the tables presented in the TA just provide the differences from the Reference Case scenario. It is difficult to gauge the impact without the full information. Therefore, the tables should be updated to include the actual Reference Case and Do Something figures then the difference in absolute and percentage terms. For instance, this has been done in Table 7.10 and should be replicated in all other tables: **No Action Required - The spreadsheets provided comparisons between the Reference and Do Something scenarios. – As this was not provided PF have produced them and present them in the next section.**
- As previously mentioned, and repeated above, no outputs on junction performance are provided. This still has not been included and is important to understand the junction performance: **Spreadsheet included with this information.**
- Conference Centre Model - Only the model files have been provided with on input or output files. **Input files have now been provided. However, no output files were provided.**

5 Addendum Report

5.1 Introduction

The Addendum Report (AR) report repeats a large amount of information from the previous report and adds in new sensitivity test results covering:

- 12:30 kick-off sensitivity test;
- Additional sensitivity test to include vehicles travelling to Oxford Parkway;
- Modelling Outputs split into 15-minute segments; and,
- Additional evidence of background traffic reduction on event days.

5.2 Pedestrian Crossings

In section 2.2.2 it states that Toucan crossings are proposed across Oxford Road north of the stadium. However, the crossings are either modelled on fixed time with a 120s cycle time (which appears very long for a standalone crossing) or with pedestrian demand set to 10 per hour which is clearly too low for before and after the match.

5.3 VMS Signing and Traffic Demand Reduction

In section 3.4.4 it states that traffic has been reduced by 10-15% globally other than the A34. The through traffic on the A40 and A44 should also be excluded from the global reduction.

5.4 Early Kick-off (12:30)

The methodology adopted to create an earlier time period on the Saturday uses a crude factoring method. The results should therefore be treated with caution as the factoring is applied on a global basis and will not reflect changes in OD patterns and local changes in demand that are evident based on the range presented in Table 4.1, from 0.999 to 1.177.

The global reduction in traffic has been increased to 15% for the early kick-off. It should be noted that the input spreadsheets for this scenario have not been provided to check the calculations.

5.5 Network Performance Results Comparison

Ridge present results simply as the differences between the 3pm and early kick-off times. Therefore, PF has prepared comparison tables that were previously requested to show a direct comparison between scenarios for each metric. Table 5.1 shows the weekday results and Table 5.2 the Saturday results comparisons. For the latter the names with the suffix E represent the early kick-off.

The light blue shaded cells represent the optimal performer between scenarios for each metric and vehicle class.

Table 5.1 – Weekday Network Performance Results Comparison

Time Period	Time	Class	Average Delay (s)			Average Speed (mph)			Average Stops			Average Stopped Delay (s)			Total Travel Time (veh/hrs)			Total Delay Time (veh/hrs)			Total Stops			Latent Demand Delay (veh/hrs)			Latent Demand (vehs)		
			Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2	Ref	DS1	DS2
1800-5400	18:00 to 19:00	All	174.5	194.1	137.3	26.8	26.0	29.3	5.1	6.1	3.8	90.4	105.0	61.1	1934	1825	1700	675	700	500	71018	79679	50361	1.5	8.8	0.6	0.6	1.3	0.3
		Car	180.8	198.2	140.8	27.5	19.0	29.2	5.3	6.3	4.0	94.6	106.5	63.1	1732	1654	1492	619	628	448	65568	71259	45495	-	-	-	-	-	-
		LGV	176.8	280.7	150.7	42.9	34.9	43.4	5.2	9.8	4.3	86.5	169.9	65.2	108	117	105	37	58	32	3930	7250	3268	-	-	-	-	-	-
		HGV	48.3	36.3	45.4	13.7	15.1	16.3	1.0	1.0	1.0	17.1	17.6	15.4	70	33	70	8	6	8	646	580	637	-	-	-	-	-	-
5400-9000	19:00 to 20:00	All	168.0	238.2	200.1	27.9	23.4	25.7	4.0	7.7	4.8	99.0	144.6	126.3	1413	1455	1470	478	643	569	40972	75123	48926	39.2	35.4	41.2	46.3	67.3	58.8
		Car	174.9	256.1	206.0	28.1	23.9	25.2	4.2	8.4	5.0	104.2	155.3	130.9	1252	1343	1278	436	602	506	37616	71399	44041	-	-	-	-	-	-
		LGV	177.5	202.1	236.0	43.2	37.8	41.7	4.3	5.5	5.9	99.7	133.8	148.2	78	71	83	26	30	34	2251	2918	3059	-	-	-	-	-	-
		HGV	44.6	25.6	63.2	14.0	15.3	16.6	0.9	0.7	1.3	16.7	13.3	33.5	62	24	64	7	4	10	497	359	703	-	-	-	-	-	-
9000-12600	20:00 to 21:00	All	88.4	110.1	242.9	32.2	30.3	23.0	1.8	2.3	5.3	40.6	63.2	168.7	806	776	1132	168	205	487	12574	15132	38084	37.6	29.9	45.0	43.7	2.6	43.1
		Car	93.4	119.9	258.9	33.0	30.5	24.2	1.9	2.5	5.7	44.1	69.8	181.5	693	703	982	151	189	439	11299	13902	34486	-	-	-	-	-	-
		LGV	92.1	97.4	265.6	44.5	39.6	40.3	2.1	2.3	5.9	35.2	51.5	178.2	45	40	68	9	10	29	733	797	2301	-	-	-	-	-	-
		HGV	30.8	15.5	73.7	17.7	17.6	14.9	0.6	0.3	1.5	9.1	6.5	42.2	55	20	62	4	2	10	295	153	767	-	-	-	-	-	-
12600-16200	21:00 to 22:00	All	76.0	83.8	91.0	34.2	32.5	31.9	1.7	1.8	2.0	32.9	43.5	46.2	678	576	636	127	121	137	10145	9237	10818	5.1	191.9	234.4	0.2	389.9	432.9
		Car	79.5	91.8	97.3	34.0	33.8	33.9	1.8	1.9	2.1	35.3	48.6	51.0	585	520	541	114	111	123	9180	8420	9700	-	-	-	-	-	-
		LGV	82.4	68.5	88.3	45.0	42.2	45.4	1.9	1.8	2.2	31.9	31.2	36.4	35	29	36	6	5	7	524	483	601	-	-	-	-	-	-
		HGV	28.0	9.3	28.6	17.3	17.4	17.1	0.5	0.2	0.6	8.4	3.7	9.2	47	16	47	3	1	3	226	82	254	-	-	-	-	-	-
16200-19800	22:00 to 23:00	All	65.0	82.2	91.0	34.8	32.8	32.4	1.6	1.7	2.0	24.4	44.3	45.8	520	459	556	84	94	117	7218	6901	9323	0.0	383.5	441.5	0.0	378.9	448.5
		Car	68.2	89.9	94.2	34.4	34.1	34.5	1.6	1.8	2.1	25.9	49.1	47.9	465	431	478	78	90	104	6717	6477	8362	-	-	-	-	-	-
		LGV	74.0	62.7	78.3	45.2	40.4	45.2	1.8	1.7	2.0	30.8	27.1	34.2	11	9	11	2	1	2	162	139	185	-	-	-	-	-	-
		HGV	24.0	9.8	25.3	17.8	17.6	20.7	0.5	0.2	0.6	7.2	3.8	8.3	37	12	37	2	1	2	163	78	187	-	-	-	-	-	-

