



National Highways Planning Response (NHPR 22-12) Formal Recommendation to an Application for Planning Permission

From: Divisional Director
Operations Directorate
Highways England.
North East Region

To: [REDACTED]
North Lincolnshire Council – Ed Senior

CC: [REDACTED]

Council's Reference: PA/2023/1124

Location: Lincolnshire Lakes, Land east of M181 and north of Burringham Road, Scunthorpe

Proposal: Planning permission for the development of 599 No. dwellings and lake, along with associated infrastructure, including landscaping, public open space and play area, pedestrian and cycle links, pumping station and sub-station.

National Highways Ref: NH/23/03296

Referring to the consultation on a planning application received **October 20 2023** referenced above, in the vicinity of the M180/M181 that forms part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

- ~~a) offer no objection (see reasons at Annex A);~~
- b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);**
- ~~c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);~~
- ~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B ~~is~~/is not relevant to this application.¹

¹ Where relevant, further information will be provided within Annex A.

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the [Town and Country Planning \(Development Affecting Trunk Roads\) Direction 2018](#), via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

The Local Planning Authority must also copy any consultation under the 2018 Direction to PlanningYNE@nationalhighways.co.uk

Signature:

Date: February 13 2023

Name: Simon GP Geoghegan

**Position: Planning and
Development**

National Highways, 2 City Walk, Leeds LS11 9AR

Standing advice to the local planning authority

The Climate Change Committee's [2022 Report to Parliament](#) notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs **74** and **109** prescribing that significant development should offer a genuine choice of transport modes, while paragraphs **108** and **114** advise that appropriate opportunities to promote walking, cycling and public transport should be taken up.

Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of [PAS2080](#) promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

Annex A National Highway's assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Conditions

Having reviewed all relevant information, National Highways would recommend that the development is acceptable subject to suitable conditions as follows:

- 1:** *Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways, construction of the development hereby approved shall not take place unless and until evidence has been provided to demonstrate that the development complies with **Paragraphs 57 and 59** [Physical Infrastructure] of the [DfT Policy Paper 01/2022](#) 'strategic road network and the delivery of sustainable development' [December 2022].” All works shall be undertaken in accordance with the agreed plan and maintained as such thereafter.*

Reason:

To ensure the safe and continued operation of the SRN.

- 2:** *Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors) no construction shall commence unless and until a detailed Construction Traffic Management Plan (CTMP) has been submitted to and approved in writing. Thereafter the construction shall be undertaken in accordance with the approved plan.*

Reason:

To mitigate any adverse impact from the development on the M181 and M180 Motorways in accordance with DfT circular 01/2022.

- 3:** *No development earthwork or construction hereby approved shall commence until a geotechnical risk assessment of the works adjacent to the M1 boundary has been undertaken. This should accord with the requirements of CD622 of the Design Manual for Roads and Bridges (DMRB) and shall be agreed by the local authority in conjunction with National Highways.*

Reason:

To ensure the safe and continued operation of the SRN and our assets.

Our ref: SE 861 086
Your ref: PA/2023/1124

North Lincolnshire Council
Church Square House
30-40 High Street
Scunthorpe
DN15 6NL

Simon GP Geoghegan
National Highways
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FAO: David Boreham, Ed Senior

February 13 2024

Dear David and Ed,

Planning permission for the development of 599 No. dwellings on Land north of Burringham Road, Scunthorpe

We have reviewed the revised Transport Assessment [revised TA] and Travel Plan prepared by Local Transport Projects [LTP] in support of the above planning application and would offer the following comments.

We would note the application site, accommodating 599 dwellings, sits within the red line associated with the extant outline planning permission (ref: PA/2015/0396). The current detailed planning application for 599 dwellings sits within "Plot 1" of the 2021 outline consent. In the Arup Transport Assessment that accompanied the outline planning application, Plot 1 accommodated 643 dwellings, i.e., 44 more than is currently being applied for.

Trip rates and generation

Although we do not consider LTP's proposed mode share as appropriate, we note that it has been used to derive the vehicle trip generation from the consented trip rates. After an independent analysis using our own person trip rates and higher car use mode share, LTP does forecast a similar volume of vehicle trips in the AM peak and larger volume of vehicle trips in the PM peak. We would, therefore, be inclined to consider LTP's vehicle trip rates derived from the consented Arup trip rates to be appropriate.

Remaining vehicle trips associated with Outline Permission (ref: PA/2015/0396)

In Table 1, we have presented the vehicle trip generation originally assumed for the entirety of "Lincolnshire Lakes, Land east of M181 and north of Burringham Road, Scunthorpe Outline Permission (ref: PA/2015/0396)" from the Arup TA (2016). This has been compared to the current application.

As can be seen, from the evidence presented to date, it would appear that there are 1,333 consented two-way vehicle trips and 1,352 two-way consented vehicle trips, in the AM and PM peak periods respectively, that 'remain' or are still to be considered as part of the outline consent (ref: PA/2015/0396); i.e., compared with that assumed within the Arup TA.

Table 1. Remaining consented trips

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Arup TA 2,500 dwell.	363	1,391	1,754	1,058	705	1,763
LTP 599 dwell.	87	334	421	251	160	411
Remaining	276	1,057	1,333	807	545	1,352

Vehicle trip distribution

We have undertaken a vehicle trip distribution exercise using our gravity model GraHAM. When applying our vehicle trip distribution results to LTP's vehicle trip generation, the proposed residential development is forecast to generate 23 vehicle trips on the eastbound merge in the AM peak and 29 vehicle trips in the PM peak at M180 J4.

We would conclude that, although the volume of trips assigned to the SRN, namely M180 J4, highlight a potential material uplift in vehicle trip generation, the vehicle trips associated with the current application have been previously considered acceptable as part of the outline planning consent.

However, we would note the remaining allocation of dwellings as part of the outline consent and AAP has the potential to result in a greater cumulative impact. Consequently, we would note that future applications should consider the impact of the development cumulatively with all other aspects of the outline planning consent.

Construction Traffic Management Plan

We would reiterate that a CTMP will need to be prepared and anticipate that it will be subject to and be delivered via condition. The CTMP should be provided to National Highways for review.

