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Proposed Lidl Foodstore
Bankwood Way, Birstall

Transport Assessment

July 2021

PROPOSED LIDL FOODSTORE
BANKWOOD WAY
BIRSTALL

LIDL GREAT BRITAIN

TRANSPORT ASSESSMENT

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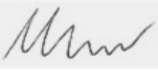
Report prepared by	Nick Calder		1st July 2021
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1.0 INTRODUCTION

1.1 This Transport Assessment (TA) forms part of a full planning application submitted by Lidl Great Britain to erect a new Lidl foodstore and separate retail unit with garden centre, on a vacant development plot at Bankwood Way, Birstall Shopping Park, Birstall.

1.2 The new Lidl foodstore will have a gross floor area (gfa) of 2,231m^2 and the retail unit with garden centre will have a combined gfa of 2,792m^2. The combined gfa for which permission is sought is therefore some 5,023m^2.

1.3 The site is located on a vacant development plot within the Birstall Shopping Park which has been cleared to allow for re-development. The site is bound to the north by Bankwood Way and an existing office building, to the south-east by the continuation of Bankwood Way, to the south-west by existing office buildings known as Woodhead House and to the north-west by Woodhead Road.

1.4 Vehicular access to the site will be provided from two separate points, firstly Woodhead Road to the north-west via a new priority-controlled T-junction and secondly, through the existing site access junction off Bankwood Way to the north-east. Pedestrian access to the site will be provided as part of these two points of vehicular access. In addition, given the level difference between Woodhead Road to the north-west and the site, pedestrian access to Woodhead Road from the site will be provided via steps as well as a 1:21 gradient ramped footway.

1.5 The site on which the food-store and garden centre are proposed benefits from an extant outline planning permission (application reference 2018/60/92563/E) for, four A1 non-food retail units with a combined gfa of 7,896m^2 and a 305-space shared car park, with access to be taken from Bankwood Way at two separate points.

1.6 This application was granted outline planning approval by Kirklees Council (KC) in January 2020. The principle of retail development on this development site has therefore been established. The extant permission is larger in size than the development now proposed.

1.7 This TA has been prepared with due regard to the TA and TA Addendum (TAA) prepared in support of the extant approval by BWB Consultants, and subsequent discussions with highways officers at KC. As part of the extant planning permission, condition 9 requires details to be submitted and agreed for proposed changes to the priorities at the Woodhead Road / Bankwood Way junction. The requirement

for this change of priorities is considered further within this TA and it is confirmed that the changes in priority will also be made as part of the current proposals.

1.8 This TA has been prepared following a pre-application meeting held with KC on 28th October 2020, and with regard to a TA Scoping Note submitted by BGH to KC on 5th November 2020 (report reference 20-270-001.01). The content of the Scoping Note mirrors the scope agreed between BWB and the Authority as part of the consideration of the application for the extant permission.

1.9 To date no comments on the BGH TA Scoping Note have been provided by KC. In the absence of comments from the Authority the scope of assessment has been considered to be acceptable, and this TA has been prepared in line with the methodology outlined within the TA Scoping Note which is attached at **Appendix BGH1** for ease of reference.

1.10 This TA demonstrates that the development proposals accord with relevant national and local transport planning policy and that they will have no significant residual traffic impact on the operation of the local highway network. It also demonstrates that the site location will promote sustainable modes of travel, consistent with appropriate policy guidance.

1.11 This TA is accompanied by Travel Plans (TP) which have been prepared to support the proposals and have been submitted to KC alongside this TA. The TP's discuss the sustainable travel options available for the site in greater detail, promote a strategy for future users (staff and shoppers) to travel sustainably and set out appropriate targets.

1.12 The remainder of this TA is structured as set out in Table 1.1 below:-

Table 1.1
Transport Assessment Report Structure

Section	Title	Description
2.0	Relevant planning and transport policy	This section will set out the local and national policy relevant to the application site.
3.0	The application site and the existing highway network	This section will describe the existing site, the local highway network and its function.
4.0	The operation of the existing highway network	This section will assess the existing operation of the highway network in the absence of the development, based upon relevant traffic flow information.
5.0	Sustainable transport	This section will describe the existing situation in the vicinity of the site with regards to the opportunities for visitors and employees to travel on foot, by cycling and public transport.
6.0	Base operating conditions	This section will assess the operation of the highway network at a future base year, including where relevant the inclusion of committed development in the absence of this development site.
7.0	The development proposals	This section describes the proposed development, including the vehicular and pedestrian access strategy.
8.0	Development trip generation, trip types and trip distribution	This section presents appropriate trip generation rates for the development, discusses appropriate trip type assumptions and assesses the distribution of development related traffic on to the highway network.
9.0	Traffic impact on the local highway network	The impact of the traffic generated by the development on the local transport network is presented in this section.
10.0	Summary & conclusions	This section presents a summary of the analysis contained within the Transport Assessment and the conclusions drawn.

1.13 This TA demonstrates that the development proposals are acceptable, and that planning consent could not be reasonably withheld on highways or transportation grounds.

2.0 RELEVANT PLANNING AND TRANSPORT POLICY

National Policy

National Planning Policy Framework

2.1 The National Planning Policy Framework (NPPF) was first published in March 2012 and most recently revised in June 2019. It sets out the Government's planning policies for England and how these should be applied.

2.2 Paragraph 108 of the NPPF states that:-

> *"…In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
>
> *a) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
> *b) Safe and suitable access to the site can be achieved for all users; and*
> *c) Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

2.3 Paragraph 109 of the NPPF 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."*

2.4 Paragraph 110 of the NPPF goes on to state:

> *"..Within this context, applications for development should:*
>
> *a) Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
> *b) Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

c) *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
d) *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
e) *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*

2.5 All developments that will generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed. The application for this site includes this TA in line with this requirement.

Planning Practice Guidance

2.6 On the 6th March 2014, the Government released updated planning guidance in the form of the Planning Practice Guidance (PPG) which is linked to the National Planning Policy Framework. The aim of the PPG is to help simplify the planning system in England and replace a number of historic guidance notes.

2.7 The updated PPG covers Transport in two sections, the first being 'Transport evidence bases in plan making' and 'Travel plans, transport assessments and statements in decision taking'. The relevant guidance to this TA is contained within the latter of the two documents and is summarised below.

2.8 Paragraph 2 states that:-

> *"…Travel Plans; Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements".*

2.9 In respect to Transport Assessments and Travel Plans, paragraph 6 states that:-

> *'…Travel Plans, Transport Assessments and Statements can positively contribute to:-*
>
> - *encouraging sustainable travel;*
> - *lessening traffic generation and its detrimental impacts;*
> - *reducing carbon emissions and climate impacts;*
> - *creating accessible, connected, inclusive communities;*
> - *improving health outcomes and quality of life;*

- *improving road safety; and*
- *reducing the need for new development to increase existing road capacity or provide new roads.*

They support national planning policy which sets out that planning should actively manage patterns of growth in order to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.'

2.10 In terms of the key principles, paragraph 7 states that:-

'…Travel Plans, Transport Assessments and Statements should be:-

- *proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;*
- *established at the earliest practicable possible stage of a development proposal;*
- *be tailored to particular local circumstances (other locally-determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally);*
- *Be brought forward through collaborative ongoing working between the Local Planning Authority/Transport Authority, transport operators, Rail Network Operators, Highways Agency (now Highways England) where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, Transport Assessments and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).*

In order to make these documents as useful and accessible as possible any information or assumptions should be set out in a clear and publicly accessible form:-

- *the timeframes over which they are conducted or operate should be appropriate in relation to the nature of developments to which they relate (and planned changes to transport infrastructure and management in the area);*

- *Local Planning Authorities should advise qualifying bodies for the purposes of Neighbourhood Planning on whether Travel Plans, Transport Assessments and Statements should be prepared, and the benefits of doing so, as part of the duty to support;*
- *Local Planning Authorities may wish to consult the relevant bodies on planning applications likely to affect transport infrastructure, such as Rail Network Operators where a development is likely to impact on the operation of level crossings'.*

2.11 Paragraph 15 of the updated Planning Practice Guidance Notes sets out the information which should be included within a Transport Assessment:-

'…The scope and level of detail in a Transport Assessment or Statement will vary from site to site but the following should be considered when settling the scope of the proposed assessment:-

- *information about the proposed development, site layout, (particularly proposed transport access and layout across all modes of transport)*
- *information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;*
- *data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;*
- *a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;*
- *an assessment of trips from all directly relevant committed developments in the area (i.e. development that there is a reasonable degree of certainty will proceed within the next three years);*
- *data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;*
- *an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area;*

- *an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);*
- *measures to improve the accessibility of the location (such as provision / enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;*
- *a description of parking facilities in the area and the parking strategy of the development;*
- *ways of encouraging environmental sustainability by reducing the need to travel; and*
- *Measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads).*

In general, assessments should be based on normal traffic flow and usage conditions (e.g. non-school holiday periods, typical weather conditions) but it may be necessary to consider the implications for any regular peak traffic and usage periods (such as rush hours). Projections should use local traffic forecasts such as TEMPRO drawing where necessary on National Road Traffic Forecasts for traffic data.

The timeframe that the assessment covers should be agreed with the local planning authority in consultation with the relevant transport network operators and service providers. However, in circumstances where there will be an impact on a national transport network, this period will be set out in the relevant Government policy'.

Local Policy

Kirklees Local Plan

2.12 The Kirklees Local Plan was adopted on 27th February 2019. The adopted documents include the 'Strategy and Policies' document as Part 1 and the 'Allocations and Designations' document as Part 2.

Kirklees Local Plan Strategy and Policies Document

2.13 The Kirklees Council Strategy and Policies document forms Part 1 of the Local Plan and sets out the policies necessary to guide development in Kirklees for the period 2013 – 2031. It sets out strategic objectives to guide development and sets out a spatial strategy to define how development will be accommodated across the district.

2.14 Policy LP1 of the Local Plan is entitled 'presumption in favour of sustainable development' and states:-

> *"…When considering development proposals, the council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. The council will always work pro-actively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.*
>
> *Proposals that accord with the policies in the Kirklees Local Plan (and, where relevant, with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise…"*

2.15 Policy LP20 of the Local Plan is named 'sustainable travel' and states:-

> *"…New development will be located in accordance with the spatial development strategy to ensure the need to travel is reduced and that essential travel needs can be met by forms of sustainable transport other than the private car. The council will support development proposals that can be served by alternative modes of transport such as public transport, cycling and walking and in the case of new residential development is located close to local facilities or incorporates opportunities for day to day activities on site and will accept that variations in opportunity for this will vary between larger and smaller settlements.*
>
> *…Proposals should include measures to encourage the use of sustainable travel options, including public transport, the promotion of personal journey planning, walking, cycling, car sharing, electronic communication and home working.*
>
> *Travel Plans will normally be required for all major planning applications in accordance with current guidance and should set targets and monitoring arrangements to ensure sustainable travel patterns are maintained…*
>
> *Proposals for new development shall be designed to encourage sustainable modes of travel and demonstrate how links have been utilised to encourage connectivity. Proposals will be required to facilitate the needs of the following user hierarchy:*
>
> - *Pedestrians*

- *Cyclists*
- *Public transport*
- *Private vehicles"*

2.16 Policy LP21 of the Local Plan is named 'highways and access' and states:-

"Proposals shall demonstrate that they can accommodate sustainable modes of transport and be accessed effectively and safely by all users.