Table 5.2 – Saturday Network Performance Results Comparison

Time Period	Time	Class	Average Delay (s)					Average Speed (mph)					Average Stops					Total Travel Time (veh/hrs)					Total Delay Time (veh/hrs)					Latent Demand Delay (veh/hrs)					Latent Demand (vehs)				
			Ref	RefE	DS1	DS1E	DS2	Ref	RefE	DS1	DS1E	DS2	Ref	RefE	DS1	DS1E	DS2	Ref	RefE	DS1	DS1E	DS2	Ref	RefE	DS1	DS1E	DS2	Ref	RefE	DS1	DS1E	DS2	Ref	RefE	DS1	DS1E	DS2
1800-5400	14:00 to 15:00 11:30 to 12:30	All	147.0	183.1	145.6	160.0	187.9	30.1	27.9	30.0	29.5	28.0	4.2	5.5	5.1	5.4	7.1	1608	2073	1638	1665	1840	499	748	513	555	686	175.5	238.4	0.5	0.9	1.9	218.5	331.6	0.5	0.4	0.6
		Car	147.6	184.3	146.4	157.3	184.7	28.4	26.4	28.6	28.3	26.1	4.2	5.6	5.2	5.5	7.2	1483	1927	1503	1482	1656	463	699	474	489	613	-	-	-	-	-	-	-	-	-	
		LGV	164.3	201.1	162.3	178.5	207.4	39.2	37.5	40.1	39.2	38.3	4.8	6.2	5.2	5.6	6.8	86	101	92	98	100	28	37	30	33	38	-	-	-	-	-	-	-	-	-	
		HGV	73.3	93.0	64.3	75.0	84.1	16.3	16.1	16.4	18.1	15.9	1.8	2.4	1.7	2.0	2.3	24	28	26	27	27	4	6	4	5	5	-	-	-	-	-	-	-	-	-	
5400-9000	15:00 to 16:00 12:30 to 13:30	All	130.1	168.9	159.8	163.6	210.0	31.2	28.7	29.3	29.7	27.0	3.5	5.3	7.5	7.0	13.3	1476	1925	1629	1595	1826	419	661	535	533	721	96.4	221.9	0.4	0.4	0.4	2.6	91.6	0.4	0.4	0.6
		Car	130.5	170.5	161.3	160.0	207.3	29.9	27.6	28.2	28.8	26.1	3.6	5.4	7.7	7.2	13.5	1368	1798	1505	1440	1659	390	620	498	471	649	-	-	-	-	-	-	-	-	-	
		LGV	144.3	183.9	170.7	170.5	208.4	40.7	38.1	40.3	40.4	39.2	4.0	5.6	7.1	6.7	11.3	69	83	82	83	89	21	29	27	27	34	-	-	-	-	-	-	-	-	-	
		HGV	65.9	95.9	69.2	69.6	82.0	16.5	16.3	16.6	15.7	13.2	1.6	2.8	1.7	1.7	2.3	23	27	26	26	27	3	6	4	4	5	-	-	-	-	-	-	-	-	-	
9000-12600	16:00 to 17:00 13:30 to 14:30	All	103.6	148.1	92.5	105.1	125.3	33.3	30.1	34.5	34.4	32.9	2.6	4.8	2.3	2.5	3.5	1367	1836	1372	1372	1495	329	576	303	335	418	0.5	59.8	0.4	0.4	0.4	0.3	43.8	0.2	0.1	0.1
		Car	102.8	148.7	91.6	97.0	119.2	31.5	28.6	32.5	32.9	30.9	2.6	4.8	2.3	2.5	3.5	1262	1709	1259	1230	1352	302	536	277	280	362	-	-	-	-	-	-	-	-	-	
		LGV	128.7	176.8	114.1	117.4	138.2	41.2	38.0	41.9	41.7	40.5	3.4	6.0	2.9	3.1	4.1	68	83	72	74	76	18	28	18	18	22	-	-	-	-	-	-	-	-	-	
		HGV	56.8	91.0	48.8	51.4	62.8	16.3	16.2	16.5	16.4	16.4	1.3	3.0	1.0	1.1	1.4	21	25	23	23	23	3	5	3	3	3	-	-	-	-	-	-	-	-	-	
12600-16200	17:00 to 18:00 14:30 to 15:30	All	115.8	166.1	136.2	121.5	135.8	32.8	29.3	31.0	33.1	32.1	3.3	6.7	4.3	2.9	3.8	1452	1949	1533	1455	1570	380	664	452	394	462	0.5	22.5	164.0	169.2	165.1	0.4	7.2	351.9	359.2	353.3
		Car	115.2	167.5	136.8	109.1	125.9	29.6	26.7	29.2	31.0	29.5	3.3	6.8	4.4	2.9	3.8	1350	1828	1419	1281	1399	353	624	420	320	390	-	-	-	-	-	-	-	-	-	
		LGV	141.8	191.9	148.5	126.0	141.5	40.3	39.3	40.3	41.4	40.6	4.0	7.3	4.6	3.5	4.2	68	82	76	74	75	20	30	23	19	22	-	-	-	-	-	-	-	-	-	
		HGV	62.9	73.9	63.8	53.0	59.6	16.6	16.1	16.1	18.2	17.8	1.5	1.8	1.6	1.2	1.4	19	22	21	21	21	3	4	3	3	3	-	-	-	-	-	-	-	-	-	
16200-19800	18:00 to 19:00 15:30 to 16:30	All	112.1	124.2	87.6	103.7	101.6	32.5	31.6	34.5	34.8	35.2	3.1	5.5	2.0	2.1	2.0	1177	1480	1153	1164	1192	301	410	245	282	285	0.3	1.5	290.0	308.9	299.9	0.0	0.4	236.5	260.6	248.9
		Car	111.5	124.8	87.2	87.1	86.6	30.0	29.6	32.7	33.1	32.7	3.1	5.6	2.0	2.0	1090	1382	1062	1016	1048	278	383	226	214	221	-	-	-	-	-	-	-	-	-		
		LGV	141.3	145.8	98.6	103.3	99.4	40.4	40.7	42.4	43.1	42.4	3.9	6.1	2.4	2.6	2.5	57	65	58	59	57	16	19	13	13	13	-	-	-	-	-	-	-	-	-	
		HGV	64.5	60.3	42.9	41.2	43.4	16.8	16.6	16.2	18.0	18.0	1.5	1.5	0.8	0.8	0.9	17	19	18	18	18	3	3	2	2	2	-	-	-	-	-	-	-	-	-	

Purely in the context of early kick-off (E) vs 3pm kick-off on Saturday, the results show the following:

- The early kick-off results in more delay and lower average speed in all hours with the exception of the 4th hour;
- However, compared to the early kick-off reference case, the delays are all lower (and speeds higher), although this is likely to be due to 15% global reduction in traffic; and,
- The latent demand increases more in the final two hours with the early kick-off compared to 3pm and is much higher than the reference case for both kick-off times, although for the first three hours the early kick-off latent demand is lower than the reference case.

5.6 Junction Performance Results Comparison

Ridge did not present any results for the junction performance in the AR or original forecast report, but did provide a spreadsheet with limited presentation of the results. Therefore, PF has prepared comparison tables that were previously requested to show a direct comparison between scenarios for each metric. Table 5.3 shows the weekday results and Table 5.4 the Saturday results comparisons. Again, for the latter the names with the suffix E represent the early kick-off.