Boundary Treatment

National Highways would reiterate that further information should be provided with regards to, but not exclusively:

- The impact of earthworks, including bunds, on the stability and integrity of the SRN;
- The impact of earthworks on drainage, and the drainage requirements needed to ensure that surface water does not flow from the application site on to the SRN;
- Access for maintenance of the highway boundary is maintained; and
- Boundary treatments are adequate and appropriate; particularly in regard to dazzle and distraction from opposing head lights.

On the basis of the above, I enclose National Highways' formal NHPR 22-12 response recommending that the following conditions should remain attached to any planning permission that may be granted:

Recommended Conditions:

1. Unless otherwise agreed in writing by the Local Planning Authority [LPA] in consultation with National Highways, construction of the development hereby approved shall not take place unless and until evidence has been provided to demonstrate that the development complies with **Paragraphs 57 and 59** [Physical Infrastructure] of the [DfT Policy Paper 01/2022](#) 'strategic road network and the delivery of sustainable development'." All works shall be undertaken in accordance with the agreed plan and maintained as such thereafter.

Reason: to ensure the safe and continued operation of the SRN.

Informative: The applicant is advised to contact National Highways prior to appointing a Geotechnical Advisor to enable National Highways to agree their professional qualifications meet the requirements of CD622 and we can pass on any geotechnical asset information that may be relevant to the assessment.

2. Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors), no construction shall commence unless and until a detailed **Construction Phase Traffic Management Plan** has been submitted to and approved in writing by the LPA in consultation with National Highways (or its successors). Thereafter construction shall be undertaken in accordance with the approved plan.

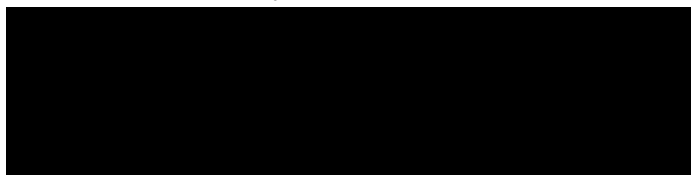
Reason: To manage construction traffic impacts and ensure the safe and efficient operation of the SRN.

3. No development earthwork or construction hereby approved shall commence until a geotechnical risk assessment of the works adjacent to the M1 boundary has been undertaken. This should accord with the requirements of CD622 of the Design Manual for Roads and Bridges (DMRB) and shall be agreed by the local authority in conjunction with National Highways.

Reason: to ensure the safe and continued operation of the SRN and our assets.

I trust this response is helpful, but should you require any further information please do not hesitate to contact me.

Yours sincerely



Simon GP Geoghegan
Planning and Development

AA.23.33.05 Lincolnshire Lakes

Prepared for:	Simon Geoghegan
Prepared by:	Harry Robinson
Date:	12 th February 2024
Case Reference:	DevHU0097
Document Reference:	AA.23.33.05 TM03
Reviewed/approved by:	Terence Dale

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Introduction

In August 2023, Keepmoat Homes Ltd [the Applicant] submitted a full planning application (ref: PA/2023/1124) for the development of 599 dwellings and lake, along with associated infrastructure, including landscaping, public open space and play area, pedestrian and cycle links, pumping station and sub-station. The Applicant's Transport Consultant is Local Transport Projects [LTP] and the Local Planning Authority [LPA] is North Lincolnshire Council [NLC].

Jacobs SYSTRA Joint Venture [JSJV], on behalf of National Highways, has reviewed the revised Transport Assessment [revised TA] and revised Travel Plan [revised TP] and would offer the following comments.

Background

Lincolnshire Lakes Area Action Plan

The Lincolnshire Lakes Area Action Plan [AAP] (adopted May 2016) sets out the planning policy framework within which the development will be delivered. The emerging Local Plan separates Lincolnshire Lakes into two Strategic Allocations (Northern and Southern). The Southern Strategic Allocation is being delivered by Keepmoat Homes Ltd., with the Northern Strategic Allocation being delivered separately by Hargreaves Land Limited (ref: DevHU0161/AA.23.19.22).

Lincolnshire Lakes, Land east of M181 and north of Burringham Road, Scunthorpe Outline Permission (ref: PA/2015/0396)

The wider Lincolnshire Lakes development, as set out within the AAP, will provide up to 6,304 dwellings. Of these, 2,500 already benefit from an outline planning consent. The application site, accommodating 599 dwellings, sits within the red line associated with the extant outline planning permission (ref: PA/2015/0396), which in its entirety, comprises of the following:

- 2,500 new homes;
- A village centre;
- A health care facility;

- Community facilities;
- A three-form entry primary school;
- New roads and footpaths;
- Informal areas of open space;
- Play spaces; and
- Wildlife habitats, water bodies, and wetlands.

In April 2016, National Highways offered “No Objection” to the application, and JSJV notes that it was subsequently approved. In its Decision Notice (5th August 2021) the Council imposed conditions on the consent including Condition 37, which required that:

“Prior to the occupation of the 250th dwelling approved under PA/2015/0396 (served off Burringham Road), works to the M181 southern (terminating) junction roundabout including connection to the existing Burringham Road and associated roundabouts approved under PA/2015/0627, must be constructed and operational and accessible to motor vehicles.

Reason

To give alternative vehicular access arrangements to the proposed areas of housing and additional capacity to the transport network in the interests of free circulation of traffic, highway safety and in accordance with policy T2 of the North Lincolnshire Local Plan, policy T12 of the Lincolnshire Lakes Area Action Plan and policies CS1, CS4, CS25 and CS26 of the North Lincolnshire Core Strategy.”

The current detailed planning application for 599 dwellings sits within “Plot 1” of the 2021 outline consent. In the Arup Transport Assessment that accompanied the outline planning application, Plot 1 accommodated 643 dwellings, i.e., 44 more than is currently being applied for.

M181 highways and infrastructure works (ref: PA/2017/1386)

The planning application reference PA/2017/1386, sought consent for on-site infrastructure and off-site highway works to deliver a new terminating junction to the M181 motorway. In April 2016, National Highways offered ‘No Objection’ to the application; however, this applied only to the hybrid element of the application for:

- A new road and footpaths;
- Informal areas of open space;
- Parklands;
- Play areas;
- Wildlife habitats;
- Attenuation ponds; and
- Recreational lakes and wetlands.