New development will normally be permitted where safe and suitable access to the site can be achieved for all people and where the residual cumulative impacts of development are not severe.

Proposals shall demonstrate adequate information and mitigation measures to avoid a detrimental impact on highway safety and the local highway network. Proposals shall also consider any impacts on the Strategic Road Network.

All proposals shall:

- *Ensure the safe and efficient flow of traffic within the development and on the surrounding highway network;*
- *Where needed, provide new infrastructure or improvement on or off site to ensure safe access from the highway network for pedestrians, cyclists, public transport users and private vehicles;*
- *Be accompanied by a supporting Transport Assessment or Transport Statement where the development would generate significant trip generation, providing detail as to the impact on highway safety, air quality and light restrictions;*
- *Take into account changes in site levels and topography to ensure the development can be accessed easily and safely by all sections of the community and by different modes of transport;*
- *Take into account the features of surrounding roads and footpaths and provide adequate layout and visibility to allow the development to be accessed safely;*
- *Take into account access for emergency, service and refuse vehicles;*
- *Provide on-site safe, secure and convenient cycle parking / storage facilities to encourage sustainable travel modes."*

Kirklees Local Plan Allocations and Designations Document

2.17 The Kirklees Council Allocations and Designations document forms Part 2 of the Local Plan. The plan covers the Kirklees area, excluding areas within the Peak District National Park, for the period of 2013 – 2031.

2.18 The site is recognised within this document as a priority employment area, as Local Plan ID PEA 46. This area includes the site and areas to the west including Oakwell Industrial Park and Norquest Industrial Park. The Kirklees Local Plan Allocations and Designations document does not contain any site-specific information for this area, other than to state that this is a safeguarded area for priority employment.

Summary

2.19 This TA has been written with regard to the national transport planning policy requirements described above and with regard to the local planning policy requirements set out by KC.

3.0 THE APPLICATION SITE AND THE LOCAL HIGHWAY NETWORK

Application Site

3.1 The site is located on a vacant development plot within the Birstall Shopping Park which has been cleared to allow for future re-development. The site is bound to the north by Bankwood Way and an existing office building, to the south by a continuation of Bankwood Way, to the south-west by existing office buildings known as Woodhead House, and to the north-west by Woodhead Road. As detailed earlier, the site benefits from extant planning permission for retail development and is identified within Kirklees Council Local Plan (ref: ID PEA 46) as providing for future employment opportunities.

3.2 Existing vehicular access to the site is provided from a simple priority-controlled T junction with Bankwood Way to the north-east. The access currently provides access to a car park of some 20 spaces for the existing office building located adjacent to the site. Existing visibility provision at this junction is provided from a distance 2.4 metres back from the give way line to a minimum distance some 43 metres in both directions along Bankwood Way (to the nearside kerbline). A site location plan is attached at **Appendix BGH2**.

Existing Highway Network

3.3 Bankwood Way bounds the site to its south eastern, eastern and northern extents. To the north of the site, Bankwood Way runs in a general east to west direction. It runs across the northern site frontage before turning through 45 degrees at which point it provides access to the Showcase Cinema car park (also McDonalds, Pizza Hut and Krispy Kreme / Starbucks) by way of a simple priority T junction arrangement, with the Showcase Cinema arm forming the minor arm. From here, Bankwood Way turns south east and some 65 metres to the east of this point the existing site access junction is provided.

3.4 An further 50 metres beyond the site access, Bankwood Way forms a further junction, with all arms (both major and minor) being named Bankwood Way. The minor arm at this junction runs in a general southwest to northeast direction and bounds the site to the southeast. Bankwood Way continues in this direction before turning north-west, and meeting with A62 Gelderd Road after some 470 metres at a priority-controlled T-junction which benefits from a right turn ghost island facility.

3.5 Returning to the vicinity of the Showcase Cinema car park junction on the northern frontage of the site, Bankwood Way continues to the west for some 60 metres before meeting with Woodhead Road at a priority-controlled T-junction.

Bankwood Way forms the major arm to the east with Woodhead Road forming the major arm to the north and the minor arm to the west. Existing visibility provision at this junction is provided from a distance 2.4 metres back from the give way line to a minimum distance of 43 metres in both directions along Bankwood Way and Woodhead Road (to the nearside kerbline).

3.6 A further 50 metres to the north of this junction, Woodhead Road meets with the A62 Gelderd Road and Holden Ing Way at a 4-arm priority-controlled roundabout junction.

3.7 Bankwood Way performs the function of a local access road, providing access to a number of retail and employment premises, including the showcase cinema. It is a single carriageway road with single lanes in each direction. It has an average carriageway width of some 7.3 metres with 2.0-metre-wide footways provided on both sides of the road. To the south-eastern side of the site, Bankwood Way provides a short length of footway alongside the entry radii at the junction which then leads into a verge area.

3.8 Bankwood Way is street lit, subject to a 30mph speed limit and has double yellow line restrictions (including double yellow kerb bar markings) along its full length, prohibiting loading or parking at any time.

3.9 Woodhead Road (minor arm) to the northwest side of the site, provides access to a number of retail and employment developments before terminating in a cul de sac. Woodhead Road is a single carriageway two way road with single lanes in each direction. It has an average carriageway width of some 7.3 metres with 2.0-metre-wide footways to both sides of the carriageway. The road is also street lit, subject to a 30mph speed limit and has double yellow restrictions (including double yellow kerb bar marking) along its full length, prohibiting loading or parking at any time.

3.10 Returning to the Woodhead Road / A62 Gelderd Road / Holden Ings Way 4-arm priority-controlled roundabout junction, from this point the A62 Gelderd Road runs in a general north-east to south-west direction, acting as the main distributor road through Birstall Shopping Park. To the north-east it runs for some 300 metres before meeting with a traffic signal-controlled roundabout which forms part of Junction 27 of the M62. It is noted that Highways England (HE) have recently implemented an improvement scheme at Junction 27 and 28 of the M62, which was completed in Autumn 2020. The improvements at Junction 27 include additional lanes to the exit slip roads westbound, as well as widening of the above-mentioned roundabout. This roundabout has also been resurfaced, new road signs and markings installed, and the traffic signals and associated technology has been upgraded.

3.11 To the south-west of its roundabout junction with Woodhead Road and Holden Ings Way, A62 Gelderd Road continues for some 200 metres before meeting with High Wood Road at a traffic-signal controlled junction. High Wood Road provides access to north-western parts of the retail park and A62 Gelderd Road continues to the south-west. After a further 50 metres south-west of this junction, A62 Gelderd Road meets with Bankwood Way at a priority-controlled T-junction. After a further 400 metres to the south-west, A62 Gelderd Road meets with Oakwell Way at a traffic signal-controlled junction. Oakwell Way provides access to north-western parts of the retail park and A62 Gelderd Road continues further south-west from this location towards Birstall.

3.12 To the north-east of the roundabout junction with Woodhead Road and Holden Ing Way, A62 Gelderd Road is a dual carriageway road with 2 lanes in either direction. The carriageways are circa 7.0 metres wide with a 2.0-metre-wide footway on the eastern side of the eastern carriageway. A footway is provided on the western side of the western carriageway from the Woodhead Road roundabout for some 80 metres before terminating. A staggered Puffin pedestrian crossing is provided at this point to allow pedestrians to safely cross over A62 Gelderd Road. Along this length A62 Gelderd Road is subject to a 40mph speed limit, street lit and has no parking restrictions, although its status as a busy distributor road effectively deters on-street parking from occurring.

3.13 To the south-west of the Woodhead Road roundabout, A62 Gelderd Road is a single carriageway road with 2 lanes in either direction. Further to the south-west, the carriageway narrows to provide a single lane in either direction. The carriageway in this direction narrows to some 9.0 metres, with 3.0-metre-wide lanes and a 3.0-metre-wide area of central hatching. A62 Gelderd Road in this direction is also subject to a 40mph speed limit, street lit and has no formal parking restrictions, although again there is no evidence of on street parking taking place along this stretch of the road.

Personal Injury Collision Data

3.14 The record of personal injury collisions (PICs) occurring as a result of road traffic accidents that have occurred within the vicinity of the site on Woodhead Road / Bankwood Way, and at the off-site junctions described above, has been obtained from Leeds City Council (LCC), (as the authority providing PIC records for the Kirklees area) for the most recent 5-year period available, from 16th November 2015 to 16th November 2020. This data is attached at **Appendix BGH3**. The data shows that there have been 10 PICs within the study period, eight of which are classified as slight in severity, with the remaining two as serious.

Bankwood Way (South of the Woodhead Road Junction)

3.15 There has been 1 PIC on Bankwood Way within the five-year study period which was classified as slight in severity. This PIC (ref: 5891929) occurred on Bankwood Way to the south of the site and involved a single vehicle travelling westbound, travelling 'at an inappropriate speed' around a bend, colliding with the nearside kerb and causing damage to the vehicle. No contributory factors were listed, but it can be concluded from the description that the driver was travelling in excess of a reasonable speed for the layout of the road.

Woodhead Road (North and West of the Bankwood Way Junction)

3.16 There have been no PICs on Woodhead Road within the five-year study period.

Bankwood Way / Woodhead Road Junction

3.17 There have been no PICs at the Bankwood Way / Woodhead Road junction within the five-year study period.

A62 Gelderd Road / Woodhead Road / Holden Ing Way Roundabout

3.18 There have been 4 recorded PICs at the A62 Gelderd Road / Woodhead Road / Holden Ing Way Roundabout within the five-year study period, all 4 of which were classified as slight in severity.

3.19 The first slight PIC (ref: 49N0694) occurred on the Holden Ing Way westbound carriageway and occurred as a result of driver attempting to turn left across the path of another vehicle, from the right-hand lane. Causation factors were listed as 'failed to look properly' and 'fail to judge other person's path or speed'.

3.20 The second slight PIC (ref: 76C0774) also occurred on the Holden Ing Way arm and was the result of a vehicle turning out of the Pets at Home car park intending to cross to the south-west side of the road, colliding with a vehicle travelling north-west on Holden Ing Way. A causation factor was listed as 'poor turn or manoeuvre'.

3.21 The third slight PIC (ref: 6910810) occurred on the A62 Gelderd Road south-westbound approach to the roundabout and was the result of a vehicle failing to brake for a vehicle in front which had braked at the junction, resulting in a rear end shunt. A causation factor was listed as 'junction overshoot'.

3.22 The fourth and final PIC at this junction (ref: 72T1331) occurred on the circulatory carriageway and was the result of a vehicle turning from Woodhead Road failing to give way to a vehicle already on the circulatory carriageway, causing a collision. Causation factors were listed as 'failed to look properly', 'fail to judge other person's path or speed' and 'rain, sleet, snow or fog'.

A62 Gelderd Road / High Wood Road Junction

3.23 There have been no PICs at the A62 Gelderd Road / High Wood Road junction within the five-year study period.

A62 Gelderd Road / Bankwood Way Junction

3.24 There have been no PICs at the A62 Gelderd Road / Bankwood Way junction within the five-year study period.

A62 Gelderd Road / Oakwell Way Junction

3.25 There has been 1 PIC at this junction within the five-year study period which was classified as slight in severity. This PIC (ref: 72C1760) occurred as a result of a vehicle travelling north-eastbound on A62 Gelderd Road through the junction colliding with a pedestrian who was crossing the carriageway to the south side. The vehicle did not stop. A single causation factor was listed as 'failed to look properly' for the vehicle driver.