The light blue shaded cells represent the optimal performer between scenarios for each metric and vehicle class. In addition, the level of service (LOS) is a measure of the overall delay at each junction as defined in the US Highway Capacity Manual. A LOS of 'A' to 'C' suggests that the junction operates within the capacity (under 85% capacity), a LOS of 'D' suggests that the junction operates approaching its capacity (85%). A LOS of 'E' suggests that the junction operates at capacity, and a LOS of 'F' suggests that the junction operates over capacity.

Therefore, to help distinguish junctions that do not operate within capacity, a LOS E has been highlighted in orange and a LOS F in red.

Table 5.3 - Junction Performance Comparison - Weekday

Time	Node	Junction Name	Flow				Avg Queue Length				Max Queue Length				Delay Car				LOS Car				Delay LGV				LOS LGV				Delay HGV				LOS HGV				
			Base	Ref	DS1	DS2	Base	Ref	DS1	DS2	Base	Ref	DS1	DS2	Base	Ref	DS1	DS2	Base	Ref	DS1	DS2	Base	Ref	DS1	DS2	Base	Ref	DS1	DS2	Base	Ref	DS1	DS2					
18:00 to 19:00	1201	Kidlington Roundabout	95	74	67	69	6	5	4	4	63	59	52	51	11	16	12	15	B	C	B	B	7	9	8	11	A	A	A	B	3	4	3	4	A	A	A	A	
	101	Loop Farm Roundabout	233	298	282	287	0	1	1	40	31	35	34	165	2	3	4	16	A	A	A	C	3	3	2	15	A	A	A	B	2	2	2	10	A	A	A	A	
	201	Peartree Interchange	125	144	136	141	3	4	4	9	32	34	36	46	20	20	20	27	C	C	C	D	17	17	19	28	C	C	C	D	19	20	22	32	C	C	C	D	
	401	Wolvercote Roundabout	96	92	83	87	39	53	40	39	142	126	122	119	34	43	33	31	D	E	D	D	18	20	21	16	C	C	C	C	16	15	11	12	C	C	B	B	
	701	Cotteslowe Roundabout	254	251	227	233	37	42	25	32	127	109	95	107	43	47	33	37	E	E	D	E	41	42	21	33	E	E	C	D	28	17	14	21	D	C	B	C	
	1001	Water Eaton Park and Ride	257	244	221	228	4	3	3	4	60	58	59	66	11	17	16	21	B	C	C	C	3	6	10	12	A	A	B	B	2	7	2	8	A	A	A	A	
	1814	A34 Link/Kidlington Road	93	95	138	96	0	0	0	0	3	4	9	4	1	1	2	1	A	A	A	A	1	1	1	1	A	A	A	A	0	0	0	0	A	A	A	A	
	1812	Bicester Road/A34 Link	76	63	56	61	0	0	0	0	5	2	2	0	0	0	0	0	A	A	A	A	1	0	0	0	A	A	A	A	0	0	0	0	A	A	A	A	
	1811	Bicester Road/Water Eaton Lane	80	75	70	73	8	7	6	7	58	54	48	55	26	24	23	26	D	C	C	D	14	14	10	15	B	B	B	B	21	19	5	18	C	C	A	C	
	1601	A40 / Eynsham Road / Cassington Road	120	152	131	138	3	12	9	7	51	148	112	94	42	40	37	36	E	E	E	E	16	20	28	20	C	C	D	C	4	13	2	4	A	B	A	A	
	1724	Woodstock Road/Cassington Road	176	145	139	141	0	0	16	0	17	9	130	9	2	1	6	1	A	A	A	A	1	1	4	1	A	A	A	A	0	0	6	0	A	A	A	A	
	1717	Woodstock Road/Sandy Lane	101	74	63	68	1	14	38	2	42	89	94	50	5	27	86	7	A	D	A	A	2	15	1	3	A	C	A	A	1	1	1	1	A	A	A	A	
	1719	Woodstock Road/Spring Hill Road	145	202	161	193	0	2	1	2	30	81	70	79	2	7	5	6	A	A	A	A	2	5	3	5	A	A	A	A	1	3	1	2	A	A	A	A	
	1720	Woodstock Road/Langford Lane	257	369	301	350	2	3	2	3	26	38	29	34	10	11	10	11	A	B	A	B	10	11	9	10	A	B	A	A	7	6	5	8	A	A	A	A	
	1701	Banbury Road/Lanford Lane	166	166	140	152	4	4	3	4	49	49	47	45	14	14	13	14	B	B	B	B	13	14	4	14	B	B	A	B	13	14	11	14	B	B	B	B	
	1702	Banbury Road/The Moors	144	137	118	127	0	0	0	0	5	6	5	5	11	9	8	9	B	A	A	A	6	5	4	10	A	A	A	A	5	4	2	4	A	A	A	A	
	1705	Banbury Road/Yarnton Road	239	233	211	216	7	6	5	5	91	82	82	77	13	11	11	11	B	B	B	B	13	10	7	10	B	B	A	A	8	8	6	6	A	A	A	A	
	1706	Banbury Road/Bicester Road	237	226	206	208	5	5	5	4	73	72	74	66	16	15	15	15	C	C	C	C	6	6	8	7	A	A	A	A	9	8	4	8	A	A	A	A	
	1708	Banbury Road/Squitchey Lane	110	105	100	97	3	48	7	5	81	119	90	72	12	41	13	11	B	E	B	B	5	22	9	9	A	C	A	A	2	11	4	3	A	B	A	A	
	1709	Banbury Road/Marston Ferry Road	150	146	131	133	52	25	21	20	191	131	121	119	64	51	53	52	E	D	D	D	62	48	33	50	E	D	D	D	22	14	10	11	C	B	B	B	
	1710	Woodstock Road/Moreton Road	163	178	155	162	0	1	0	1	17	20	19	20	9	9	8	8	A	A	A	A	8	9	5	8	A	A	A	A	3	7	2	6	A	A	A	A	
	1711	Woodstock Road/Squitchey Lane	93	97	84	88	1	7	1	1	50	86	41	42	15	25	12	13	B	C	B	B	8	9	5	8	A	A	A	A	4	4	4	3	A	A	A	A	
19:00 to 20:00	1201	Kidlington Roundabout	69	53	36	39	2	2	1	1	44	39	34	38	7	11	9	12	A	B	A	B	5	7	3	9	A	A	A	A	3	4	2	5	A	A	A	A	
	101	Loop Farm Roundabout	148	207	261	248	0	0	1	2	22	23	54	60	2	2	4	6	A	A	A	A	2	2	3	5	A	A	A	A	1	2	2	5	A	A	A	A	
	201	Peartree Interchange	83	110	134	132	2	3	5	7	23	30	47	65	20	19	29	31	C	C	D	D	15	17	24	33	B	C	C	D	13	14	30	28	B	B	D	D	
	401	Wolvercote Roundabout	69	68	77	77	20	22	43	69	99	114	104	191	27	36	30	58	D	E	D	D	16	17	18	41	C	C	C	E	15	8	8	20	B	A	A	C	
	701	Cotteslowe Roundabout	179	177	165	170	14	30	16	30	77	102	73	127	23	60	35	48	C	E	D	E	16	72	23	36	C	E	E	E	8	14	13	24	A	B	B	C	
	1001	Water Eaton Park and Ride	191	181	61	94	3	3	1	5	53	57	30	62	10	15	12	22	B	C	B	C	3	6	6	9	A	A	A	A	5	8	3	9	A	A	A	A	
	1814	A34 Link/Kidlington Road	56	60	98	57	0	0	0	0	2	7	1	0	0	1	0	0	A	A	A	A	0	0	0	0	A	A	A	A	0	0	0	0	A	A	A	A	
	1812	Bicester Road/A34 Link	54	47	42	44	0	0	0	0	0	0	0	0	1	0	0	0	A	A	A	A	0	0	0	0	A	A	A	A	0	0	0	0	A	A	A	A	
	1811	Bicester Road/Water Eaton Lane	44	39	35	40	0	0	0	0	3	35	36	31	36	21	23	21	C	C	C	C	10	10	9	12	B	B	A	B	15	16	4	16	B	C	A	B	
	1601	A40 / Eynsham Road / Cassington Road	116	151	125	147	3	11	6	8	45	143	86	122	44	25	22	22	E	D	C	C	9	12	9	11	A	B	A	B	2	4	1	3	A	A	A	A	
	1724	Woodstock Road/Cassington Road	105	90	84	82	0	0	27	0	9	136	6	1	1	41	1	A	A	E	A	1	2	43	1	A	A	E	A	0	0	8	0	A	A	A	A		
	1717	Woodstock Road/Sandy Lane	60	52	47	49	0	0	4	38	1	19	48	84	34	3	12	105	5	A	B	A	A	1	7	3	2	A	A	A	A	1	1	1	1	A	A	A	A
	1719	Woodstock Road/Spring Hill Road	79	128	130	119	0	0	0	0	8	44	41	32	1	4	3	3	A	A	A	A	0	7	3	1	A	A	A	A	1	2	0	2	A	A	A	A	
	1720	Woodstock Road/Langford Lane	131	223	221	208	1	1	1	1	15	24	21	22	7	8	7	8	A	A	A	A	7	7	8	8	A	A	A	A	10	11	2	12	A	B	A	B	
	1701	Banbury Road/Lanford Lane	100	102	86	88	2	2	1	2	36	36	31	32	11	11	10	10	B	B	B	B	9	9	7	9	A	A	A	A	7	6	3	14	A	A	A	B	
	1702	Banbury Road/The Moors	93	88	74	73	0	0	0	0	4	3	3	3	9	7	6	7	A	A	A	A	4</																