Lincolnshire Lakes, Land east of M181 and north of Burringham Road, Scunthorpe 599 houses (ref: PA/2023/1124)

In November 2023, National Highways responded to the current planning application, concluding that the Applicant had not considered the requirements set out in Circular 01/2022. Thus, it was recommended that the application not be determined in order to allow for the following information to be provided:

- A Transport Assessment and Travel Plan to be developed in accordance with Circular 01/2022;
- A vision for the development;
- Trip rates and traffic distribution;
- The residual traffic generation taking into account the proposed Travel Plan measures and initiatives to encourage active and sustainable travel;
- Junction capacity assessments where required; and
- A revised Travel Plan targets monitoring regime.

Land north of Burringham Road, Burringham Road, Scunthorpe (ref: PA/2023/1750)

Although not forming part of the 2021 outline planning consent for 2,500 new homes, the land subject to planning application ref: PA/2023/1750, is located adjacent to the eastern extents of the application site, and accommodates 158 dwellings.

In February 2024, National Highways offered 'No Objection' to the application. JSJV would note however, that this application should be considered within any future assessment, in order to understand it's cumulative impact.

Existing situation

The location of the development site, relative to the Strategic Road Network [SRN], is presented in **Figure 1**. The site is located approximately:

- 2.4km north of the M180 / M181 junction (M180 J3); and
- Adjacent to the M181 / A1077(M) roundabout.

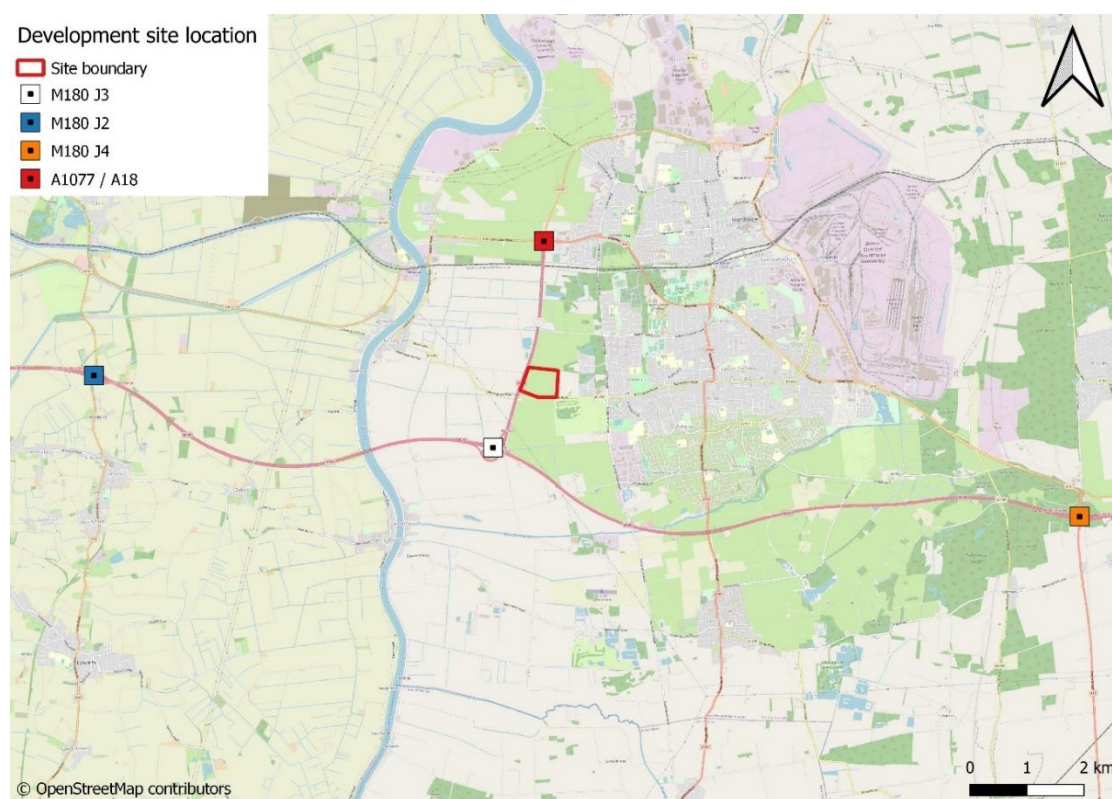


Figure 1. Development site in relation to SRN

Collision data analysis

LTP has not included any SRN junctions within their collision data analysis. JSJV would have expected an analysis of the M180 junctions 2, 3, and 4, given their proximity to the application site. However, considering the forecast traffic impact on the SRN, as highlighted within this review, it is unlikely that the development will afford a material impact that would be considered to be severe, or result in an unacceptable road safety issue.

Policy review

JSJV would note that LTP has reviewed the following relevant policy documents within the TA and TP:

- National Planning Policy Framework [NPPF] (2023);
- Circular 01/2022 Strategic road network and the delivery of sustainable development (2022);
- North Lincolnshire Housing and Employment Land Allocations Development Plan Document (DPD) (2016a);
- Lincolnshire Lakes Area Action Plan (2016b); and
- Planning Practice Guidance (2014)

Proposed development

LTP states the proposed development will comprise: *“the development of 599no. dwellings and lake, along with associated infrastructure, including landscaping, public open space and play area, pedestrian and cycle links, pumping station and sub-*

station. A mix of dwelling types are expected to be provided at the site, with a range of property sizes”.

Access

Access to the site will be served via a new simple priority T-junction with Burringham Road as well as a new roundabout to the west of this access.

Parking

Parking provision has been based on NLC’s ‘Car Parking Guidelines’ set out in the ‘North Lincolnshire Council Residential Roads Design Guide’. JSJV can confirm that the parking provision at the proposed development is to be provided in accordance with NLC parking requirement.

Travel Plan and Sustainable Access

JSJV would highlight paragraph 115 of the NPPF which states that:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

As outlined below, the development is unlikely to affect a material change in the safe and efficient operation of the SRN. JSJV would suggest therefore, that the residual impact of the development is unlikely to be severe. Nonetheless, we have provided comments on the Vision and the Travel Plan and have noted deficiencies with this information.

Vision

JSJV would note that LTP has not provided a Vision for the proposed development. Circular 01/2022 paragraph 48 states that the vision should adhere to the following:

“Where a transport assessment is required, this should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision.”

Sustainable access and Travel Planning measures

Accessibility by walking

LTP notes that the guidance provided by the Chartered Institution of Highways & Transportation (CIHT) suggests a preferred maximum walking distance of 2km for a number of trip types, including commuting and school trips (IHT, 2000). LTP has provided a list of key attractors within 2km walking distances, as shown in **Figure 2**.