A62 Gelderd Road – Other Locations on the Link

3.26 There have been a further 4 PICs occurring on the A62 Gelderd Road within the five-year study period. 2 of these were classified as serious in severity and 2 were classified as slight in severity. The first serious PIC (ref: 42R0574) occurred some 60 metres to the west of the junction with Pheasant Drive. A motorcycle was travelling south-west on A62 Gelderd Road overtaking slow-moving traffic and collided with a car suddenly turning right from the queueing traffic. Causation factors were listed as 'Fail to judge other person's path or speed' and 'failed to look properly' for the car. The second serious PIC (ref: 43I1615) occurred some 30 metres to the west of the junction with Pheasant Drive and occurred as a result of a motorcycle travelling north-east on A62 Gelderd Road colliding with a car travelling in the opposite direction waiting to turn right. Causation factors were listed as 'Rain, sleet, snow or fog', 'failed to look properly' for the vehicle and 'careless, reckless or in a hurry' for the motorcycle.

3.27 The first of the two remaining slight PIC's (ref: 6171258) occurred at the junction with Pheasant Drive. Two vehicles on Pheasant Drive were waiting side by side to turn left and right out onto A62 Gelderd Road respectively. The vehicle turning right pulled out onto the A62 Gelderd Road into the path of another vehicle travelling south-west, which caused a collision between all 3 vehicles. No causation factors were listed. The second slight PIC (ref: 5151343) occurred some 40 metres to the west of the junction with Bankwood Way at the access with the Screwfix premises. A vehicle turning left out of the Screwfix car park collided with a motorcycle already travelling north-east on A62 Gelderd Road. Causation factors

were listed as 'poor turn or manoeuvre', 'failed to look properly' and 'fail to judge other person's path or speed' for the turning vehicle.

PIC Summary

3.28 The above analysis shows that all 10 PICs occurring on the local highway network can be attributed to driver error. There are no recurring patterns or readily identifiable geometric road characteristics which are having an adverse impact upon road safety on the road network in the vicinity of the site. The rate of PIC's experienced, is an average of two per annum over the study period, and given the number of junctions considered, and the level of traffic within the vicinity of the shopping park on A62 Gelderd Road, the accident rate and causation factors listed, are not considered to raise any road safety concerns that are likely to be exacerbated by the development.

4.0 OPERATION OF THE EXISTING HIGHWAY NETWORK

4.1 The scope of the network considered by this assessment is consistent with that outlined within the BGH TA Scoping Note and is consistent with that adopted by BWB in relation to the extant planning approval on the site. Given the proposed retail development is of a similar nature to the extant permission, it is considered appropriate to adopt the same study network which includes the following junctions:-

1. A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout;
2. A62 Gelderd Road / Bankwood Way T-junction;
3. A62 Gelderd Road / Oakwell Way traffic signal junction;
4. A62 Gelderd Road / High Wood Road traffic signal junction;
5. Bankwood Way / Woodhead Road T-junction; and
6. Bankwood Way / Existing Site access T-junction.

4.2 The 6 junctions listed above, as well as the proposed site access junction with Woodhead Road, will therefore be assessed within this TA. A plan showing the location of these junctions is attached at **Appendix BGH4**.

4.3 Traffic survey information for these 6 junctions has been extracted from the BWB TA and TAA as submitted in support of the extant permission on the site. The TA was prepared by BWB consulting (reference BIR-BWB-GEN-XX-RP-TR-001, dated 17.07.2018) and was supplemented by a TAA also prepared by BWB (reference BIR-BWB-GEN-XX-RP-TR-003, dated 15.01.2019) in response to consultation comments made on the application by KC.

4.4 Peak hour traffic flows for each of the above junctions have been extracted from these documents, with the surveys having taken place at varying times in March, October and December 2017. Some junctions were originally surveyed in March 2017 as part of the original TA submission, with other junctions surveyed following the consultation process with KC. As a result, link flows between junctions are not identical with one another but are broadly consistent (within +/-10% and thus in line with day to day flow variation).

4.5 Due to the nature of the extant permission, all junctions were surveyed and modelled during the weekday (Friday) evening peak period and during the Saturday midday peak period. The identified peak hours of the highway network were 4:00pm – 5:00pm on the Friday evening and 1:00pm – 2:00pm for the Saturday afternoon period.

4.6 This survey data is just 3 years old and is considered to present representative data of traffic conditions before the Covid-19 pandemic and the associated UK lockdown. It is broadly within the generally accepted 3-year timeframe guidance within the 'Guidance on Transport Assessment' document as prepared by the Department for Transport (DfT) (now superseded but still considered to offer good practice guidance). The use of this traffic survey data to assess the development proposals is therefore considered to be appropriate.

4.7 In order to growth the 2017 traffic flows to the 2021 application year, appropriate weekday evening and weekend peak hour growth rates have been determined using the Trip End Model Presentation Program (Tempro, 7.2b), for the Kirklees 002 middle super output area (MSOA) as the area in which the site is located. Road Traffic Forecast (RTF) adjusted growth rates retrieved from Tempro are set out in Table 4.1 below.

Table 4.1
Tempro Adjusted National Transport Model Growth Factors

	RTF Growth Factors	
	Weekday PM Peak Period	**Saturday Peak Period**
2017 – 2021 Kirklees 002 MSOA	1.0278	1.0294

4.8 The factors indicate 2.8% (weekday) and 2.9% (Saturday) growth in local background traffic between 2017 (as the year of the traffic surveys) and 2021 (as the application submission year) taking account of planned increases in households and employment figures. These growth rates have been applied to the BWB Consulting traffic flows to show predicted traffic flows on the local highway network in the 2021 existing scenario, as shown on the traffic flow diagrams at **Appendix BGH5**.

4.9 The operation of the 6 junctions on the local highway network has been assessed using industry-standard modelling software. Junction modelling parameters and signal specifications (for the traffic signal-controlled junctions) have been extracted from the models used within the BWB Consulting TA. The models used by BWB Consulting were agreed with KC as part of the extant permission and are therefore considered acceptable for the purposes of this assessment. No material changes to the highway network have occurred in the intervening period and the geometric parameters agreed with the Council are considered accurate.

Junction 1: A62 Gelderd Road / Woodhead Road / Holden Ing Way Roundabout

4.10 The existing peak hour operational characteristics of the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout have been assessed using the ARCADY module contained within Junctions8 computer modelling software, with the results summarised in Table 4.2 below and the full technical outputs attached at **Appendix BGH6**.

Table 4.2
2021 Existing Operation – A62 Gelderd Road / Woodhead Road / Holden Ing Way Roundabout

Movement	2021 Existing Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
A62 Gelderd Road (NE)	0.57	1	0.70	2
Woodhead Road	0.45	1	0.88	6
A62 Gelderd Road (SW)	0.49	1	0.69	2
Holden Ing Way	0.48	1	0.69	2

4.11 It can be seen that the junction is currently operating with a maximum ratio of flow to capacity (RFC) of 0.88 and a maximum associated queue of 6 vehicles, occurring during the Saturday peak hour on the Woodhead Road arm of the roundabout. It is recognised that the junction is influenced at busy times by up and downstream influences, however the junction operation accords with the agreed position between BWB and KC. The results are therefore considered appropriate for the purposes of this TA.

Junction 2: A62 Gelderd Road / Bankwood Way T-Junction

4.12 The existing peak hour operational characteristics of the A62 Gelderd Road / Bankwood Way priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 4.3 below and the full technical outputs attached at **Appendix BGH6**.

Table 4.3
2021 Existing Operation – A62 Gelderd Road / Bankwood Way T-Junction

Movement	2021 Existing Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Bankwood Way left out	0.17	0	0.29	0
Bankwood Way right out	0.05	0	0.20	0
A62 Gelderd Road (SW)	0.11	0	0.16	0

4.13 It can be seen that the junction is currently operating with a maximum RFC of 0.29 and no associated queuing, occurring during the Saturday peak hour on the Bankwood Way left turn out movement. The junction operation accords with the agreed position between BWB and KC and is therefore considered appropriate for the purposes of this TA.

Junction 3: A62 Gelderd Road / Oakwell Way Traffic Signal Controlled Junction

4.14 The existing peak hour operational characteristics of the A62 Gelderd Road / Oakwell Way traffic-signal controlled junction have been assessed using LINSIG computer modelling software, with the results summarised in Table 4.4 below and the full technical outputs attached at **Appendix BGH6**.

Table 4.4
2021 Existing Operation – A62 Gelderd Road / Oakwell Way Traffic Signal Controlled Junction

Movement	2021 Existing Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	DoS	Queue	DoS	Queue
A62 Gelderd Road (NE) ahead	66.9%	14	59.9%	11
A62 Gelderd Road (NE) right turn	0.9%	0	4.1%	0
A62 Gelderd Road (SW) ahead / left	58.4%	11	71.4%	16
Oakwell Way right turn	67.3%	5	67.3%	5
Junction PRC	33.7%		26.0%	

4.15 It can be seen that the junction is currently operating with a maximum Degree of Saturation (DoS) of 71.4% with a maximum associated queue of 16 vehicles, occurring during the Saturday peak hour on the A62 Gelderd Road. It is recognised that the junction is influenced at busy times by up and downstream influences, however the junction's operation accords with the agreed position between BWB and KC. The results are therefore considered appropriate for the purposes of this TA.

Junction 4: A62 Gelderd Road / High Wood Road Traffic Signal Controlled Junction

4.16 The existing peak hour operational characteristics of the A62 Gelderd Road / High Wood Road traffic-signal controlled junction have been assessed using LINSIG computer modelling software, with the results summarised in Table 4.5 below and the full technical outputs attached at **Appendix BGH6**.

Table 4.5
2021 Existing Operation – A62 Gelderd Road / High Wood Road Traffic Signal Controlled Junction

Movement	2021 Existing Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	DoS	Queue	DoS	Queue
A62 Gelderd Road (NE) Ahead	55.7%	10	55.8%	10
A62 Gelderd Road (NE) Right	6.7%	0	6.7%	0
A62 Gelderd Road (SW) Ahead	46.4%	8	47.2%	8
High Wood Road Left	22.9%	1	22.9%	1
Junction PRC	61.6%		61.4%	

4.17 It can be seen that the junction is currently operating with a maximum DoS of 55.8% and a maximum associated queue of 10 vehicles, occurring during both the evening and Saturday peak hours on the A62 Gelderd Road north-eastern arm. It is recognised that the junction is influenced at busy times by up and downstream influences, however the junction's operation accords with the agreed position between BWB and KC. The results are therefore considered appropriate for the purposes of this TA.

Junction 5: Bankwood Way / Woodhead Road T-Junction

4.18 The existing peak hour operational characteristics of the Bankwood Way / Woodhead Road priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 4.6 below and the full technical outputs attached at **Appendix BGH6**.