Table 5.4 - Junction Performance Comparison - Saturday

Time	Node	Junction Name	Flow						Avg Queue Length						Max Queue Length						Delay Car						LOS Car						Delay LGV						LOS LGV						Delay HGV						LOS HGV							
			Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2	Base	Ref	RefE	DS1	DS1E	DS2								
14:00 to 15:00 11:30 to 12:30	1201	Kidlington Roundabout	83	68	76	50	48	49	3	3	4	2	2	2	46	50	55	49	48	40	4	7	14	17	3	5	6	A	B	C	A	A	A	7	10	12	4	5	6	A	B	B	A	A	A	3	4	4	13	17	17	A	A	A	B	C	C	C
	101	Loop Farm Roundabout	228	277	298	322	319	311	0	1	9	49	36	52	28	32	64	301	253	354	2	3	16	44	74	46	A	A	C	E	E	E	2	3	11	0	2	3	A	A	B	A	A	A	1	1	29	31	29	30	A	A	D	D	D	D		
	201	Pearlree Interchange	135	153	164	168	169	167	3	7	24	30	27	37	30	55	99	157	114	140	27	32	62	40	37	35	C	C	E	D	D	C	20	32	63	1	1	1	C	C	E	A	A	A	18	22	41	58	47	62	B	C	D	E	D	E		
	401	Wolvercote Roundabout	121	111	121	115	115	118	28	53	44	43	47	46	121	119	122	105	124	110	33	45	41	17	17	18	C	D	C	D	B	B	B	24	28	26	8	11	10	C	C	C	A	B	B	16	19	17	36	39	37	B	B	D	D	D	D	
	701	Cutteslowe Roundabout	221	234	252	206	201	212	12	15	20	20	15	30	76	81	98	191	93	111	20	21	27	22	29	26	C	C	C	C	C	C	17	17	21	10	11	16	B	B	C	A	B	B	16	18	21	35	26	46	B	B	C	C	C	D		
	1001	Water Eaton Park and Ride	204	203	225	79	76	76	2	3	3	1	2	2	45	55	64	77	56	54	8	16	17	4	4	3	A	B	B	A	A	A	2	6	6	14	19	20	A	A	A	B	B	C	5	5	6	13	18	18	A	A	A	B	B	B	B	
	1814	A34 Link/Kidlington Road	97	111	121	110	109	114	0	0	0	0	0	0	4	6	5	107	6	5	1	1	1	0	0	0	0	A	A	A	A	A	A	1	1	1	0	0	0	A	A	A	A	A	A	0	0	1	1	1	1	A	A	A	A	A	A	
	1812	Bicester Road/A34 Link	77	62	68	55	56	51	0	0	0	0	0	0	7	2	2	47	3	5	0	0	0	0	0	0	0	A	A	A	A	A	A	0	0	0	0	0	0	A	A	A	A	A	A	0	0	0	0	0	0	A	A	A	A	A	A	
	1811	Bicester Road/Water Eaton Lane	78	76	83	71	71	70	6	6	7	5	6	5	54	54	54	66	50	46	23	23	25	8	7	C	C	C	C	A	A	A	20	18	21	6	6	6	C	B	C	A	A	A	9	7	7	23	23	23	A	A	A	C	C	C	C	
	1601	A40 / Eynsham Road / Cassington Road	148	175	192	149	143	161	4	11	31	6	10	11	68	147	260	141	109	117	24	33	35	2	3	C	C	D	A	A	A	13	14	15	0	0	0	B	B	B	A	A	A	2	3	11	33	34	34	A	A	B	C	C	C	C		
	1724	Woodstock Road/Cassington Road	163	119	126	116	115	114	0	0	0	0	0	0	19	11	14	106	12	10	1	1	1	0	0	0	0	A	A	A	A	A	A	1	1	1	2	2	2	A	A	A	A	A	A	0	0	1	1	1	1	A	A	A	A	A	A	
	1717	Woodstock Road/Sandy Lane	90	62	68	57	55	54	0	1	1	1	1	1	26	42	45	55	41	37	3	6	7	0	1	0	A	A	A	A	A	A	3	5	4	3	2	3	A	A	A	A	A	A	0	0	0	5	6	5	A	A	A	A	A	A		
	1719	Woodstock Road/Spring Hill Road	140	176	191	167	161	160	0	1	1	1	1	1	17	65	72	160	61	52	2	6	7	1	2	2	A	A	A	A	A	A	1	5	5	2	2	2	A	A	A	A	A	A	0	0	2	5	4	4	A	A	A	A	A	A		
	1720	Woodstock Road/Langford Lane	242	314	342	297	285	284	1	2	2	2	1	1	22	27	29	285	26	26	8	9	10	9	10	7	A	A	A	A	A	A	8	9	10	10	11	11	A	A	A	B	B	B	4	7	12	9	8	8	A	A	B	A	A	A		
	1701	Banbury Road/Lanford Lane	120	124	136	112	106	105	2	3	3	2	2	2	40	39	43	103	36	35	12	12	13	14	10	19	B	B	B	B	A	B	12	13	13	8	7	6	B	B	B	A	A	A	17	13	11	12	11	11	B	B	B	B	B	B		
	1702	Banbury Road/The Moors	118	118	129	106	100	99	0	0	0	0	0	0	9	6	9	99	4	5	9	9	9	6	6	6	A	A	A	A	A	A	10	8	11	5	6	5	A	A	B	A	A	A	6	7	11	8	7	7	A	A	B	A	A	A		
	1705	Banbury Road/Yamton Road	191	206	225	187	179	177	4	4	5	4	3	3	66	68	81	178	58	59	10	9	11	6	8	6	A	A	B	A	A	A	10	9	12	8	8	8	B	A	B	A	A	A	4	8	4	9	9	9	A	A	A	A	A	A		
1706	Banbury Road/Bicester Road	200	209	229	190	182	180	4	4	5	3	3	3	56	64	72	181	52	50	14	15	15	5	7	8	B	B	B	A	A	A	7	8	8	16	15	15	A	A	A	B	B	B	6	6	8	14	13	13	A	A	A	B	B	B			
1708	Banbury Road/Squitchey Lane	91	90	97	78	76	73	1	0	1	2	0	14	44	37	44	71	39	100	8	7	7	5	4	16	A	A	A	A	A	C	8	6	7	2	1	4	A	A	A	A	A	A	4	4	3	9	6	22	A	A	A	A	A	C			
1709	Banbury Road/Marston Ferry Road	128	130	141	117	112	112	14	13	16	12	14	15	102	95	107	104	126	125	39	37	40	24	19	20	D	D	D	C	B	B	39	36	40	20	21	20	D	D	D	C	C	C	B	16	14	15	39	43	42	B	B	B	D	D	D		
1710	Woodstock Road/Moreton Road	167	153	166	140	135	135	0	0	0	0	0	0	16	16	16	124	12	12	9	8	8	4	2	2	A	A	A	A	A	A	10	8	8	4	4	4	A	A	A	A	A	A	4	4	3	8	7	7	A	A	A	A	A	A	A		
1711	Woodstock Road/Squitchey Lane	95	83	91	75	72	72	1	0	1	0	0	0	42	33	40	67	27	29	12	10	11	7	4																																		