Trip Attractor	Walking Route	Walking Distance*
Education		
Westcliffe Primary School	Burringham Road – Dryden Road	1.8km
Mellior Community College (south site)	Burringham Road – Enderby Road	2km
Retail/Commercial		
Asda Scunthorpe Superstore	Burringham Road	900m
Silicia Lodge Garden Centre	Burringham Road – Scotter Road South	1.6km
South Park Industrial Estate	Burringham Road – Scotter Road South	1.9km
Leisure		
Ashby Decoy Golf Club/Oglesby Park	Burringham Road	500m
Ashfield Caravan Site	Burringham Road	700m
The Iron Forge Public House	Burringham Road	900m
Church of Jesus Christ of Latter Day Saints	Burringham Road – Whitestone Road	1.4km
Silica Country Park	Burringham Road – Scotter Road South	1.5km
Manor Park	Burringham Road	1.6km
Healthcare		
Lindsey Lodge Hospice	Burringham Road	300m

*Walking distances are approximate (measured along footways, rather than as the crow flies) and have been measured from the proposed site access on Burringham Road.

Figure 2. Key trip attractors by foot (Extracted from TP)

As can be seen in **Figure 2**, walking distances have been measured from the site access on Burringham Road, subsequently, it is unlikely that the majority of trip attractors shown in Figure 2 will fall within a 2km walking distance from the majority of houses within the site. JSJV would note that the only notable amenity within 2km is the ASDA Scunthorpe Superstore, which is located 900m from the site access. JSJV would also note a lack of employment opportunities within a 2km walking distance.

However, LTP does note that the wider Lincolnshire Lakes development is expected to include "... local centres, primary schools and recreation/sport facilities".

Overall, as things currently stand, JSJV would suggest that walking is not a viable, sustainable method of travel for residents of the proposed development, other than travelling to the supermarket. The opportunities for commuting trips on foot are clearly limited.

Accessibility by cycling

LTP notes the Department for Transport states the journeys up to 8km are "An achievable distance for most people". LTP, therefore, has provided an 8km cycling isochrone, as shown in **Figure 3**.

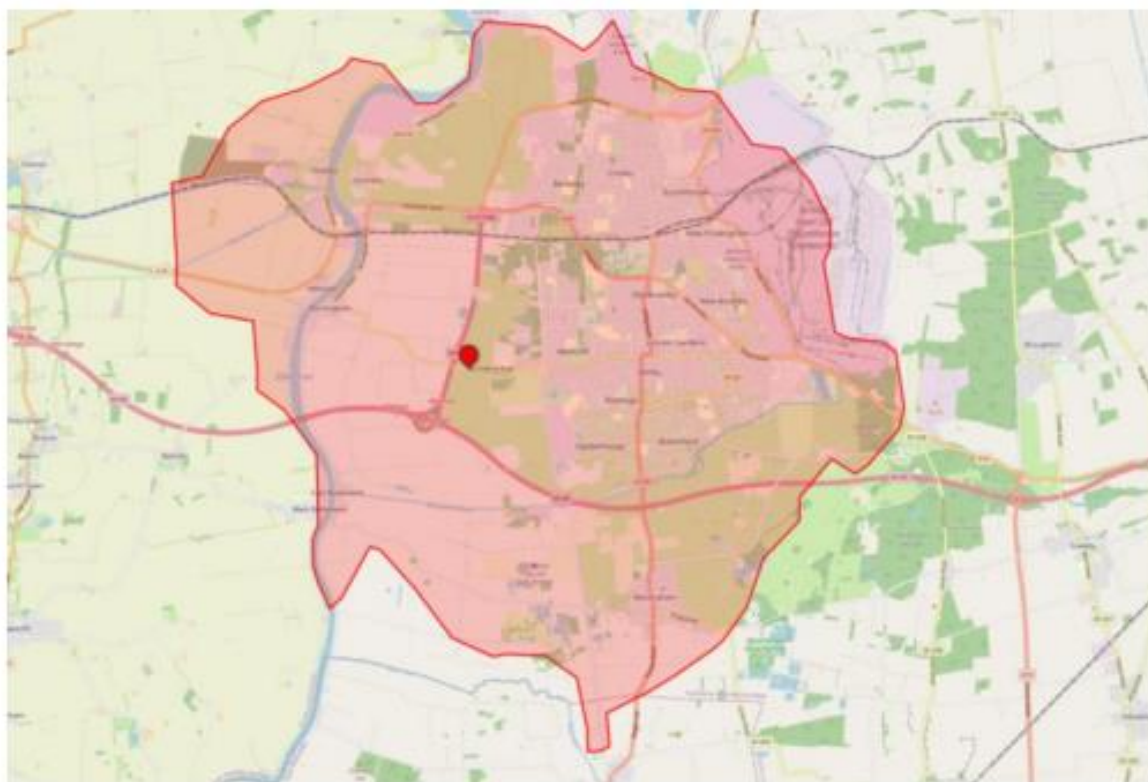


Figure 3. 8km cycling isochrone (Extracted from TP)

As shown in **Figure 3**, the majority of Scunthorpe is within an 8km cycling journey from the development site access.

LTP notes that the National Cycle Network [NCN] route 169, is approximately 2.2km to the north-east of the site on Burringham Road, and it provides a mostly off-road shared surface. As shown in **Figure 4**, JSJV would note that this route does provide an opportunity for off-road cycling, that connects the south of Scunthorpe to the north; however, there is currently a lack of cycling infrastructure connecting the site to the NCN.

LTP notes that a shared 3m wide surface will be provided “on at least one side of the main spine roads within the site” and “on the northern side of Burringham Road within the site frontage”. JSJV welcomes the provision of shared surfaces within the site and along the site frontage of Burringham Road.

Furthermore, LTP notes that, as part of a separate planning application (ref: PA/2020/1295), the current 2m wide footway on the northern side of Burringham Road is to be upgraded to a 3m wide shared surface. As a result, the site frontage shared provision will connect to that to the east, providing improved cycling infrastructure on Burringham Road. JSJV would note this should provide greater connectivity to the existing NCN route 169.

Consequently, JSJV would note by improving infrastructure along Burringham Road, accessibility to the site via cycling will become a viable alternative method of travel.

