



City Transport

Transport Development Management

Application Response

To: Richard Sewell, Major Applications Planning Team

From: Matthew Cockburn, Transport Development Management

Date: 12 July 2022

Address: Land At Broom Hill/Brislington Meadows Broomhill Road Bristol BS4 4UD

Application No: 22/01878/P

Proposal: Application for Outline Planning Permission with some matters reserved - Development of up to 260 new residential dwellings (Class C3 use) together with pedestrian, cycle and vehicular access, cycle and car parking, public open space and associated infrastructure. Approval sought for access with all other matters reserved. (Major)

Contributions: Section 106 Agreement

Response: Initial Response

Recommendation: Further Information Required

Summary

The proposal is for up to 260 dwellings on an allocated site.

The proposal has a number of significant advantages and a number of significant disadvantages which need to be weighed up when deciding on its acceptability in transport terms.

The site benefits from a significant number of advantages when it comes to accessibility including being close to a wide range of services and a wide range of bus routes.

Given the application is only outline many of the detailed layout issues cannot yet be resolved as they relate to the detail of the layout.

Details of the likely impact of the site have been developed using standard methodologies. These allow the impact of the site to be understood and the developer has offered a significant number of improvements to rectify issues identified in terms of how this development integrates with the wider area and to ease pressure on infrastructure.

Nonetheless a number of areas of impact need more detailed assessment in order to understand their acceptability. Whilst in many areas we have been able to identify what we consider to be appropriate mitigation, we would flag one area that poses the highest risk in terms of acceptability:

- The main desire line between the development and nearby secondary schools and other facilities is via Brislington Trading Estate. Whilst there is not a complete bar on such connections, and alternatives do exist, we consider that the developer would need to demonstrate that the risks posed by this connection

have been adequately considered and mitigated.

We would also note that, as with much of the surrounding area, the site is steep with a height difference of approximately 35m from one side to the other. Although the application is only outline in nature and so detailed layout has not been developed, we expect that parts of the site will not meet the very onerous 1 in 20 gradient which it ideally should. We consider that provided the developer can show that they have taken all reasonable steps to make the accessibility As High As Reasonably Practicable, gradient on its own wouldn't necessarily be a bar to development but we accept that this an uncomfortable position and would be a subjective, on-balance decision.

Principle

This application is for Outline Planning Permission with some matters reserved. The development consists of up to 260 new residential dwellings (Class C3 use) together with pedestrian, cycle and vehicular access, cycle and car parking, public open space and associated infrastructure. Approval is sought for access only with all other matters reserved. A Transport Assessment and Travel Plan have been submitted as part of this application to quantify its transport impact.

The site is allocated for up to 300 dwellings in the Adopted Local Plan (reference: BSA1201). The allocation notes:

Development should:

- *be led by a comprehensive masterplan of the whole site, guided by community involvement;*
- *provide suitable access, which may include access off School Road through the existing allotments and ensure that any allotments affected are reprovided on the site or on nearby land;*
- *be informed by an ecological survey of the site and make provision for mitigation and compensation measures, including enhancement to the grazing land adjacent to Victory Park and compensation for the loss of semi-improved neutral grassland and damp grassland (the site currently has city-wide importance for nature conservation due to the presence and condition of particular species, habitats and / or features);*
- *retain or incorporate important trees and hedgerows within the development which will be identified by a tree survey*
- *provide a green infrastructure link with Eastwood Farm Open Space to the north-east;*
- *take account of the overhead power lines;*
- *retain and where appropriate improve the public rights of way on the site and provide pedestrian / cycle links with Brislington Trading Estate;*
- *seek to provide pedestrian / cycle links with Eastwood Farm Open Space to the north-east via the site of Sinnott House Police Station;*
- *ensure that any scheme provides for any necessary improvements to the surrounding highway / transport network;*
- *address any potential noise, pollution and nuisance issues from nearby industrial uses through the design and layout of new development and incorporation of measures to prevent any noise or other pollution affecting new development;*
- *be informed by a site-specific flood risk assessment as the area of the site is greater than 1 hectare. This is a requirement of the Government's National Planning Policy Framework. The flood risk assessment should consider the impacts on the wider Brislington catchment, and lead to a reduction of the flood risk to existing properties and, where necessary, improvements to existing drainage infrastructure;*
- *incorporate appropriate Sustainable Drainage Systems to minimise surface water runoff and the risk of flooding;*
- *be informed by a Health Impact Assessment. This should include how the proposals have been discussed with local primary health care providers regarding impacts on primary health care services.*

The estimated number of homes for this site is 300

Explanation

A housing allocation is appropriate as:

- The site is in a sustainable location close to the supermarket and shops of Broomhill Road / Fermain Avenue Local Centre, shops on the Brislington Retail Park, community facilities, employment areas and public transport infrastructure, with a residential context to the north and west*
- It will contribute to meeting the Core Strategy minimum target of providing 26,400 new homes in the period 2006-2026.*
- It reflects the Core Strategy approach to the location of new housing by developing new homes on land which does not need to be retained as part of the city's green infrastructure / open space provision*

From a transport perspective, the rationale for housing at this location set out in the Local Plan still appears strong albeit that a number of changes to the detail have occurred in the intervening period. The reasoning behind this assertion is set out in this note with particular regard to the importance of a good masterplan, ensuring high quality accessibility and securing good connections.

Local Conditions

The large site is located just north of the A4 Bath Road in the outer south-eastern suburb of Brislington. To the NW are allotments then School Rd. To the NE are schools and a residential area then Broomhill Rd. To the SW are private fields then Victory Park then Bath Rd. To the SE is Bonville Rd then Brislington Trading Estate.