Table 4.6
2021 Existing Operation – Bankwood Way / Woodhead Road T-Junction

Movement	2021 Existing Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Woodhead Road left out	0.22	0	0.39	1
Woodhead Road right out	0.03	0	0.14	0
Bankwood Way (West)	0.23	0	0.47	1

4.19 It can be seen that the junction is currently operating with a maximum RFC of 0.47 and a maximum associated queue of 1 vehicle, occurring during the Saturday peak hour on the Bankwood Way arm. The junction operation accords with the agreed position between BWB and KC and is therefore considered appropriate for the purposes of this TA.

Junction 6: Bankwood Way / Existing Site Access T-Junction

4.20 The existing peak hour operational characteristics of the Bankwood Way / Existing Site Access priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 4.7 below and the full technical outputs attached at **Appendix BGH6**.

Table 4.7
2021 Existing Operation – Bankwood Way / Existing Site Access T-Junction

Movement	2021 Existing Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Existing Site Access left out	0.03	0	0.00	0
Existing Site Access right out	0.00	0	0.00	0
Bankwood Way (West)	0.01	0	0.00	0

4.21 It can be seen that the junction is currently operating with a maximum RFC of 0.03 with no associated queueing, occurring during the weekday evening peak hour on the left-out movement of the Existing Site Access. The junction operation accords with the agreed position between BWB and KC and is therefore considered appropriate for the purposes of this TA.

Summary

4.22 In summary, it can be seen that all of the junctions within the study area are operating within capacity during the 2021 existing scenario. This conclusion accords with those drawn by BWB Consulting within their TA and TAA as part of the extant permission application, and as such, the modelling of the existing operation of the local highway network is considered to be appropriate for testing the future impact of the development proposals.

5.0 SUSTAINABLE TRANSPORT

5.1 The Government's objectives set out in the NPPF are to ensure that new developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised. The site is well located with regard to key services by sustainable modes of transport, as described further below.

Pedestrian Accessibility

5.2 With regard pedestrian provision at new development, the Chartered Institution of Highways and Transportation (CIHT) document 'Planning for Walking' (April 2015) describes how approximately 80% of all journeys under 1 mile are made wholly on foot. If destinations are within a convenient walking distance, people are more likely to make journeys on foot as long as it is safe, comfortable, and the environment is attractive.

5.3 Further relevant, but historic guidance, which is still relevant, set out within the CIHT document 'Guidelines for Providing for Journeys on Foot' (2000), summarises suggested acceptable walking distances to and from development for commuting / school and for other journeys, including retail and shopping.

Table 5.1
CIHT Recommended Walking Distances

	Trip Purpose	
	Commuting	**Other Journeys (Retail/Shopping)**
Desirable Maximum Distance	500 metres	400 metres
Acceptable Maximum Distance	1,000 metres	800 metres
Preferred Maximum Distance	2,000 metres	1,200 metres

5.4 The plan at **Appendix BGH7** has been prepared using TRACC accessibility software and shows a 2.0-kilometre walking catchment from the centre of the application site in 400 metre intervals. It demonstrates that the whole retail park as well as residential areas within Birstall to the south and a small area of Gildersome to the north is located within an acceptable walking distance of the site. Any future customers or staff living within these areas will be able to conveniently travel to the

store on foot. Any visitors to the wider Birstall Shopping Park will also be able to conveniently walk to the proposed retail development as part of a linked trip.

5.5 Pedestrian access to the site will be provided via new footways to be provided alongside the vehicular access points on Woodhead Road and Bankwood Way. These new footways will tie-in to the existing footway provision on these roads and which link to the wider footway network. Furthermore, the proposed footways within the site will facilitate safe pedestrian routes to the store entrances with uncontrolled crossing points located at all minor crossing points, each with tactile paving and dropped kerbs. It is also noted that Woodhead Road and Bankwood Way are both relatively lightly-trafficked roads, as evidenced by the analysis presented in Chapter 4, so pedestrians will be able to cross these roads without any issues.

5.6 Footways are provided along the A62 Gelderd Road in either direction. A staggered puffin crossing is provided on A62 Gelderd Road some 50 metres to the north-east of the roundabout junction with Woodhead Road and Holden Ings Way, providing a safe facility for pedestrians to cross this dual carriageway.

5.7 Further pedestrian crossing facilities are provided across A62 Gelderd Road at the junction with High Wood Road, some 200 metres to the south-west of the roundabout junction with Woodhead Road. Pedestrian crossing movements at this junction are signalised as part of the operation of the traffic signals across the A62 Gelderd Road and High Wood Road with a central pedestrian refuge island, providing a safe crossing facility for pedestrians to cross Gelderd Road in two distinct movements.

5.8 There are no public rights of way (PRoW) within the site boundary, but there are several located to the west of the site within Birstall Shopping Park which provide convenient 'short-cuts' throughout. A screenshot of these PRoW's from the KC online Definitive Map is attached at **Appendix BGH8**.

Cycle

5.9 The Department for Transport Cycling and Walking Investment Strategy (April 2017) notes that cycling is an ideal mode of transport for journeys under 8 kilometres (5 miles). Good practice guidance also suggests that cycling has clear potential to substitute for short car trips, particularly those under 5 kilometres, and has the potential to form part of a longer journey by public transport.

5.10 The cycling accessibility TRACC plan at **Appendix BGH9** shows that there is a large residential area within a 5-kilometre cycling distance of the site, including Morley, Batley, Drighlington and Gildersome. Residential areas within an 8-kilometre

cycling distance of the site also include New Farnley, West Ardsley, parts of Dewsbury and Cleckheaton. These areas combined provide a significant residential area within cycling distance of the site, from where future staff can reasonably be expected to cycle to the site.

5.11 A screenshot of the West Yorkshire Interactive Cycle Map is attached at **Appendix BGH10** and shows the network of traffic free, signed and advisory cycle routes within the local and surrounding areas, as well as cycle shops and other cycle facilities. It can be seen that there are a number of advisory cycle routes within the local and wider areas, as well as some traffic-free cycle paths to the north-east providing a safe route through Junction 27 of the M62 via a shared footpath / cycleway.

5.12 National Cycle Network (NCN) Route 66 is located some 5 kilometres to the west of the site in Cleckheaton and forms a local route travelling in a north to south direction, travelling between Dewsbury and Bradford. Along its route, NCN Route 66 provides a largely signed and off-road route that may be of use to some future staff who perhaps have to travel from further afield.

Public Transport

Bus

5.13 With regard to public transport provision at new development, the CIHT publication 'Buses in Urban Developments' (January 2018) recommends that sites be designed to enable access to public transport services and ensure that these are located within reasonable walking distances, as shown in Table 5.2. The guidance also notes that these standard distances should not be applied uniformly without regard to the specific characteristics of the particular location or route.

Table 5.2
CIHT Recommended Walking Distance for Bus Stops

Trip Purpose	Maximum Walking Distance
Core bus corridors with two or more high-frequency services	500 metres
Single high-frequency routes (every 12 minutes or better)	400 metres
Less frequent routes	300 metres
Town / city centres	250 metres

5.14 Bus stops are located on A62 Gelderd Road to the north of the site, some 160 and 280 metres from the site access junction with Woodhead Way for services in the westbound and eastbound directions respectively. The bus stop on the southern side of the carriageway for westbound services can be reached by walking north-east from the Woodhead Road access and then north-west towards the roundabout junction with A62 Gelderd Road and Holden Ings Way. Assuming that the pedestrian is on the eastern side of the carriageway, they would turn north-east onto A62 Gelderd Road and reach the bus stop after some 70 metres. The bus stop on the northern side of the carriageway for eastbound services can be reached by following the above route, but then continuing for a further 30 metres before crossing the A62 Gelderd Road at the staggered puffin crossing. Once on the northern side of the carriageway, pedestrians would walk north-east for some 30 metres before reaching the bus stop. Both bus stops benefit from a shelter and timetable information, with the westbound bus stop on the southern carriageway also benefitting from a lay-by. A further bus stop is provided just to the south-west of the roundabout junction for eastbound services only.

5.15 These stops are served by the 229 Max service and the 281 service. A summary of these services is provided in Table 5.3 below.

Table 5.3
Summary of Existing Bus Services

Route Number	Operator	Route Description	Frequency			
			Weekday	Weekday Evening	Saturday	Sunday
229	Arriva	Leeds city centre – Gildersome – Birstall – Liversedge – Mirfield – Deighton – Bradley Mills	15 mins	15 mins	15 mins	60 mins
281	Arriva	Dewsbury – Batley – Birstall – Howden – Birstall	30 mins	30 mins	30 mins	60 mins

5.16 It can be seen that the bus stops on A62 Gelderd Road are served by up to 6 buses per hour in each direction, which equates to 1 bus every 10 minutes. These buses provide services towards Leeds, Gildersome, Birstall, Batley, Dewsbury and a number of other residential areas within the wider area.

5.17 The West Yorkshire Metro, North Kirklees bus and rail map is attached at **Appendix BGH11** and provides further information on routes and frequencies of all other bus routes within the wider Birstall and north Kirklees area. It also provides useful

information on railway station locations, places of interest and interchange locations.

5.18 The above bus services are understood to be accurate at time of writing (March 2021). However, these may be reduced services due to the Covid-19 pandemic and associated lockdown restrictions in the UK.

Rail

5.19 The nearest railway station to the site is Morley railway station some 4 kilometres to the north-east of the site. This railway station offers regular rail services to regional destinations including Leeds, Huddersfield and Wigan. More local destinations served from Morley railway station include Batley, Dewsbury, Mirfield, Brighouse, Sowerby Bridge, Cottingley and Ravensthorpe. Although the station is not within a reasonable walking distance, it can be reached within a reasonable cycling distance including using the shared footway / cycleway across Junction 27 of the M62 to the north and may provide an opportunity, if required, for access by staff or visitors combining these modes of travel.

5.20 The plans attached at **Appendix BGH12** show a 60-minute travel time isochrone by public transport from the site, shown in 10-minute intervals. The plans demonstrate that there is a significant area within a convenient travel time by public transport, including Leeds, Bradford, Cleckheaton and Dewsbury.

Summary

5.21 The development is considered to be well located to encourage journeys by all modes of sustainable transport. There is a limited area within a convenient walking distance of the proposed site, but there is a sizeable area within a convenient cycle distance, providing a real opportunity for future staff living in local areas to travel to the site by this mode. Existing bus stops on A62 Gelderd Road are conveniently located very close to the site to also provide a very good opportunity for travel to and from the site by bus.

6.0 BASE OPERATING CONDITIONS

6.1 Historic good practice guidance on TA's set out within the DfT's 'Guidance on Transport Assessment' states the timeframe that an assessment should cover should be 5 years from the date of the planning application. Current guidance on TA's set out within the PGG suite of documents states that the timeframe that an assessment covers should be agreed with the local planning authority. A 5-year timeframe to a future year of 2026 is therefore adopted within this assessment, as outlined within the TA Scoping Note. This approach is consistent with the BWB TA and TAA.

6.2 Morning and evening peak hour traffic flows at a future year of 2026 have been determined using Tempro (v7.2b), for the Kirklees 002 middle super output area (MSOA) as the area in which the site is located. In order to avoid applying growth rates twice, a single growth rate for the 2017 surveyed data to obtain the 2026 future year has been extracted from Tempro. NTM adjusted growth rates retrieved from Tempro are set out in Table 6.1 below.