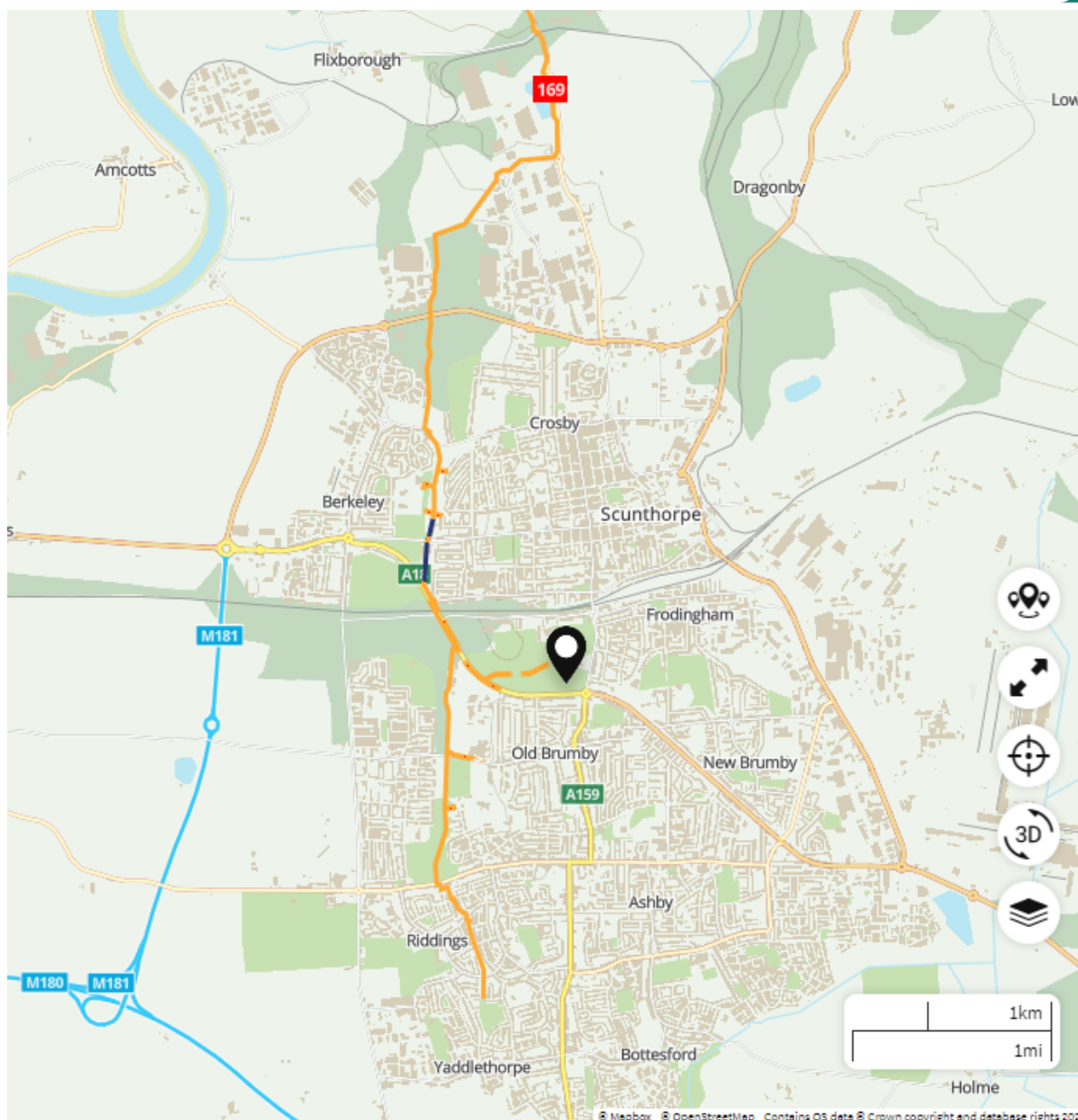


Figure 4. NCN route 169¹

Bus provision

LTP notes that the closest bus stop is located approximately 900m to the east of the site access; JSJV would note the distance will be even further from the extremities of the residential development. LTP notes this stop is served by the number 12, which operates on an hourly basis serving Riddings, Ashby, Old Brumby and Scunthorpe Bus Station.

LTP notes as part of the Lincolnshire Lakes AAP: *“it is expected that the ‘primary route network’ identified within the AAP will accommodate bus routes and cover the proposed site, providing better access to bus services (NLC, 2016b).”*

In light of any confirmed improvements to the current bus provision, JSJV does not consider the current bus service to be a viable mode of sustainable travel for residents

¹ <https://www.sustrans.org.uk/national-cycle-network/>

of the proposed development; the bus stops are greater than 400m distant from the site access and the service frequency is considerably low.

Rail provision

LTP notes the nearest railway station to the site is Scunthorpe Railway Station, located approximately 5.3km to the north-east of the site and accessible via the number 12 bus service. The station is served by an hourly TransPennine Express service between Manchester Piccadilly and Cleethorpes via Doncaster.

JSJV would note in light of improvements to the current bus provision, we do not anticipate rail as a viable alternative method of sustainable transport that can be accessed without driving.

Travel Plan measures

LTP has presented a range of measures and initiatives to promote active and sustainable travel to / from the proposed development site. JSJV has presented the key measures in **Table 1** for reference. JSJV would note the measures will either be funded for by the TPC budget or directly through the detailed design of the development.

Table 1. Proposed Travel Plan measures

Mode of transport	Measure	Funded
Walking	Ensure that the pedestrian routes within the development are safe, convenient, accessible and well lit, providing good internal permeability and access to all dwellings and open spaces.	Detailed design
	Design the development in accordance with a 'pedestrian first' policy with good lighting, dropped kerbs and a road layout that maintains a low vehicle speed environment	Detailed design
	Distribute a map showing key pedestrian features within the local network.	TPC budget
	Liaise with local schools in order to encourage the establishment of a 'walking bus' to/from the development.	TPC budget
Cycling	Provide 3m wide shared footways on at least one side of the main spine roads within the site and on the northern side of Burringham Road within the site frontage.	Detailed design
	Distribute copies of relevant cycle maps to all residents. Related information with regard to local cycle shops and local cycle groups should also be distributed.	TPC budget
	Investigate the possibility of establishing a Bicycle User Group (BUG) or working group equivalent and implement if there is sufficient interest.	TPC budget
Public transport	Meet local bus operators regarding the potential for re-routing or providing additional bus services to better accommodate the residents of the site and the surrounding area. These meetings and discussions are to include the TPC for this TP, but also the TPCs and representatives for the developers/developments on other parcels of the wider Lincolnshire Lakes development, also including close consultation with NLC Highways and Passenger Transport teams.	TPC budget
	Disseminate public transport information to all residents.	TPC budget

Overall, JSJV welcomes the proposed TP measures proposed by LTP, however, we would reiterate the importance of meeting with local bus operators regarding the potential for re-routing or providing additional bus services at the earliest possible date.