Purely in the context of early kick-off (E) vs 3pm kick-off on Saturday, the results show the following for cars:

- The early kick-off results in changes in performance at the following locations
 - o Loop Farm roundabout from E to F in the first hour, reduction in delay in the 2nd hour but still LOS E;
 - o In the reference case for the early kick-off Peartree is a LOS of F in the 2nd hour and E in the 3rd and 4th hours and F again the 5th hour.
 - o In all other hours the LOS is within capacity in DS1 and DS1E (likely due to the reduction in overall traffic of 10% and 15% respectively;

5.7 Queue Length Results – Early Kick-off

The results in Figures 4.1 and 4.2 of the Addendum report show that the A40 WB and Frieze Way are most affected in the pre-match period beginning an hour before kick-off. It is noted that the time labels are incorrect in those figures but the data is correct.

5.8 Journey Time Results – Early Kick-off

The journey time results were not included in the spreadsheet provided, therefore, the commentary is related purely to the tables provided in the Addendum report. The journey time routes are shown in Figure 5.1 below.

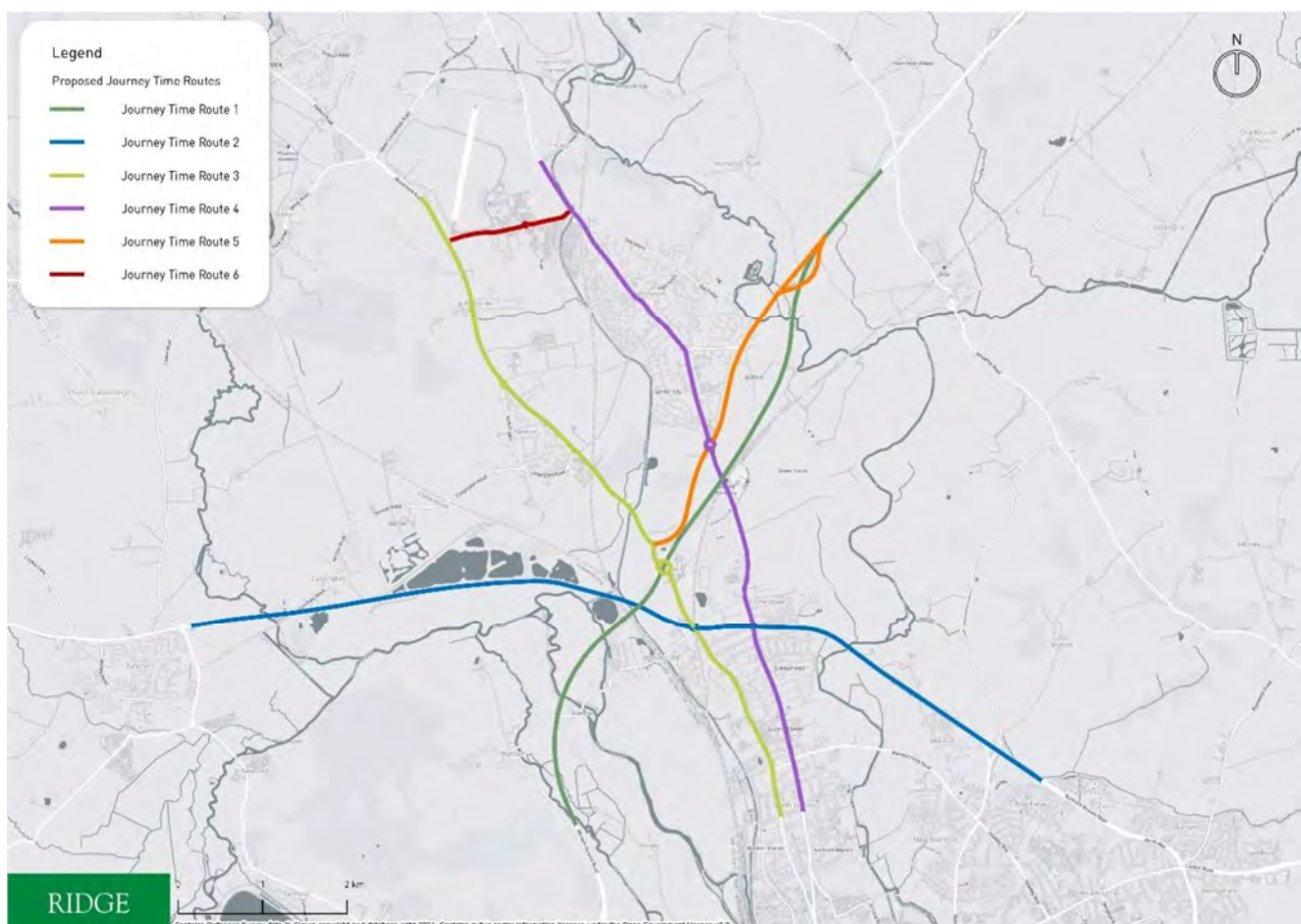


Figure 5.1 – Journey Time Routes

Table 4.6 of the AR shows that Route 3 NB is the worst affected between the kick-off times with nearly 2 minutes increase (8%) in the first hour. Routes 4 and 5 show small increase in all hours.