Table 6.1
Tempro Adjusted National Transport Model Growth Factors

	NTM Growth Factors	
	Weekday PM Peak Period	**Saturday Peak Period**
2017 – 2026 Kirklees 002 MSOA	1.0688	1.0748

6.3 The factors indicate a 6.9% and 7.5% growth in local background traffic between 2017 and 2026 (or an increase in growth of 4.1% and 4.6% growth respectively between 2021 and 2026) and take account of planned increases in households and employment figures. No manual adjustments to account for the increase in employment element associated with the proposed development have been made within Tempro, and as such the factors are considered robust.

6.4 Application of these growth factors to the 2021 peak hour flows shown on the diagrams at **Appendix BGH5**, provides peak hour growthed traffic flows at a future year of 2026, as shown on the traffic flow diagrams at **Appendix BGH13**.

6.5 With regard to committed development which was not accounted for as part of the 2017 traffic surveys but which will be on the highway network in the 2026 future year, a review of the Kirklees planning portal has been undertaken. One such

application which was considered as part of the extant permission has been reviewed as part of this TA. This application was submitted to KC in February 2018 and sought permission for the erection of a new retail park on land at the junction of A62 Gelderd Road and Bankwood Way, to the south of the proposed site. A review of the KC planning portal reveals that this planning application was refused by KC in March 2019, and therefore is not considered as a committed development.

6.6 There is of course the extant permission on the site associated with the 4 No. retail units, and this development could clearly be delivered in the future, this therefore forms part of any future year baseline assessment. Traffic flows associated with this extant permission have therefore been extracted from the Highways Technical Note prepared by BWB Consultants in support of the application (document ref: BIR-BWB-GEN-XX-RP-TR-005, dated June 2019). These traffic flows reflect a number of primary trips, pass-by trips and linked trips with the wider Birstall Shopping Park, as agreed with KC. These traffic flows are shown on the traffic flow diagrams at **Appendix BGH14**.

6.7 The committed development flows for the site at **Appendix BGH14** have then been added to the 2026 growthed flows at **Appendix BGH13** to represent traffic flows on the network in the 2026 base scenario, as shown on the traffic flow diagrams at **Appendix BGH15**.

Junction 1: A62 Gelderd Road / Woodhead Road / Holden Ings Way Roundabout

6.8 The 2026 base peak hour operational characteristics of the A62 Gelderd Road / Woodhead Road / Holden Ings Way roundabout have been assessed using the ARCADY module contained within Junctions8 computer modelling software, with the results summarised in Table 6.2 below and the full technical outputs attached at **Appendix BGH16**.

Table 6.2
2026 Base Operation – A62 Gelderd Road / Woodhead Road / Holden Ings Way Roundabout

Movement	2026 Base Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
A62 Gelderd Road (NE)	0.63	2	0.81	4
Woodhead Road	0.65	2	1.26	97
A62 Gelderd Road (SW)	0.56	1	0.83	5
Holden Ing Way	0.57	1	0.81	4

6.9 It can be seen that with the introduction of traffic associated with the extant permission, the junction is expected to operate over capacity, with a maximum RFC of 1.26 and a maximum associated queue of 97 vehicles, occurring during the Saturday peak hour on the Woodhead Road approach. This is very similar to the conclusion presented by BWB as part of their technical analysis on the extant scheme, which found this same arm operating at a predicted RFC of 1.29 with a queue of 111 vehicles during the Saturday peak period. The results can therefore be considered appropriate for the purposes of this TA.

6.10 Remedial measures were set out within a Highways Technical Note prepared by BWB (document ref: BIR-BWB-GEN-XX-RP-TR-005, dated June 2019) and were agreed with KC. These remedial measures were to:

- Change the priority of the Woodhead Road / Bankwood Way junction to prevent queueing back on Woodhead Road, which would subsequently reach the A62 Gelderd Road; and
- Provide directional signage within the site and upon egressing, to direct drivers travelling towards Birstall / Batley to turn right out of the site via the Bankwood Way access junction, and to join the A62 Gelderd Road at its priority-controlled junction with Bankwood Way to the south-west of the site. This would reduce development impact at the A62 Gelderd Road roundabout and improve its operation.

6.11 The proposed change of priority scheme is shown on the drawing attached at **Appendix BGH17**. This scheme will result in Woodhead Road operating as the major arm in a north to south direction, with Bankwood Way to the east forming the minor arm and having to give way to traffic on Woodhead Road. The delivery of this scheme and directional signage within the site as discussed above was considered appropriate to mitigate the impacts of the development at the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout junction, as agreed between BWB and KC.

Junction 2: A62 Gelderd Road / Bankwood Way T-Junction

6.12 The 2026 base peak hour operational characteristics of the A62 Gelderd Road / Bankwood Way priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 6.3 below and the full technical outputs attached at **Appendix BGH16**.

Table 6.3
2026 Base Operation – A62 Gelderd Road / Bankwood Way T-Junction

Movement	2026 Base Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Bankwood Way left out	0.22	0	0.35	1
Bankwood Way right out	0.07	0	0.25	0
A62 Gelderd Road (west)	0.12	0	0.17	0

6.13 It can be seen that the junction is expected to continue operating well, with a maximum RFC of 0.35 and an associated queue of 1 vehicle during the Saturday peak hour. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario. The results are therefore considered appropriate for the purposes of this TA.

Junction 3: A62 Gelderd Road / Oakwell Way Traffic Signal Controlled Junction

6.14 The 2026 base peak hour operational characteristics of the A62 Gelderd Road / Oakwell Way traffic-signal controlled junction have been assessed using LINSIG

computer modelling software, with the results summarised in Table 6.4 below and the full technical outputs attached at **Appendix BGH16**.

Table 6.4
2026 Base Operation – A62 Gelderd Road / Oakwell Way Traffic Signal Controlled Junction

Movement	2026 Base Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	DoS	Queue	DoS	Queue
A62 Gelderd Road (NE) ahead	71.6%	16	64.2%	12
A62 Gelderd Road (NE) right turn	0.9%	0	4.7%	0
A62 Gelderd Road (SW) ahead / left	62.7%	13	76.9%	19
Oakwell Way right turn	69.9%	6	77.2%	6
Junction PRC	25.8%		16.6%	

6.15 It can be seen that the junction is expected to operate satisfactorily, with a maximum DoS of 76.9% on the Oakwell Way approach and a maximum queue of 19 vehicles on the A62 Gelderd Road south-west approach, occurring during the Saturday peak hour. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario. The results are therefore considered appropriate for the purposes of this TA.

Junction 4: A62 Gelderd Road / High Wood Road Traffic Signal Controlled Junction

6.16 The 2026 base peak hour operational characteristics of the A62 Gelderd Road / High Wood Road traffic-signal controlled junction have been assessed using LINSIG computer modelling software, with the results summarised in Table 6.5 below and the full technical outputs attached at **Appendix BGH16**.

Table 6.5
2026 Base Operation – A62 Gelderd Road / High Wood Road Traffic Signal Controlled Junction

Movement	2026 Base Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	DoS	Queue	DoS	Queue
A62 Gelderd Road (NE) Ahead	58.9%	11	59.4%	12
A62 Gelderd Road (NE) Right	7.3%	0	7.3%	0
A62 Gelderd Road (SW) Ahead	49.8%	9	52.1%	10
High Wood Road Left	23.8%	1	23.8%	1
Junction PRC	52.7%		51.5%	

6.17 It can be seen that the junction is expected to operate well within capacity, with a maximum DoS of 59.4% and a maximum associated queue of 12 vehicles, occurring during the Saturday peak hour on the A62 Gelderd Road north-east arm. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario. The results are therefore considered appropriate for the purposes of this TA.

Junction 5: Bankwood Way / Woodhead Road T-Junction

6.18 The 2026 base peak hour operational characteristics of the Bankwood Way / Woodhead Road priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 6.6 below and the full technical outputs attached at **Appendix BGH16**. As discussed above at paragraph 6.11, the extant planning permission would deliver a scheme to change the priorities at this junction to make Woodhead Road the major arm in a north to south direction, with Bankwood Way to the east forming the minor arm. The proposed junction layout is attached at **Appendix BGH17** and has been used in the following modelling analysis.

Table 6.6
2026 Base Operation – Bankwood Way / Woodhead Road T-Junction

Movement	2026 Base Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Bankwood Way left out	0.06	0	1.43	13
Bankwood Way right out	0.66	2	1.51	143
Woodhead Road ahead / right turn	0.02	0	0.11	0

6.19 It can be seen that the junction is expected to operate with a maximum RFC of 1.51 and a theoretical maximum associated queue of 143 vehicles, occurring during the Saturday peak hour on the Bankwood Way eastern arm. Although the proposed scheme with reversed priorities will result in the junction operating significantly worse than it does under the current arrangement, the queuing would occur along Bankwood Way to the east. As such there would be no queuing on Woodhead Road to the north i.e. the right turn from Woodhead Road (north) to Woodhead Road (south) under the current arrangement, and therefore there would be no direct impact upon the operation of the A62 Gelderd Road roundabout. This compromise was agreed between KC and BWB as part of the extant permission and will therefore be adopted as part of the current scheme proposals. In reality, queues such as those predicted by the traffic modelling will not be realised in practice and traffic wishing to join the A62 Gelderd Road would reassign to the priority-controlled junction with Bankwood Way to the south-west of the site. This would reduce development impact at the A62 Gelderd Road roundabout and improve its operation.

Junction 6: Bankwood Way / Existing Site Access T-Junction

6.20 The 2026 base peak hour operational characteristics of the Bankwood Way / Existing Site Access priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 6.7 below and the full technical outputs attached at **Appendix BGH16**.

Table 6.7
2026 Base Operation – Bankwood Way / Existing Site Access T-Junction

Movement	2026 Base Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Existing Site Access left out	0.24	0	0.34	0
Existing Site Access right out	0.01	0	0.00	0
Bankwood Way (West)	0.24	0	0.52	0

6.21 It can be seen that the junction is expected to operate with a maximum RFC of 0.52 with no associated queue, occurring during the Saturday peak hour on the Bankwood Way western arm. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario. The results are therefore considered to be appropriate for the purposes of this TA.

Summary

6.22 In summary, it can be seen that all of the junctions within the study area are expected to continue operating within capacity during the 2026 base scenario, with the exception of the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout junction and the junction of Woodhead Road / Bankwood Way where a change in priorities is proposed. Remedial measures were agreed with KC as part of the extant planning permission to offset the impact of the development and assessment of these has been included within the 2026 base year assessment. These remedial measures are to:-

- Change the priority of the Woodhead Road / Bankwood Way junction to prevent queueing on Woodhead Road (northern approach) blocking back, and subsequently blocking the A62 Gelderd Road roundabout; and
- Provide directional signage within the site and upon egressing, to direct drivers travelling towards Birstall / Batley to turn right out of the site via the Bankwood Way access junction, and to join the A62 Gelderd Road at its priority-controlled junction with Bankwood Way to the south-west of the site. This would reduce development impact at the A62 Gelderd Road roundabout and improve its operation.

7.0 THE DEVELOPMENT PROPOSALS

7.1 The planning application seeks full planning permission to erect a new Lidl foodstore and separate retail unit with garden centre on a vacant development plot at Bankwood Way, Birstall Shopping Park, Birstall. The new Lidl foodstore will have a gfa of 2,231m^2 and the retail unit with garden centre will have a gfa of 2,792m^2.