Summary

In summary, JSJV would note that the site is not currently located in an accessible and therefore sustainable location for walking, cycling and public transport. The lack of employment opportunities and amenities within reasonable walking distances, along with the low provision of cycling infrastructure, will unlikely reduce the reliance on car travel.

Nevertheless, as discussed, the provision of shared footways along Burringham Road provides the opportunity for cycling to become an attractive option by improving the sites connectivity to NCN route 169, allowing people to access amenities and employment opportunities that fall outside walking distances.

Furthermore, the possibility for re-routing and/or additional bus services has the potential to increase accessibility via public transport, however, in light of any firm commitments, this should not be used to support any reduction in percentage of car use.

Mode share

Baseline mode share

LTP has presented two options for the baseline mode share across the TA and TP. These have been derived from 'Method of Travel to Work' data from the 2011 National Census and the TRICS online database. JSJV would note that the 2011 Census mode share has been derived from eight MSOA's: 'Burringham & Guinness', 'Frodingham Town', 'Crosby & Park', 'Bottlesford', 'Kingsway with Lincoln Gardens', 'Ashby' and 'Brumby'.

JSJV has considered a comparison mode share using Method of Travel to Work' data from the 2011 National Census from an average split between the closest comparable MSOA's to the site (MSOA 016 and 019). LTP's proposed baseline mode share and JSJV's comparison is shown in **Table 2**.

Table 2. Proposed baseline mode share

Mode	TRICS	2011 Census (Eight MSOA's)	2011 Census (MSOA 016&019)
Train	1.6%	0.35%	0%
Bus, minibus or coach		3.56%	4%
Taxi	N/A	0.44%	0%
Motorcycle, scooter or moped	N/A	1.33%	1%
Driving a car or van	64%	65.94%	73%
Passenger in a car or van	22%	8.77%	9%
Bicycle	1.7%	5.97%	5%
On foot	10.6%	13.04%	8%
Other method of travel to work	N/A	0.59%	1%

As can be seen from **Table 2**, our baseline mode share for driving a car or van is higher than both options presented by LTP. Considering the current lack of public transport provision and employment opportunities within walking distance of the site, JSJV would suggest a baseline mode share of 64% or 65.94% as relatively low.

Target mode share

Within the TP, LTP has proposed a 5% reduction in vehicle trips within the AM and PM peak over a 5-year period. The resultant target mode share is shown in Figure 5.

Mode	Modal Split
Vehicle Drivers	59%
Vehicle Passengers	23%
Pedestrians	12.6%
Cyclists	2.7%
Public Transport Users	2.6%
TOTAL	100%

Figure 5. LTP proposed target mode share.

Due to the proposed baseline mode share being relatively low, JSJV would not consider the target shown in **Figure 5** to be realistic.

Travel Plan management, funding and monitoring

JSJV would note the following information provided by LTP:

- The Applicant acts as the owner of the development and is therefore responsible for the implementation of this Travel Plan;
- The Applicant will be responsible for ensuring the provision of adequate resources to develop and implement the Travel Plan, including the appointment of a Travel Plan Coordinator (TPC);
- The Applicant will appoint a TPC at the site at least 3 months prior to first occupation of the development;
- Formal monitoring of the Travel Plan and its targets is to start 12 months after first occupation. This will involve undertaking a questionnaire-based survey;
- If the annual review process identifies that the Travel Plan targets are being missed by a significant margin, then potential additional measures/initiatives may be required at the site;
- Potential additional measures include:
 - Area-wide (potentially local authority-wide) initiatives, working with neighbouring developments and the local authority;
 - More active marketing of the Travel Plan, incorporating a shift of focus; and
 - Offer of personalised journey planning services to residents.
- It is suggested that a monitoring and evaluation period of five years post full occupation at the site should be suitable.

JSJV would suggest that 12 months after first occupation is relatively late for the first travel survey to be undertaken in order to inform whether or not the Travel Plan targets are going to be met within the first year. As a result, JSJV would suggest an initial

resident travel survey be carried out within the first year of occupation as well as 12 months after first occupation.

LTP states that the monitoring process will be repeated for 5 years. JSJV would note that the cessation of monitoring may only be appropriate once it has been demonstrated that the travel patterns of the development are in line with the targets and objectives of the Travel Plan; this needs to be a consideration within the Travel Plan.

Transport Assessment

LTP has provided two sets of trip rate analysis, one set using trip rates from the consented PA/2015/0396 outline application, and the other using the TRICS online database.

Trip Rates and Generation

Consented trip rates

LTP has presented the person trip rates derived from the Arup TA (2016) that was submitted in support of the previous PA/2015/0396 outline application for 2,500 homes. The person trip rates are shown in **Figure 6**.

Table 7: Consented Modal Split & Projected Vehicle Trip Generation

	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
Person Trip Rate	0.220	0.844	0.634	0.404
Person Trips (599 Dwellings)	132	506	380	242

Figure 6. LTP proposed person trip rates (Arup TA, 2016)

LTP has derived the vehicle trip generation from the proposed person trip generation shown in **Figure 6** by applying the 2011 Census (Eight MSOA's) mode share shown in **Table 2**. LTP's proposed vehicle trip generation is shown in **Figure 7**.

Person Trips	Modal Split	Arrivals	Departures	Arrivals	Departures
Driving a Car or Van	65.94%	87	334	251	160
Motorcycle, scooter or moped	1.33%	2	7	5	3
Taxi or minicab	0.44%	1	2	2	1
Vehicle Trip Generating	67.71%	90	343	258	164
Passenger in a Car or Van	8.77%	12	44	33	21
On foot	13.04%	17	66	50	32
Bicycle	5.97%	8	30	23	14
Bus, minibus or coach	3.56%	5	18	14	9
Train	0.35%	0	2	1	1
Other	0.59%	1	3	2	1
TOTAL PERSON TRIPS	100%	132	506	380	242

*The total may not represent the sum of its parts due to rounding

Figure 7. LTP's proposed vehicle trip generation (Extracted from TA)

As can be seen from **Figure 7**, LTP forecast that the proposed development will generate 421 two-way vehicle trips in the AM peak and 411 two-way vehicle trips in the PM peak.