The public transport routes are worse affected by the change in kick-off times with routes 2, 2A, S5, S7 and 700 in the SB direction all showing increases in all hours, although all are less than a minute with up to 8% difference in journey times.

5.9 Oxford Parkway Sensitivity Test

OCC has requested an additional sensitivity test to include vehicles travelling to Oxford Parkway. OCC has requested that the remaining capacity of Oxford Parkway modelled, following the removal of existing users (already captured in the model), spaces removed for temporary arrangements on match days and spaces being lost for the OCC's Supported Transport depot which is removing 150 spaces is tested to be used by supporters. This scenario assumes that the use of Oxford Parkway is not managed, therefore traffic arrives and exits the car park during the closure.

It should be noted that the input spreadsheets for this scenario have not been provided to check the calculations. A 10% reduction in overall demand has been applied to this scenario in the weekday and 15% on the weekend. This scenario is referred to as DS2 in the results tables.

5.10 Network Performance Results Comparison - Parkway

Ridge present results simply as the differences between the DS1 and DS2 results. Therefore, PF has prepared comparison tables that were previously requested to show a direct comparison between scenarios for each metric. Table 5.1 shows the weekday results and Table 5.2 the Saturday results comparisons. For the latter the names with the suffix E represent the early kick-off.

The light blue shaded cells represent the optimal performer between scenarios for each metric and vehicle class.

The tables compare all results therefore, purely in the context of the without (DS1) and with (DS2) Parkway scenarios on the Weekday, the results show the following:

- In the first two hours the delay is lower and speeds higher in DS2, however, in the final three hours the delay is higher and speeds lower; and,
- After the first hour the DS2 results in more latent demand than DS1, particularly in the final two hours.

Purely in the context of the without (DS1) and with (DS2) Parkway scenarios on the Saturday, the results show the following:

- DS2 performs worse than DS1 in all hours except the last but one with higher delays (over 50s in the 2nd hour) and lower speeds (2.3mph slower in the 2nd hour); and,
- The latent demand in DS2 is slightly higher than DS1.

5.11 Junction Performance Results Comparison - Parkway

PF has prepared comparison tables that were previously requested to show a direct comparison between scenarios for each metric. Table 5.3 shows the weekday results and Table 5.4 the Saturday results comparisons. Again, for the latter the names with the suffix E represent the early kick-off.

The tables compare all results therefore, purely in the context of the without (DS1) and with (DS2) Parkway scenarios on the Weekday, the results show the following for Cars:

- In the 1st hour the LOS at Cutteslowe roundabout moves from D in DS1 to E in DS2;
- In the 2nd hour the LOS at Wolvercote roundabout moves from D in DS1 to F in DS2, also at Cutteslowe roundabout moves from D in DS1 to E in DS2; and,

- In the 3rd hour the LOS at Wolvercote roundabout moves from C in DS1 to F in DS2, also at Cutteslowe roundabout moves from B in DS1 to F in DS2.

The tables compare all results therefore, purely in the context of the without (DS1) and with (DS2) Parkway scenarios on the Saturday, the results show the following for Cars:

- In the 2nd hour the LOS at Peartree interchange moves from E in DS1 to F in DS2;
- In the 3rd and 4th hours the LOS at Peartree interchange moves from C in DS1 to D in DS2; and,
- In the 5th hour the LOS at Loop Farm roundabout moves from A in DS1 to C in DS2.

5.12 Queue Length Results – Parkway

The results in Figures 5.4 and 5.5 of the Addendum report show that the A40 WB and Banbury Way NB are most affected in the Weekday scenarios with the timing on the queues shifted to closer to kick-off, but reduced compared to the reference case.

The results in Figures 5.6 and 5.7 of the Addendum report again show that the A40 WB and Banbury Way NB are most affected along with Freize Way in the Saturday early kick-off scenarios compared to the reference case that only really shows a queue on A44 SB that is removed in DS2 (likely due to the 15% reduction in global demand).

5.13 Journey Time Results – Parkway

The journey time results were not included in the spreadsheet provided, therefore, the commentary is related purely to the tables provided in the Addendum report.

Table 5.5 of the AR shows for the Weekday, shows that Route 3 A44 NB is the worst affected with nearly 4 minutes increase (33%) in the 2nd hour with DS2 compared to the reference case. Route 3 A44 SB also shows a large increase in the 2nd hour of 2.5 minutes (23%) in DS2 compared to the reference case.

Table 5.6 of the AR shows for the Saturday, shows that Route 5 SB on Frieze Way is the worst affected route with an increase on 16.5 minutes in the 2nd hour (262%). Route 4 A4260 NB is also affected with nearly 4.5 minutes increase (27%) in the 2nd hour (and over 4 mins in the first hour). Routes 3 SB also shows a large increase in the 2nd hour of 2.5 minutes (15%) in DS2 compared to the reference case.

The public transport routes generally show delays of around a minute in the Weekday in the first hour for routes 2, 2A, S5, S7 and 700 in the SB direction. In the 3rd hour similar increases are shown apart from routes 2, 2A, S7 and 700 in the NB direction that see nearly a doubling of the reference case journey times with up to 12 minutes increase.

The public transport routes show large delays in the first hour of the Weekend early kick-off for the NB directions of up to 5 minutes. In the 2nd hour this trend continues with delays in the NB directions of up to 4 minutes. In the 3rd hour no delays are noted but smaller increases return again in the 4th and 5th hours in both directions with delays of up to 1 minute compared to the reference case.

5.14 Pedestrian Assessment

A pedestrian assessment has been undertaken using VisWALK, however, the files have not been provided for review so comment has only been made on the reporting in the AR.

The screenshots in Figures 6.7 and 6.8 show huge demand for the crossing on Frieze Way. This is not reflected in the VISSIM model where the crossing has been set on a 120s cycle time. If the intention is to run the crossing with a higher frequency then the VISSIM model should also be updated to reflect the higher frequency.

6 Summary and Conclusion

This Technical Note summarised a review of the revised sensitivity models that have been submitted as well as the Addendum Report.

There are a number of issues outstanding from the previous March 2025 review including:

- Missing commentary on the changes made to the network between the PR sites and the new OUFC model;
- The input files or previous reporting provided do not show or explain the full calculations undertaken and in particular do not show the details of the matrix estimation undertaken;
- The LMVR needs more detail on where the signal coding has changed and where the source signal data was derived, the source of bus journey times needs to be stated (as it is in the TA), no outputs on junction performance are provided and a comparison of network performance by seed should be provided and an overall table summarising the journey time pass/fail by route and time period would make it easier to digest. Whilst this information has been clarified in Appendix A of the AR and with a supporting spreadsheet the previous reporting should be updated with the requested information;

Specifically for the forecast models, the issues include:

- New vehicle types with category Car use Small Car not Large Car have been added consistent with the PR sites models, but more importantly they are not being used. This means it is not possible to identify committed development easily (and the same applies to the DS model for OUFC vehicles). Ridge have confirmed that colours could be added to represent different vehicle types but have not added this feature to the models;
- The pedestrian demand on the crossings on the Oxford Road and Freize Road contain very low pedestrian numbers of 10 per hour despite an obvious huge increase in pedestrian numbers in and around match time (see Figures 6.7 and 6.8 of the AR). This crossing currently operates on 120s cycle time and if the intention is to operate this on a lower cycle time then this should be reflected in the model.
- Traffic has been reduced by 10-15% with evidence now provided it has been applied on a global basis apart from the A34 and it is considered that the A40 and A44 through traffic should also have been excluded. It would have been better to model the core scenario with no reduction in traffic and then present a sensitivity test with reduced traffic using an evidence-based figure.
- Whilst output spreadsheets have been provided, these are for individual outputs and no comparison spreadsheets have been provided. Therefore, PF has derived comparisons for network performance and junction performance.
- Whilst vehicles driving through the diversion routes has been resolved for the routes previously mentioned, there are still vehicles driving through the diversion well beyond the cut off time (for instance at 1723 in the Friday weekday). However, this is probably just a function of the distance that vehicles have to travel from the partial route?