7.2 The proposed Lidl foodstore provides 1,414m^2 sales area, 471m^2 warehouse space and 346m^2 ancillary space. The retail unit provides 2,280m^2 for the overall building and 512m^2 garden centre area. Although not confirmed, it is likely that the retail unit will be operated by Home Bargains and will utilise 30% of its gfa for food retail, which is circa 850m^2. The proposed site plan is attached at **Appendix BGH18**.

7.3 The site is located on a vacant development plot within the Birstall Shopping Park which has been cleared to allow for future development. The site is bound to the north by Bankwood Way and an existing office building, to the south-east by Bankwood Way, to the south-west by existing office buildings known as Woodhead House, and to the north-west by Woodhead Road.

7.4 Vehicular access to the site will be provided from two separate points. The first point of access will be provided from Woodhead Road to the north-west via a new priority-controlled T-junction. The second will be provided from the existing priority-controlled T-junction with Bankwood Way to the north-east. The existing site access arm currently gives way within the site to an internal site access road some 35 metres into the site. However, as part of the proposals this internal give way arrangement will be reversed and amended and the site access will form the priority route within the site, as seen on the proposed site plan at **Appendix BGH18**. Car park users will be able to use either access will be able to travel between them internally within the site.

7.5 The car park will be provided with a total capacity for 175 spaces, including 10 accessible spaces, 2 electric vehicle (EV) charging spaces and 9 parent & toddler spaces.

7.6 Pedestrian access to the site will be provided alongside the two points of vehicular access. Given the level difference between Woodhead Road to the north-west and the site, pedestrian access to Woodhead Road will be provided via steps as well as a 1:21 gradient ramped footway. Within the site, there will be a series of internal footways which will connect with the store entrances with the existing footway provision onto Woodhead Road and Bankwood Way. To facilitate safe pedestrian

movement, there will be uncontrolled crossing points across all minor internal junctions with the internal footways.

7.7 The proposed access junction with Woodhead Road to the north-west has been designed with radii of 6.5 metres with the site access arm having a width of 9.0 metres. Regarding visibility requirements, reference is made to the Kirklees Highway Design Guide (November 2019). For the prescribed speed limit on Bankwood Way and Woodhead Road of 30 mph, paragraph 3.33 of the Design Guide states that a corresponding visibility provision of 43.0 metres must be provided along the carriageway edge from a position 2.4 metres back from the give way line on the site access arm. The required visibility is shown to be unobstructed on the proposed access arrangement with Woodhead Road, as shown on the drawing at **Appendix BGH19** (drawing No. 20/270/TR/001).

7.8 The existing access junction with Bankwood Way to the northeast is to remain as existing and has radii of some 15.0 metres with the access arm having a width of some 7.3 metres. As discussed above at paragraph 7.4 and as indicated on the proposed site plan, the internal priorities within the site will be amended.

7.9 As part of the extant planning permission for the site, BWB agreed with KC to change the priority arrangement at the existing Woodhead Road / Bankwood Way priority-controlled T-junction. As described in Chapter 3.0, the junction currently operates with Woodhead Road acting as the minor arm. The proposal seeks to alter this and make Woodhead Road the priority route, with Bankwood Way to the east forming the minor arm. This scheme will be delivered as part of the proposals and is discussed in further detail in Chapter 9.0.

7.10 Internally within the site, the car park aisles have been designed to have a minimum width of 6.5 metres to allow vehicles to safely travel two-way and to allow sufficient space for vehicles to manoeuvre into and out of parking spaces. Parking spaces have been designed with a width of 2.5 metres and a length of 5.0 metres. Accessible spaces have an additional 1.2 metre buffer. Parent & toddler spaces, as well as EV spaces, have a width of 3.6 metres with a length of 5.0 metres.

7.11 The largest type of vehicle expected to access the site will be for delivery and servicing movements, which will be a 16.5-metre-long maximum legal length articulated HGV. All delivery and servicing movements will be required to be taken from the Bankwood Way access to the north-east. Vehicle swept path analysis has been undertaken to demonstrate that this existing site access arrangement can safely accommodate turning movements associated with this vehicle, and that the internal site layout is also suitably designed to accommodate the design vehicle. The drawing attached at **Appendix BGH20** (drawing No. 20/270/ATR/004 Rev C)

demonstrates that the proposals are appropriate to accommodate these vehicle movements. Lidl store deliveries occur once per day and generally take place outside of store peak trading periods whenever possible.

7.12 With regard to car parking standards, reference is made to the Kirklees Highway Design Guide which states at, Key Design Driver 20: "Kirklees Council has not set local parking standards for residential and non-residential development…". The onus being on the applicant to demonstrate that the proposed level of parking provision is appropriate.

7.13 As evidence of the provision of car parking for the Lidl store, reference is made to car parking accumulation surveys which have been undertaken at two existing Lidl stores in England. One survey was undertaken at a Lidl store on Sunningdale Road, Balby, Doncaster, over a consecutive 3-day period from Thursday 7th September 2017 to Saturday 9th September 2017. This store has a gfa of some 1,350m^2 a 96-space car park. Over the 3-day survey period, the maximum accumulation was observed to be 66 vehicles. This equates to a maximum accumulation of 1 vehicle per 20.5m^2.

7.14 The second survey was undertaken at a Lidl store on Cottingham Road, Hull, over a 3-day consecutive period from Thursday 10th January 2019 to Saturday 12th January 2019. This store has a gfa of some 1,200m^2 and a 69-space car park. Over the 3-day survey period, the maximum accumulation was observed to be 61 vehicles. This equates to a maximum accumulation of 1 vehicle per 19.7m^2. The survey data for both of these Lidl stores are attached at **Appendix BGH21**.

7.15 Applying these same maximum accumulation ratios to the proposed Lidl gfa of 2,231m^2 gives a predicted maximum accumulation of 109 vehicles or 113 vehicles respectively. There is no available survey data for the Home Bargains unit, therefore a bespoke car parking accumulation has been undertaken for this unit in accordance with the TRICS outputs described later within Chapter of this TA.

7.16 Tables 7.1 and 7.2 below summarise the likely car parking accumulation of the Home Bargains unit for the weekday and Saturday respectively, in accordance with the trip rates, and assuming a nominal level of car parking of some 10 vehicles in the car park at the beginning of each day (to account for overnight staff, early workers, deliveries etc.).

Table 7.1
Car Parking Accumulation – Home Bargains, Weekday

Time Start	Time End	Arrivals	Departures	Accumulation
	6:00			10
6:00	7:00	1	0	11
7:00	8:00	5	2	14
8:00	9:00	18	14	18
9:00	10:00	18	14	21
10:00	11:00	27	26	22
11:00	12:00	32	26	29
12:00	13:00	35	37	27
13:00	14:00	39	37	28
14:00	15:00	39	41	26
15:00	16:00	43	44	25
16:00	17:00	28	35	18
17:00	18:00	25	29	14
18:00	19:00	19	19	14
19:00	20:00	13	18	8
20:00	21:00	4	5	7
21:00	22:00	0	0	7
22:00	23:00	0	0	7

Table 7.2
Car Parking Accumulation – Home Bargains, Weekend

Time Start	Time End	Arrivals	Departures	Accumulation
	6:00			10
6:00	7:00	1	0	11
7:00	8:00	4	1	14
8:00	9:00	18	13	18
9:00	10:00	26	19	25
10:00	11:00	43	41	27
11:00	12:00	47	42	33
12:00	13:00	49	48	34
13:00	14:00	50	49	36
14:00	15:00	49	53	32
15:00	16:00	48	52	28
16:00	17:00	30	35	22
17:00	18:00	24	29	17
18:00	19:00	16	18	15
19:00	20:00	10	14	11
20:00	21:00	3	4	9
21:00	22:00	0	0	9
22:00	23:00	0	0	9

7.17 Applying the worst-case accumulation of 113 vehicles for the Lidl store and combining with the estimates for the Home Bargains Store above, it can be seen that the maximum total accumulation in the car park is expected to be some 142 (81%) vehicles during the weekday and some 149 (85%) vehicles during the weekend.

7.18 The proposed 175-space car park is sufficient to accommodate the likely demand, with a good level of spare provision (15%) for periods of increased demand at Christmas and easter and allowing for good circulation of vehicles internally within the car park. This level of parking is consistent with Lidl and Home Bargain's operational requirement at other stores.

7.19 A TP has been prepared to support the proposals and is submitted to KC alongside this TA. The TP discusses the sustainable travel options available for the site in greater detail, promotes a strategy for future users (staff and shoppers) to travel sustainably and sets appropriate targets.

8.0 DEVELOPMENT TRIP GENERATION, TRIP TYPES AND TRIP DISTRIBUTION

Trip Generation

8.1 In order to estimate the number of vehicle trips which the proposed Lidl foodstore is likely to generate, an interrogation of the Trip Rate Information Computer System (TRICS) database has been undertaken. Trip rates have been retrieved from the TRICS database for a weekday and weekend period respectively, with filtering parameters adopted as per the TRICS Good Practice Guide (December 2020). Trip rates have been retrieved for the following land uses:-

- 01/C 'Retail – Discount Food Stores' land use; and
- 01/D 'Retail –Superstore – With Garden Centre' land use.

8.2 The TRICS outputs are attached at **Appendix BGH22** and the peak hour trip rates are summarised in Table 8.1 below.

Table 8.1
Vehicular Trip Rates (Trips per 100sqm)

Land Use	Weekday PM Peak Hour			Saturday Peak Hour		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Proposed Food Store	4.362	4.436	8.798	6.270	6.888	13.158
Retail Unit with Garden Centre	1.211	1.207	2.417	1.741	1.874	3.615

8.3 The trip generation of the two proposed units has been calculated using these trip rates applying the respective gfa's. For the proposed retail unit with garden centre, as discussed in Chapter 7.0 of this TA, this unit is likely to be operated by Home Bargains and is likely to allocate 30% of its gfa to food retail. In order to calculate the trip generation then, the 'proposed food store' trip rates above have been applied to 30% of this unit's gfa, whilst for the remaining 70% the 'retail unit with garden centre' trip rates have been applied. The resulting robust trip generation is set out in Table 8.2 below.

Table 8.2
Development Vehicular Trip Generation

Land Use	Weekday PM Peak Hour			Saturday Peak Hour		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Proposed Food Store	97	99	196	140	154	294
Retail Unit with Garden Centre – 30% Food	24	24	48	35	37	72
Retail Unit with Garden Centre – 70% Non-food	37	38	75	53	59	112
Total	**158**	**161**	**319**	**228**	**249**	**477**

8.4 It can be seen that the development is predicted to generate some 319 vehicle trips during the weekday evening peak period and some 477 vehicle trips during the weekend peak period.

8.5 For comparison, the BWB TA and TAA prepared in support of the extant permission on the site described how the consented proposals would generate some 263 vehicle trips during the weekday evening peak period and some 474 vehicle trips during the weekend period. The proposals supported within this TA will therefore generate an additional +56 vehicle trips during the weekday evening peak period and an additional +3 vehicle trips during the weekend peak period. This is a maximum additional impact of one vehicle every minute on the local highway network during the weekday peak which would be imperceptible to everyday drivers on the highway network.

8.6 Once the proportion of 'new' trips onto the highway network is considered (discussed further below), the net impact of the proposed retail development is significantly reduced and will not result in any significant impact on the local and wider highway network. Nevertheless, the impact of the development on the local highway network has been assessed within this TA in Chapter 9.0.