LTP TRICS analysis

LTP has undertaken a person trip rate analysis using the TRICS Online Database (version 7.10.3), the results of this analysis are shown in **Table 3** with the TRICS selection parameters outlined as follows:

- TRICS Land Use Category: 03 / A (Residential / Houses privately owned);
- Location: Edge of Town;
- Trip rate parameter: Number of dwellings;
- Actual Range: 300 to 900 dwellings; and
- Calculation Factor: 1 dwell

Table 3. LTP proposed TRICS person trip rates.

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip rate	0.222	0.810	0.495	0.545	0.279	0.487
Trip generation	133	485	618	326	167	494

LTP has derived the vehicle trip generation from the proposed person trip generation shown in **Table 3** by applying the TRICS baseline mode share shown in **Table 2**. LTP's proposed TRICS vehicle trip generation is shown in **Table 4**.

Table 4. LTP's proposed vehicle trip generation.

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Veh. trip generation	85	311	396	209	107	316

As can be seen from **Table 4**, LTP forecast the proposed development to generate 396 two-way vehicle trips in the AM peak and 316 two-way vehicle trips in the PM peak.

JSJV TRICS trip rate analysis

For comparison, JSJV has undertaken a trip rate analysis using the TRICS Online Database (version 7.10.3), the results of this analysis are shown in **Table 5** with the TRICS selection parameters outlined as follows:

- TRICS Land Use Category: 03 / A (Residential / Houses privately owned);
- Location: Suburban Area, Edge of Town;
- Trip rate parameter: Number of dwellings;
- Actual Range: 300 to 900 dwellings; and
- Calculation Factor: 1 dwell

JSJV has applied the higher mode share for driving a car or a van (73%) from Table 2 to derive the vehicle trip generation.

Table 5. JSJV proposed vehicle trip generation analysis.

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Person trip rate	0.206	0.758	0.964	0.528	0.267	0.795
Person trip gen	123	454	577	316	160	476
Veh. trip gen (73%)	90	331	422	231	117	348

As can be seen from **Table 5**, JSJV anticipate that the proposed development will generate 422 two-way vehicle trip in the AM peak and 348 two-way vehicle trips in the PM peak.

Vehicle trip generation comparison

In **Table 6**, JSJV has compared both LTP's and JSJV's proposed vehicle trip generation results.

Table 6. Vehicle trip generation comparison

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
JSJV	90	331	422	231	117	348
LTP Consented	87	334	421	251	160	411
Variance to JSJV	-3	+3	-1	+20	+43	+63
LTP TRICS	85	311	396	209	107	316
Variance to JSJV	-5	-20	-26	-22	-10	-32

As can be seen from **Table 6**, when using the consented trip rates, LTP anticipate that the proposed development will generate 1 fewer two-way vehicle trips in the AM peak and 63 more two-way vehicle trips in the PM peak compared to JSJV.

When using the LTP's TRICS trip rates, LTP anticipate that the proposed development will generate 26 fewer two-way vehicle trip in the AM peak and 32 fewer two-way vehicle trips in the PM peak compared to JSJV.

Although JSJV do not consider LTP's proposed mode share, used to derive the vehicle trip generation from the consented trip rates, as appropriate, after an independent analysis using our own person trip rates and higher car use mode share, LTP does forecast a similar volume of vehicle trips in the AM peak and larger volume of vehicle

trips in the PM peak. We would, therefore, be inclined to consider LTP's vehicle trip rates derived from the consented Arup trip rates to be appropriate.

However, JSJV would note that we do not consider LTP's TRICS trip rates to be appropriate considering the large variance compared to JSJV's analysis.

Remaining vehicle trips associated with Outline Permission (ref: PA/2015/0396)

In **Table 7**, JSJV has presented the vehicle trip generation originally assumed for the entirety of "Lincolnshire Lakes, Land east of M181 and north of Burringham Road, Scunthorpe Outline Permission (ref: PA/2015/0396)" from the Arup TA (2016). This has been compared to the current application.

As can be seen, from the evidence presented to date, it would appear that there are 1,333 consented two-way vehicle trips and 1,352 two-way consented vehicle trips, in the AM and PM peak periods respectively, that 'remain' or are still to be considered as part of the outline consent (ref: PA/2015/0396); i.e., compared with that assumed within the Arup TA.

Table 7. Remaining consented trips

	AM Peak Period (08:00-09:00)			PM Peak Period (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Arup TA 2,500 dwell.	363	1,391	1,754	1,058	705	1,763
LTP 599 dwell.	87	334	421	251	160	411
Remaining	276	1,057	1,333	807	545	1,352

Proposed vehicle trip distribution

LTP distributed vehicle trips associated with the proposed development on to the SRN (M180) utilising a gravity model based upon commuting patterns of existing residents within the North Lincolnshire 016 MSOA.

JSJV has also undertaken a vehicle trip distribution exercise using National Highways' gravity model GraHAM.

LTP's and JSJV's residential development trip distribution results are presented in **Table 8**.

Table 8. LTP proposed vehicle distribution comparison.

	Junction	Arm	AM Peak Period		PM Peak Period	
			Arrivals	Departures	Arrivals	Departures
LTP	M180 J2	Eastbound diverge	2.2%	-	2.2%	-
		Westbound merge	-	2.2%	-	2.2%
	M180 J3	Eastbound diverge	-	-	-	-
		Westbound merge	-	-	-	-

	M180 J4	Eastbound merge	-	-	-	-
		Westbound diverge	-	-	-	-
JSJV	M180 J2	Eastbound diverge	-	-	-	-
		Westbound merge	-	-	-	-
	M180 J3	Eastbound diverge	1%	-	1%	-
		Westbound merge	-	1%	-	1%
	M180 J4	Eastbound merge	-	7%	-	7%
		Westbound diverge	7%	-	7%	-

As shown in **Table 8**, JSJV forecast that in the order of 7% of traffic will assign to a movement via the M180 J3&4, whereas LTP forecast only 2.2% will assign to the M180 J2.