The Addendum Report (AR) report repeats a large amount of information from the previous report and adds in new sensitivity test results covering:

- Early 12:30 kick-off sensitivity test;
- Additional sensitivity test to include vehicles travelling to Oxford Parkway;
- Modelling Outputs split into 15-minute segments; and,
- Additional evidence of background traffic reduction on event days.

The results of the early kick-off show that the performance of the network is worse than a 3pm kick-off, however, the differences are not large and the junction performance shows that Loop Farm deteriorates to a

LOS of F in the first hour but after that the junction generally perform within capacity, most likely due to the global 15% reduction in demand.

The Oxford Parkway results show that:

- Network Performance - in the first two hours of the Weekday, delay is lower and speeds higher in DS2, however, in the final three hours the delay is higher and speeds lower and in the Weekend the DS2 performs worse than DS1 in all hours except the last but one with higher delays (over 50s in the 2nd hour) and lower speeds (2.3mph slower in the 2nd hour).
- The junction performance shows that Cutteslowe and Wolvercote deteriorate in the 1st 2nd and 3rd hours in the Weekday and at the Weekend it is Peartree and Loop Farm that deteriorate in the 2nd, 3rd, 4th and 5th hours.
- The queue length results show that A40 WB and Banbury Way NB are the most affected in both the Weekday and Weekend scenarios with the addition of Frieze Way at the Weekend.
- The journey time results show impacts to A44 NB, A44 SB in the Weekday and Frieze Way SB and A4260 NB at the Weekend.
- The public transport routes show large delays in the first hour of the Weekend early kick-off for the NB directions of up to 5 minutes. In the 2nd hour this trend continues with delays in the NB directions of up to 4 minutes. In the 3rd hour no delays are noted but smaller increases return again in the 4th and 5th hours in both directions with delays of up to 1 minute compared to the reference case.

The model results do show an impact in both the Weekday and Weekend and the sensitivity tests have shown a worsening with both the Early kick-off and Parkway, however, overall, the impact with the Early kick-off or Parkway shows a deterioration in performance but compared to 3pm kick-off / without Parkway and the reference case the impact is not considered unreasonable for an event that will not occur every week.

Nevertheless, it is considered that the results should have been presented originally with the worse case scenario without any global reduction in traffic. This scenario has not been presented for consideration and the results rely upon large decreases in traffic demand of 10%-15% within the local network area. Similarly, the pedestrian crossings have not been modelled as a worse case with 120s cycle time or low demand of 10 pedestrians per hour. Again, the worst case scenario should have been modelled and presented for consideration with further sensitivity tests to reduce the impact.

Appendix D: Draft Heads of Terms Table – Highways

PLANNING OBLIGATION	REG 122 Test 1 - Necessary to make the development acceptable in planning terms	REG 122 Test 2 - Directly related to the development	REG 122 Test 3 - Fairly and reasonably related in scale and kind to the development
S106 Contributions			
Oxford Parkway Junction £587,778 (Baxter April 2025) Towards Active Travel improvements to Oxford Parkway Junction	This contribution is required to upgrade the existing active transport infrastructure on Oxford Road. The existing layout of the Oxford Road/Oxford Parkway junction is not considered safe for pedestrians and cyclists, hence the temporary measures which have been in place since the fatality in February 2022. The junction will see significant increases in movements of traffic, public transport, pedestrians and cyclists as a result of the development. Without proposed improvements, it cannot be considered that there is a safe pedestrian / cycle connection to the site and in turn, no attractive alternative to the private car.	The improvements will allow cyclists and pedestrians to the development using Oxford Road to travel safely.	The contribution amount is the cost of the scheme as costed by Faithful & Gould, project and cost management consultants.
Traffic Management - £260,550 (Baxter April 2025) Towards variable message signs	The development site will significantly increase the number of people within the vicinity of the site and the countywide highway network on matchdays. This increase on the highway network will need to be managed in order to minimise the impact on the highway. In order to do this Variable Message Signs will be required to encourage visitors to use mobility hubs on route to the stadium, reducing the impact of vehicles arriving at Oxford Parkway on match days.	The VMS signage is proposed to manage traffic on matchdays, this traffic is directly associated with the development site.	It has been assessed that 10 Variable Message Signs will be required at a cost of £25,000 = £250,000 (December '23 uplifted to April '25 = £260,550).
Speed Management - £260,550 (Baxter April 2025) Towards average speed cameras	The application documents show that the proposal will impact the highway network, especially on the routes between Wolvercote, Peartree and Loop Farm roundabouts. Capacity is already maximised at these junctions and therefore alternative methods of improving performance must be assessed. Average Speed Cameras will help keep speeds on the ring road below the speed limit which is proven to help traffic flow and reduce accidents. This in turn will reduce the impact of the development on junctions leading to the development.	The implementation of average speed cameras will enforce lower speeds on the ring road which will in turn help manage congestion and the local junctions which are being impacted by the proposal.	It has been assessed that 5 cameras will be required at a cost of £50,000 each = £250,000 (July 22 uplifted to April 25 = £260,550)
Public Transport Services - £722,264 (RPIX April 2025) Towards public transport services serving the site	NPPF Paragraph 117 states that developments as far as possible should facilitate access to high quality public transport. This contribution will be used to both maintain and improve public transport services in Kidlington and surrounding areas. This contribution is necessary to ensure that there is a suitable level of public transport services serving the site to ensure visitors have an attractive option to travel sustainably, reducing reliance on private vehicle travel resulting in a reduction in the impact of the development on the highway.	The proposed development is likely to permit a significant increase in the number of passengers using public transport services in Kidlington and the surrounding areas. There is likely to be a particular increase from the 'eastern arc' of Oxford. The contribution will be used to improve public transport services directly serving visitors of the site.	The calculation is based on £23.52 (RPIX Dec 21) per sqm of floor space with a development floor space of x 25,235 = £593,527 uplifted to April 25 = £722,264
Public Transport Infrastructure - £932,519 (Baxter April 2025) towards the upgrade of the Cowley Branch Line for passenger use.	OUGC Supporter post code data shows that there are a significant number of fans that live within the catchment of the Cowley Branch Line. The Transport Assessment for the development states that in D&C scenario 2 there will be an expected 1960 home supporters using rail (including CBL), for D&P scenario 3	The Cowley Branch Line opening to passengers would connect residential areas where large numbers of fans live to the development without having to access the highway network	The contribution amount is based on the S106 requirement methodology produced by WSP, providers of engineering, advisory and science-based expertise, appointed by OCC and Oxford City Council. WSP's methodology, reported in January 2024, uses the following factors to determine a contribution amount:

	there are 3155 expected home supporters using rail (including CBL). To achieve an acceptable impact on the highway the applicants rely on people using rail, including a CBL open to passengers. It is proposed that the CBL will have new stations at Littlemore and Cowley. Without the CBL being open to passengers there are no direct services connecting those areas to the site. The opening of the Cowley Branch Line for passengers will make a direct route for many fans and will reduce vehicle trips on the network.		▪ Unit Factor ▪ Impact Factor ▪ Mode Factor ▪ Cost Factor ▪ Locational Factor Using the above factors and applying them to the proposed development the contribution amount is calculated as being £918,802 (Baxter January 2024 uplifted to April 2025 = £932,519)
Public Transport Infrastructure - £1,838,959 (Baxter April 2025) Towards a new mobility hub on the A44	The primary impacts of the development are around Loop Farm, Peartree and Wolvercote Roundabouts and on the routes between the junctions. The mobility hub will reduce traffic on these routes and alleviate impact on the junctions. Additionally, it will give fans a sustainable travel choice and reduce pressure on Peartree P&R which is over capacity in Scenario 3.	The mobility hub will reduce vehicular trips from the part of the network which the stadium has most impact.	The latest estimate for delivery of a Mobility Hub near Oxford Airport is £21,610,829 (Baxter June 2022) including land costs, design, planning and construction. Known development in the area which require the mobility hub to mitigate their impact are contributing towards the cost of the mobility hub based on their peak time trips on a basis of £2196.89 per trip. The proposed application predicts 796 peak time vehicular trips making a contribution towards the cost of the mobility hub of £1,748,725 (Baxter June 2022) uplifted to April 2025 = £1,838,959.
Public Transport Infrastructure - £29,786 (Baxter April 2025). Towards Real Time Information boards at new bus stops on Oxford Road	The site strategy is based on promoting sustainable travel. Real time information boards are important on public transport corridors such as Oxford Road to provide accurate information to users	The development necessitates the need for new bus stops that will require RTI boards.	Cost of a new bus stop Real Time Information Boards = £14,000 x 2 = £29,000 (Baxter October 2023) uplifted to April 2025 = £29,786 The bus stops themselves will be directly delivered by the applicant.
Parking Restrictions - £10,112 (Baxter April 2025) - for Clearway on Frieze Way	Required in order to avoid ad-hoc parking on carriageway and pavement in the vicinity of the site.	Required as a result of planning application.	Estimated cost based on distance of parking restrictions required.
Height Barriers - £20,224 (Baxter April 2025) - for Replacement height barriers at Oxford Parkway	Required to allow coaches associated with the site to enter Oxford Parkway.	Required as a result of planning application.	Cost of new height barrier quoted at £20,000 (Baxter April 2024) uplifted to April 2025 = £20,224
Ticket Machines - £28,313 (Baxter April 2025) - for replacement ticket machines at Oxford Parkway	Required in order to provide dynamic ticketing pricing at Oxford Parkway.	Required as a result of planning application.	Cost of new machine = £7,000 x 4 = £28,000 (Baxter April 2024) uplifted to April 2025 = £28,313.
Parking Restrictions - £20,224 (Baxter April 2025) - for double yellow lines on Oxford Road and Bicester Road	Required in order to avoid ad-hoc parking on carriageway and pavement in the vicinity of the site.	Required as a result of planning application.	Estimated cost based on distance of parking restrictions required.
Parking Enforcement - £184,120 (RPIX April 2025) - for additional enforcement officers	Required in order to better enforce matchday CPZ (below).	Required as a result of planning application.	Based on increased cost of enforcement contract.
Matchday Controlled Parking Zone - £102,160 (Baxter April 2025).	Required in order to avoid ad-hoc parking on the surrounding highway network.	Required as a result of planning application.	Estimated cost of delivering Controlled Parking Zones.

Additional Matchday Controlled Parking Zone - £51,080 (Baxter April 2025) – for an additional Matchday CPZ if required.	Required in order to avoid ad-hoc parking on the surrounding highway network.	Required as a result of planning application.	Estimated cost of delivering Controlled Parking Zones.
Framework Travel Plan - £3340 (RPIX April 2025) - for travel plan monitoring	A travel plan encourages and promotes sustainable modes of transport with the objective of reducing dependence upon private motor car travel reducing the environmental impact and traffic congestion. A travel plan is a ‘dynamic’ document and to be effective requires monitoring over a 5-year period. A Framework Travel Plan is required to monitor the site in it’s entirety. Separate travel plans are also required for the individual elements which will need to be more specific to their use.	The fees charged is for the work required by OCC to monitor a travel plan related solely to this development site.	The contribution is based on the number of officer hours required to monitor the travel plan over a the 5-year period and the cost of officer time. Travel Plan Monitoring Fees are reviewed annually and approved by Cabinet.
Matchday plan - £1,985 (RPIX April 2025) - for travel plan monitoring	As above.	As above.	As above.
Non matchday conference and exhibition use travel plan - £1,985 (RPIX April 2025) - travel plan monitoring	As above.	As above.	As above.
Public restaurant/bar travel plan - £1,985 (RPIX April 2025) - travel plan monitoring	As above.	As above.	As above.
Health and wellbeing facility/clinic and gym travel plan - £1,985 (RPIX April 2025) - for travel plan monitoring	As above.	As above.	As above.
Hotel travel plan - £1,985 (RPIX April 2025) - for travel plan monitoring	As above.	As above.	As above.
S278 Works			
New at-grade signalised crossing on Frieze Way.	Required to get fans from the stadium across Frieze Way to the new shared path on the north-west side.	Required as a result of the development	The crossing is only required due to the development therefore the full cost should be borne by this development.
2 new at-grade signalised crossings on Oxford Road.	Required for pedestrians to be able to access the site from Oxford Road.	Required as a result of the development.	The crossing is only required due to the development therefore the full cost should be borne by this development.
Access works and site frontages, incorporating ‘Cycle Superhighway’ on Oxford Road	Required to allow vehicular access to site and to tie-in with Cycle Superhighway scheme on Oxford Road.	Required as a result of the development.	The works are only required due to the development therefore the full cost should be borne by this development.
New 3m off-carriageway shared footway/cycleway on Frieze Way with additional 500mm buffer (minimum, depending on speed reduction).	Required in order for fans to safely access the site from Peartree P&R.	Required as a result of the development.	The path is only required due to the development therefore the full cost should be borne by this development.
Reduction of speed limit on Frieze Way to 40mph	To assist in minimising the buffer required at the above shared path.	Required as a result of the development	The reduction in speed limit is only required due to the development therefore the full cost should be borne by this development.

New at-grade signalised crossing on A44 near Loop Farm Roundabout.	Required in order for fans to safely access the site from Peartree P&R.	Required as a result of the development	The crossing is only required due to the development therefore the full cost should be borne by this development.
Installation of Hostile Vehicle Mitigation on Oxford Road.	Counter-terrorism requirement required by Thames Valley Police.	Required as a result of the development.	The HVM is only required due to the development therefore the full cost should be borne by this development.
2 new bus stops on Oxford Road	Required to improve public transport accessibility to the site.	Required as a result of the development.	The bus stops are only required due to the development therefore the full cost should be borne by this development.