Trip Types

8.7 The Department for Transport's Guidance on Transport Assessment (now superseded by the DfT's PPG, but still commonly referenced) identifies five different categories of trip type, and three of these are applicable to this application being:-

- Transferred trips;
- Pass-by (Diverted) trips; and
- Linked trips.

Pass-by (Diverted) Trips

8.8 These are trips that are already present on the network and travelling past, or close to, the proposed store where drivers decide to alter their journey pattern and visit the site. These trips essentially reflect drivers who would turn into the site to shop before leaving and continuing on their original journey.

8.9 Given that Bankwood Way and Woodhead Road are not major through routes in the area, the pass by traffic at the store is likely to comprise customers deciding to visit the site by deviating from their original journey whilst on the A62 Gelderd Road, via the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout junction or from the A62 Gelderd Road / Bankwood Way T junction to the west

Linked Trips

8.10 These are trips that will have multiple destinations within a proposed site usually a mixed-use site. Where there is a high probability that customers will visit two or more uses on the site, it is appropriate to only count these vehicle trips once for the development, and not effectively double count them by attributing two arrivals and two departures to visits to both stores or attractions.

8.11 In this case and as agreed between BWB and KC in relation to the extant consent, linked trips will account for vehicle trips which are also visiting the wider Birstall Shopping Park. They may be new trips to Woodhead Road, Bankwood Way and potentially to the A62 Gelderd Road / Bankwood Way roundabout, having originally travelled to / from Holden Ing Way to the north.

8.12 Beyond this local area, they will already be visiting one of the other retail offers within the Birstall area and will not be considered 'new' to the local network. It was agreed in relation to the extant planning permission on the site that the distribution of linked trips will extend along A62 Gelderd Road to the south-west, thereby extending the sphere of influence of these trips. Whilst the justification for this is unclear, it has been similarly applied within this assessment as per the

proportions agreed as part of the extant planning consent. This is considered to over-estimate the impact of development traffic on the network as it has been assumed that these linked trips will be new to wider network, and some of them will clearly already be visiting existing uses on the Birstall site.

8.13 In addition it would of course be expected for some 'linked' trips to be associated with the proposed Lidl foodstore and the Home Bargains unit, whereby a customer to one store would also visit the other store. However, no such reduction to account for these types of trips was applied in relation to the original planning consent on the site, and therefore no reduction has been applied within the assessment of the current proposals. Therefore it is considered that the assessment of trip generation will result in a potentially significant volume of double counting of vehicle trips and an over-estimation of the impact on the network.

Transferred Trips

8.14 These are trips that are already on the wider highway network and travelling to an alternative food retail offer but where drivers will now choose to visit the proposed development instead. This could be due to the proposals providing a more attractive offer than the existing destination or it simply being located closer.

8.15 For the purposes of this assessment and consistent with the approach agreed between BWB and KC, for the consented scheme, it has been considered that all transferred trips will be considered as new 'primary' trips to the local highway network. This again is considered robust, as a number of trips are already likely to be using the roads close to the site to access stores in Morley (Asda) and Heckmondwike (Aldi and Tesco Extra) etc.

Trip Type Summary

8.16 Good practice guidance on trip type proportions is set out within the TRICS Research Report 14/1 'Pass-by and Diverted Trips' (December 2014). This report however recommends that a site-by-site approach is taken in justifying the trip type proportions. The proportion of trip types which will be applied to the above trip generation was outlined within the TA Scoping Note where it was suggested that it would follow the same methodology adopted by BWB within their TA and TAA in support of the extant permission on the site. The trip type proportions adopted by BWB were agreed with KC and given that the land use is remaining as retail use, these same trip type proportions are adopted within this assessment. Therefore, 40% of trips are pass-by, 40% of trips are linked with the wider Birstall Shopping Park and 20% of trips are classed as primary trips.

8.17 The trip type proportions described above have been applied to the trip generation set out in Table 8.2. The resulting trip generation is set out in Table 8.3.

Table 8.3
Vehicle Trip Generation by Trip Type

Trip Type	Weekday PM Peak Hour			Saturday Peak Hour		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Primary	32	32	64	46	50	95
Pass-by	63	64	128	91	100	191
Linked	63	64	128	91	100	191
Total	**158**	**161**	**319**	**228**	**249**	**477**

Trip Distribution

8.18 Given the similarities between the proposed and permitted developments on the site, the three trip types described above have been distributed onto the local highway network adopting the same methodology as adopted within the BWB TAA, as agreed with KC as part of the extant permission on the site. Pass-by trips have been distributed from the A62 Gelderd Road roundabout junction with Woodhead Road, based on the proportional peak hour traffic flow in each direction on the A62. This results in some 54% and 46% of trips turning left and right respectively into Woodhead Road from the roundabout during the weekday evening peak period. These figures are 46% and 54% respectively i.e. reverse proportions during the weekend peak period.

8.19 Linked trips have been distributed towards the wider Birstall Shopping Park as described above, to the north-west beyond the A62 / Woodhead Road roundabout onto Holden Ing Way. They will be new to Woodhead Road, Bankwood Way and to the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout only. Beyond this area, these trips are assumed to be already visiting one of the other retail offers on the Birstall Shopping Park and will not be new to the network.

8.20 Primary trips have also been distributed in accordance with the methodology agreed between BWB and KC as part of the extant permission. This agreed methodology was to distribute primary trips according to the existing turning proportions to / from Birstall Shopping Park to the north-west. The agreed

distribution results in some 20% of traffic heading south-west on A62 Gelderd Road, some 72% heading north-east on A62 Gelderd Road and some 8% heading north-west on Holden Ing Way during the weekday evening peak period. These figures are 16%, 70% and 14% respectively during the weekend peak period. Flow diagrams showing the trip distribution profile for each trip type are attached at **Appendix BGH23**.

8.21 These distribution proportions have been applied to the trip generation set out in Table 8.3, with the resulting development traffic flows shown on the flow diagrams at **Appendix BGH24**. All development trips have been split equally between the two site access junctions on Bankwood Way and Woodhead Road.

8.22 Clearly, if the development proposals the subject of this planning application are granted permission and subsequently delivered and occupied, the extant consented scheme cannot come forward and the associated traffic flows would not be realised. The net impact of the proposals is therefore shown by subtracting the committed development flows at **Appendix BGH14** from the proposed development traffic at **Appendix BGH24**, to show the net impact of the proposals as seen on the flow diagrams at **Appendix BGH25**. It is clear from this that the proposals will generate an additional +56 vehicle trips during the weekday evening peak period and just an additional +3 vehicle trips during the weekend peak period over and above that which is already consented on the site.

9.0 TRAFFIC IMPACT ON THE LOCAL HIGHWAY NETWORK

9.1 The net change in traffic associated with the development proposals as shown on the traffic flow diagrams at **Appendix BGH25** has been added to the 2026 base flows at **Appendix BGH15** to provided predicted traffic flows on the network in 2026, as shown on the traffic flow diagrams at **Appendix BGH26**. The traffic flows shown on these diagrams have been used to assess the likely future operation of the local highway network and of the proposed site access junctions.

Site Access Junction 1: Woodhead Road / Site Access T-Junction

9.2 The proposed junction arrangement with Woodhead Road has been modelled as a simple priority-controlled T-junction within the PICADY module of the Junctions8 modelling software. Geometrical parameters for this junction have been taken from the proposed site access drawing shown at **Appendix BGH19**.

9.3 The predicted peak hour operational characteristics of the proposed site access junction with Woodhead Road are summarised in Table 9.1 below, with the full operational output attached at **Appendix BGH27**.

Table 9.1
2026 Predicted Operation – Proposed Site Access Junction with Woodhead Road

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Site Access	0.20	0	0.34	1
Woodhead Road ahead / right	0.00	0	0.00	0

9.4 The results show that the proposed site access junction with Woodhead Road is predicted to operate within capacity, with a maximum RFC of 0.34 and corresponding queue of 1 vehicle, occurring on the Saturday peak hour on the site access arm. This site access junction will therefore operate efficiently.

Site Access Junction 2: Bankwood Way / Site Access T-Junction (formerly Junction 6)

9.5 The 2026 predicted peak hour operational characteristics of the Bankwood Way / Site Access priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 9.2 below and the full technical outputs attached at **Appendix BGH27**.

Table 9.2
2026 Predicted Operation – Existing Site Access Junction with Bankwood Way

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Site access left out	0.14	0	0.19	0
Site access right out	0.03	0	0.05	0
Bankwood Way (West)	0.16	0	0.23	0

9.6 It can be seen that the existing site access junction with Bankwood Way is predicted to operate with a maximum RFC of 0.23 and no expected queuing, occurring during the Saturday peak hour on the Bankwood Way western arm. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario, and the junction is therefore predicted to operate satisfactorily.

Junction 1: A62 Gelderd Road / Woodhead Road / Holden Ing Way Roundabout

9.7 The 2026 predicted peak hour operational characteristics of the A62 Gelderd Road / Woodhead Road / Holden Ings Way roundabout have been assessed using the ARCADY module contained within Junctions8 computer modelling software, with the results summarised in Table 9.3 below and the full technical outputs attached at **Appendix BGH27**.

Table 9.3
2026 Predicted Operation – A62 Gelderd Road / Woodhead Road / Holden Ings Way Roundabout

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
A62 Gelderd Road (NE)	0.63	2	0.81	4
Woodhead Road	0.68	2	1.31	113
A62 Gelderd Road (SW)	0.57	1	0.82	4
Holden Ing Way	0.58	1	0.81	4

9.8 It can be seen that the junction is predicted to operate with a maximum RFC of 1.31 and a maximum associated queue of 113 vehicles, occurring during the Saturday peak hour on the Woodhead Road approach.

9.9 Considering this negligible impact over the baseline position of the development proposals now proposed, and the fact that the junction operation accords with the agreed position between BWB and KC for the previously consented scenario, the remedial measures agreed as part of the baseline position must remain valid and if delivered, are therefore considered suitable to mitigate the impact of the development. These remedial measures are to:

- Change the priority of the Woodhead Road / Bankwood Way junction to prevent queueing on Woodhead Road (norther arm), and subsequently minimise the potential for queuing back to the A62 Gelderd Road; and
- Provide directional signage within the site and upon egressing, to direct drivers travelling towards Birstall / Batley to turn right out of the site via the Bankwood Way access junction, and to join the A62 Gelderd Road at its priority-controlled junction with Bankwood Way to the south-west of the site. This would reduce development impact at the A62 Gelderd Road roundabout and improve its operation.

9.10 The proposed change of priority scheme is shown on the drawing attached at **Appendix BGH17**. This scheme will have Woodhead Road operating as the major arm in a north to south direction, with Bankwood Way to the east forming the

minor arm and having to give way to traffic on Woodhead Road. The delivery of this scheme and directional signage within the site as discussed above is considered appropriate to mitigate the impacts of the development at the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout junction, as agreed between BWB and KC as part of the consent on the site.

Junction 2: A62 Gelderd Road / Bankwood Way T-Junction

9.11 The 2026 predicted peak hour operational characteristics of the A62 Gelderd Road / Bankwood Way priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 9.4 below and the full technical outputs attached at **Appendix BGH27**.