We have applied our trip distribution results to LTP's proposed vehicle trip generation derived from the consented trip rates shown in **Table 6**, the results are shown in **Table 9**.

Table 9. Residential vehicle trip distribution results M180 J2,3&4

	Junction	Arm	AM Peak Period		PM Peak Period	
			Arrivals	Departures	Arrivals	Departures
LTP	M180 J2	Eastbound diverge	2	-	9	-
		Westbound merge	-	7	-	6
	M180 J3	Eastbound diverge	-	-	-	-
		Westbound merge	-	-	-	-
	M180 J4	Eastbound merge	-	-	-	-
		Westbound diverge	-	-	-	-
JSJV	M180 J2	Eastbound diverge	-	-	-	-
		Westbound merge	-	-	-	-
	M180 J3	Eastbound diverge	1	-	4	-

		Westbound merge	-	3	-	3
	M180 J4	Eastbound merge	-	23	-	18
		Westbound diverge	6	-	29	-

As is shown in **Table 9**, when applying JSJV's vehicle trip distribution results to LTP's vehicle trip generation, the proposed residential development is forecast to generate 23 vehicle trips on the eastbound merge in the AM peak and 29 vehicle trips in the PM peak.

JSJV would conclude that, although the volume of trips assigned to the SRN, namely M180 J4, highlight a potential material uplift in vehicle trip generation, the vehicle trips associated with the current application have been previously considered acceptable as part of the outline planning consent.

However, we would note the remaining allocation of dwellings as part of the outline consent and AAP has the potential to result in a greater cumulative impact. Consequently, we would note that future applications should consider the impact of the development cumulatively with all other aspects of the outline planning consent.

Boundary treatment

As discussed, the proposed development is located adjacent to the M181. Its western boundary is coincidental with the highway boundary.

Therefore, the Applicant should demonstrate to National Highways that there are no drainage, structural, boundary treatments or other constructions that would have an impact on National Highways land interests. It should be noted, for example, that the structural stability of the highway should not be undermined, and that surface water should not drain towards or into the highway. As stated within paragraph 57 of Circular 01/2022, for reasons of safety, liability and maintenance:

“...structures should be sited sufficiently far from the highway boundary of the SRN so that they cannot topple on to the SRN or undermine its geotechnical integrity. Alternatively, an appropriate structural assessment that accords with the DMRB must be provided. A Road Restraints Risk Assessment must also be carried out where any furniture, structures or other features would be sited adjacent to the SRN.”

Furthermore, to ensure the integrity of the highway drainage systems, paragraph 58 states:

“...no new connections into those systems from third party development and proposed drainage schemes will be accepted. Where there is already an existing informal or formal connection into the highway drainage system from a proposed development site, the right for a connection may be allowed to continue provided that the flow, rate and quality of the discharge into the highway drainage system remains unaltered or results in a betterment. The company may require a drainage management and maintenance agreement to be entered into to secure this requirement in perpetuity.”

JSJV would suggest therefore that further information be provided with regards to the proposed boundary treatment between the M181 and the application site; particularly, but not exclusively, the information should consider:

- The impact of earthworks on the stability and integrity of the SRN;
- The impact of earthworks on drainage, and the drainage requirements needed to ensure that surface water does not flow from the application site on to the SRN;
- Access for maintenance of the highway boundary is maintained; and
- Boundary treatments are adequate and appropriate; particularly in regard to dazzle and distraction from opposing head lights.

Construction Traffic Management Plan

Due to the proposed site location being in close proximity to the SRN, JSJV would also recommend a Construction Traffic Management Plan [CTMP] is submitted alongside the application. This should be provided to National Highways for review and agreement in writing prior to commencement of construction. Construction will then be expected to proceed in accordance with the approved CTMP.

The CTMP will need to include at least the following:

- A dust management plan;
- noise management plan;
- Pollution prevention measures;
- Staffing numbers;
- Contractor parking;
- Construction traffic routes;
- Details of delivery arrangements (including for any abnormal loads); and
- Measures to limit and manage transfer of debris on to the highway.

Summary and Conclusions

On the basis of this review, the recommendation to National Highways in relation to this development proposals is:

Recommended conditions – Conditions as identified (although noting assessment deficiencies).

This review has highlighted the following deficiencies:

- Considering the current lack of public transport provision and employment opportunities within walking distance of the site, JSJV would suggest a baseline mode share of 64% or 65.94% as relatively low;
- Due to the proposed baseline mode share being relatively low, JSJV would not consider the target mode share to be realistic;
- JSJV would suggest that 12 months after first occupation is relatively late for the first travel survey to be undertaken in order to inform whether or not the Travel Plan targets are going to be met within the first year. As a result, JSJV would suggest an initial resident travel survey be carried out within the first year of occupation as well as 12 months after first occupation;

- LTP states that the monitoring process will be repeated for 5 years. JSJV would note that the cessation of monitoring may only be appropriate once it has been demonstrated that the travel patterns of the development are in line with the targets and objectives of the Travel Plan; this needs to be a consideration within the Travel Plan; and
- Although JSJV do not consider LTP's proposed mode share, used to derive the vehicle trip generation from the consented trip rates, as appropriate, after an independent analysis using our own person trip rates and higher car use mode share, LTP does forecast a similar volume of vehicle trips in the AM peak and larger volume of vehicle trips in the PM peak. We would, therefore, be inclined to consider LTP's vehicle trip rates derived from the consented Arup trip rates to be appropriate.

This review has highlighted the need for the following conditions:

1) Condition: Boundary Treatment/Retaining Structures/Bunds

Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways, construction of the development hereby approved shall not take place unless and until evidence has been provided to demonstrate that the development complies with Paragraphs 57 and 59 of the DfT Policy Paper 'strategic road network and the delivery of sustainable development' [December 2022]." All works shall be undertaken in accordance with the agreed plan and maintained as such thereafter.

Reason: to ensure the safe and continued operation of the SRN.

2) Condition: Construction Management Plan

Unless otherwise agreed in writing by the Local Planning Authority in consultation with National Highways (or its successors), no construction shall commence unless and until a detailed Construction Phase Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority in consultation with National Highways (or its successors). Thereafter the construction shall be undertaken in accordance with the approved plan.

Reason: To manage construction traffic impacts and ensure the safe and efficient operation of the SRN.