Table 9.4
2026 Predicted Operation – A62 Gelderd Road / Bankwood Way T-Junction

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Bankwood Way left out	0.27	0	0.36	1
Bankwood Way right out	0.07	0	0.25	0
A62 Gelderd Road (west)	0.15	0	0.18	0

9.12 It can be seen that the junction is predicted to operate with a maximum RFC of 0.36 and an associated queue of 1 vehicle, occurring during the Saturday peak hour on the Bankwood Way arm. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario and the junction continues to offer a satisfactory level of provision.

Junction 3: A62 Gelderd Road / Oakwell Way Traffic Signal Controlled Junction

9.13 The 2026 predicted peak hour operational characteristics of the A62 Gelderd Road / Oakwell Way traffic-signal controlled junction have been assessed using LINSIG computer modelling software, with the results summarised in Table 9.5 below and the full technical outputs attached at **Appendix BGH27**.

Table 9.5
2026 Predicted Operation – A62 Gelderd Road / Oakwell Way Traffic Signal Controlled Junction

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	DoS	Queue	DoS	Queue
A62 Gelderd Road (NE) ahead	71.8%	16	63.1%	11
A62 Gelderd Road (NE) right turn	0.9%	0	4.6%	0
A62 Gelderd Road (SW) ahead / left	63.3%	13	76.5%	17
Oakwell Way right turn	70.3%	6	77.2%	4
Junction PRC	25.4%		16.6%	

9.14 It can be seen that the junction is predicted to operate with a maximum DoS of 77.2% on the Oakwell Way arm and a maximum queue of 17 vehicles on the A62 Gelderd Road south-western arm, occurring during the Saturday peak hour on the A62 Gelderd Road south-west arm. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario and the junction continues to offer a satisfactory level of provision.

Junction 4: A62 Gelderd Road / High Wood Road Traffic Signal Controlled Junction

9.15 The 2026 predicted peak hour operational characteristics of the A62 Gelderd Road / High Wood Road traffic-signal controlled junction have been assessed using LINSIG computer modelling software, with the results summarised in Table 9.6 below and the full technical outputs attached at **Appendix BGH27**.

Table 9.6
2026 Predicted Operation – A62 Gelderd Road / High Wood Road Traffic Signal Controlled Junction

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	DoS	Queue	DoS	Queue
A62 Gelderd Road (NE) Ahead	589.2%	12	59.7%	12
A62 Gelderd Road (NE) Right	7.3%	0	7.3%	0
A62 Gelderd Road (SW) Ahead	50.2%	9	51.6%	10
High Wood Road Left	23.8%	1	23.8%	1
Junction PRC	52.1%		50.9%	

9.16 It can be seen that the junction is predicted to operate with a maximum Degree of Saturation of 59.7% and a maximum associated queue of 12 vehicles, occurring during the Saturday peak hour on the A62 Gelderd Road north-east arm. The junction operation accords with the agreed position between BWB and KC for the BWB predicted scenario and the junction continues to offer a satisfactory level of provision.

Junction 5: Bankwood Way / Woodhead Road T-Junction

9.17 The 2026 predicted peak hour operational characteristics of the Bankwood Way / Woodhead Road priority-controlled T-junction have been assessed using the PICADY module contained within Junctions8 computer modelling software, with the results summarised in Table 9.7 below and the full technical outputs attached at **Appendix BGH27**. As discussed above at paragraph 9.8, it is proposed to deliver a scheme to change the priority at this junction to make Woodhead Road the major carriageway in a north to south direction, with Bankwood Way to the east forming the minor arm. The proposed junction layout is attached at **Appendix BGH17**.

Table 9.7
2026 Predicted Operation – Bankwood Way / Woodhead Road T-Junction – Proposed Priority Change Scheme

Movement	2026 Predicted Flows			
	Weekday Evening Peak Hour		Saturday Peak Hour	
	RFC	Queue	RFC	Queue
Bankwood Way Left Turn	0.05	0	1.28	8
Bankwood Way Right Turn	0.49	1	1.26	57
Woodhead Road (North) Ahead / Right Turn	0.02	0	0.12	0

9.18 It can be seen that the junction is predicted to operate with a maximum RFC of 1.28 and a maximum associated queue of 57 vehicles occurring during the Saturday peak hour. As discussed in Chapter 6 as a result of the 2026 base analysis, it is clear that the proposed scheme will result in the junction operating significantly worse than it does under the current arrangement, although it can be seen that this junction will operate significantly better in the predicted scenario than in the base scenario. Queuing would occur internally along Bankwood Way to the east, rather than Woodhead Road to the north (through queuing right turners onto Woodhead Road under the current arrangement), and therefore not directly impact upon the operation of the A62 Gelderd Road roundabout. This compromise was ultimately agreed with KC as part of the extant permission for the site and is considered to suitably mitigate the impact of development, by diverting any potential queuing away from the A62 Gelderd Road roundabout. The results accord with the BWB analysis, and must therefore be considered appropriate for the purposes of this TA.

Summary

9.19 In summary, it can be seen that, with the exception of two junctions, all of the junctions within the study area are predicted to continue operating within capacity during the 2026 predicted scenario, with the development proposals in place. The exceptions are the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout junction, and the Woodhead Road/ Bankwood Way junction, both of which are predicted to operate over capacity but no worse than the agreed position as part of the extant permission on the site. The agreed remedial measures to offset the impact of development traffic are to:-

- Change the priority of the Woodhead Road / Bankwood Way junction to prevent queueing on Woodhead Road, and subsequently blocking back to the A62 Gelderd Road; and
- Provide directional signage within the site and upon egressing, to direct drivers travelling towards Birstall / Batley to turn right out of the site via the Bankwood Way access junction, and to join the A62 Gelderd Road at its priority-controlled junction with Bankwood Way to the south-west of the site. This would reduce development impact at the A62 Gelderd Road roundabout and improve its operation.

9.20 Subject to the delivery of the change of priority scheme at the Woodhead Road / Bankwood Way junction and the delivery of directional signage within the site, the impact of the development on the local highway network is considered to be acceptable and less than the impact of the consented scheme on the site.

10.0 SUMMARY & CONCLUSIONS

10.1 This Transport Assessment forms part of a full planning application submitted by Lidl Great Britain to erect a new Lidl foodstore and separate retail unit with garden centre on a vacant development plot at Bankwood Way, Birstall Shopping Park, Birstall. The new Lidl foodstore will have a gross floor area of 2,231m^2 and the retail unit with garden centre will have a gfa of 2,792m^2.

10.2 The site is located on a vacant development plot within the Birstall Shopping Park which has been cleared to allow for re-development. The site is bound to the north by Bankwood Way and an existing office building, to the south by a continuation of Bankwood Way, to the south-west by existing office buildings known as Woodhead House, and to the north-west by Woodhead Road.

10.3 The site has outline planning permission for four A1 non-food retail units with a combined gfa of 7,896m^2 and shared car park, with access to be taken from Bankwood Way at two separate points. This application was granted outline planning approval by Kirklees Council in January 2020. The principle of retail development on this development plot has therefore been established and the principle of the proposed development is considered to be similarly appropriate.

10.4 This TA has been prepared following a pre-application meeting held with Kirklees Council on 28th October 2020, and with regard to a TA Scoping Note submitted by Bryan G Hall to Kirklees Council on 5th November 2020. No comments on the TA Scoping Note have been provided by Kirklees Council; nevertheless, this TA has been prepared in line with the methodology outlined within the TA Scoping Note and with regard to the information provided alongside the application for the extant outline permission on the site.

10.5 The record of personal injuries resulting from road traffic collisions on the local highway network has been reviewed and it is concluded that all can be attributed to driver error. There are no recurring patterns or readily identifiable geometric road characteristics which are having an adverse impact upon road safety.

10.6 The development is considered to be well located to encourage journeys by all modes of sustainable transport. There is a limited area within a convenient walking distance of the proposed site, but a significant area is within a convenient cycle distance, providing a real opportunity for future staff and customers living in local areas to travel to the site by this mode. Existing bus stops on A62 Gelderd Road are conveniently located very close to the site to also provide a very good opportunity for travel to and from the site by bus.

10.7 Vehicular access to the site will be provided from two separate points. The first point of access will be provided from Woodhead Road to the north-west via a new priority-controlled T-junction. The second will be provided from the existing priority-controlled T-junction with Bankwood Way to the north-east. Car park users will be able to use either access and can freely travel between them internally within the site through the shared car park. The car park will be provided with a total capacity for 186 spaces, including 10 accessible spaces, 2 electric vehicle (EV) charging spaces and 8 parent & toddler spaces.

10.8 With regard to parking provision, Kirklees Council do not have parking standards and instead place the onus on the applicant to demonstrate that the proposed level of parking provision is appropriate. A car parking accumulation exercise has therefore been undertaken to demonstrate the level proposed is appropriate. The exercise shows that the maximum accumulation is expected to be some 142 (81%) vehicles during the weekday and some 149 (85%) vehicles during the weekend. The proposed 175-space car park is sufficient to accommodate the likely demand, with a good level of spare provision (15%) for periods of increased demand and allowing for good circulation of vehicles internally within the car park.

10.9 With regard to servicing, the largest type of vehicle expected to access the site will be for delivery and servicing movements, which will be a 16.5-metre-long maximum legal articulated HGV. All delivery and servicing movements will be instructed to be taken from the Bankwood Way access to the north-east. Vehicle swept path analysis has been undertaken to demonstrate that this proposed site access arrangement can safely accommodate turning movements associated with this vehicle, and that the internal site layout is also suitable to accommodate the design vehicle.

10.10 The development is predicted to generate some 319 vehicle trips during the weekday evening peak period and some 477 vehicle trips during the weekend peak period. These vehicle trips are not all new to the network and have been considered as either primary trips, pass-by trips or linked trips with the wider Birstall Shopping Park. The proportion of each trip type and associated distribution has been applied as set out within the Scoping Note, and as agreed with Kirklees Council as part of the extant permission on the site.

10.11 The analysis of the operation of the local highway network has identified that all of the junctions within the study area are predicted to continue operating within capacity during the 2026 predicted scenario, with the development proposals in place, with the exception of two junctions. The exceptions are the A62 Gelderd Road / Woodhead Road / Holden Ing Way roundabout junction and the Woodhead Road / Bankhead Way junctions. Remedial measures to offset the impact of

development traffic were agreed as part of the extant permission on the site and will be implemented as part of this scheme. These measures will:

- Change the priority of the Woodhead Road / Bankwood Way junction to prevent queueing on Woodhead Road, and subsequently back to the A62 Gelderd Road; and
- Provide directional signage within the site and upon egressing, to direct drivers travelling towards Birstall / Batley to turn right out of the site via the Bankwood Way access junction, and to join the A62 Gelderd Road at its priority-controlled junction with Bankwood Way to the south-west of the site. This would reduce development impact at the A62 Gelderd Road roundabout and improve its operation.

10.12 In summary, this Transport Assessment has shown that the proposed development site will be accessible by all modes of transport, and that the local highway network will largely continue to operate satisfactorily following the proposed development. Subject to the delivery of the change of priority scheme at the Woodhead Road / Bankwood Way junction and the delivery of directional signage within the site, the impact of the development on the local highway network is considered to be acceptable, and less than that associated with the consented scheme on the site, and there are therefore no transport reasons why planning approval should be withheld.

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