The A4 Bath Road is one of Bristol's busiest roads carrying large amounts of traffic. It varies between two and four lanes with sections of bus lane. The speed limit is generally 30mph and there are generally no parking and no loading restrictions. There are three main connections between Bath Road and the area of this development: Church Hill leading to School Road; Bonville Road and Emery Road.

School Road is a 30 mph road with a steep hill and limited parking restrictions. Much of it is of concrete construction. The central section feels quite fast, wide and empty.

About halfway down where the High Voltage power lines cross the road there is a layby associated with the access to the allotments. School Road is also covered by a 7.5 tonne weight limit.

Bonville Road has a 20mph limit and leads to the industrial estate with a left in left out from the outbound side of Bath Rd. It is quite narrow and has parking restrictions along part of its length whereas other parts of it have significant amounts of car parking including quite a lot of pavement parking. It is regularly used by HGVS and as such needs to be kept clear for large vehicles. For much of its length it only has a footway on the east side. A number of Public Rights of Way connect in to it from the west.

Emery Road provides the main access to the Bath Road from this area via a fully signalised junction. It has a 30mph limit and double yellow lines on both sides. A mini roundabout provides a connection to Broomhill Road from which there are then four main connections to Brislington Trading Estate (Emery Rd , Clothier Road and Dixon Rd which lead to Bonville Road, and Hulbert Close which is a cul-de-sac. The section of Emery Road between Bath Rd and the mini roundabout has a shared use walking cycle route along its west side.

Broomhill Road is a 30mph road with some parking restrictions although much of it has unrestricted parking. It is a main bus route and there is a 7.5tonnes weight limit north of Capgrave Crescent where the road also becomes less industrial and more residential in nature. There are local shops close to Fermaine Avenue. The side roads have 20mph limits. Broomhill Road meets School Road at a mini roundabout.

Between Broomhill Road and School Road Fermaine Road and then Allison Road are one way towards School Road.

Within the site there are a number of footpath connections to Bonville Road to the east and one connection to the west to School Rd. There is a connection to Victory Park adjacent to the allotments toward the west of the site. The only connection towards Broomhill Road is via a footpath to Belroyal Avenue.

Accessibility

The TA considers accessibility around the site and identifies the following facilities located near to the site:

- Shops on Broomhill Rd and also on Bath Rd
- Primary school – Broomhill Juniors and Infants to the north as well as Mama Bear’ s nursery
- Secondary school – Oasis Brislington
- College – St Brendans

The area is also well served by a wide range of buses:

- Broomhill Rd is served by the number 1 bus route (15min M-Sat and 20 min Sun) as well as less frequent 96, 435, 513 and 514.
- School Rd is served by the 36 bus route (30 min daytime M-Sat and 1 hour Sun)
- Bath Road is served by a very wide range of local and express bus services

The TA finds that the BrisTAL (0-6) accessibility score for the centre of the site is 2 out of 6 whilst at the access it scores 3.

Our conclusion is that the site benefits from a significant number of advantages when it comes to accessibility including being close to a wide range of services and a wide range of bus routes. For a suburban site the basic site is average and with the addition of a wide range of new links and upgraded infrastructure the site could be considered to have good accessibility.

So, we concur with the Local Plan allocation summary which said:

“The site is in a sustainable location close to the supermarket and shops of Broomhill Road / Fermaine Avenue Local Centre, shops on the Brislington Retail Park, community facilities, employment areas and public transport infrastructure, with a residential context to the north and west”

Probably the biggest area of concern is the what is left out of this summary ie the links to the east and south. There is no doubt that providing links through an industrial estate will be challenging. However, we consider that with a wide range of measures set out below it would be possible to allow pedestrians, cyclists and vehicles to coexist safely within the industrial estate.

There is no doubt that there will be a tension between removing pavement parking and allowing the industrial estate to operate but BCC has the powers to put in parking restrictions where required to achieve this.

To understand the connections to the site the TA includes an audit of walking and cycling routes. These identify a range of measures where the current condition is substandard and would be expected to form the basis for a package of remediation works to bring these up to an acceptable standard. A suggested package of measures is set out later.

The TA considers collisions in the area and finds that there were 18 collisions in the local area with all but one being “slight”. It goes on to say:

"2.11 The number of collisions that have occurred within the search area in the last five years isn't particularly unexpected given the size of the area analysed.

2.12 Overall, there appears to be no collision clusters which could point towards a problem with the existing road layout in the area.

2.13 The proposals, discussed later, seek to reduce traffic speed on Broomhill Road and provide better infrastructure for pedestrians."

Our assessment is also that collisions are spread around all the roads surrounding the site (School Road, Broomhill Road and Bath Road) with no one cluster. We would therefore support a package of measures focussing particularly on School Road, Broomhill Road, Bonville Road and Emery Rd. We consider that Bath Road is sufficiently remote from the site that it would not justify mitigation from this site particularly in view of the fact that it will be the focus of BCC's A4 corridor works.

Impact

There was previously a police station on Broomhill Rd side of the site that closed in 2000. No allowance is made for past movement associated with this use.

The TA says surveys were undertaken and TRICS methodology was used to calculate predicted impact of the site based on other similar sites.

For 260 units the predicated number of trips (by all modes) is 279 in am peak and 249 in pm peak.

Census mode share was used to predict the modes of future residents (am and pm peak in brackets):

59.6% driver (166/148)

13.7% bus, (38/34)

12.3% on foot (34/31)

5.9% passenger (16/15)

5.8% cycle (16/14)

1.7% motorcycle (5/4)

0.6% train, (2/1)

0.1% taxi (0/0)

0.2% other (0/0)

From the site the trips were predicted to be shared across the network as follows:

50% Sandy Park Rd,

16% Birchwood Rd,

14% A4 Bath

8% A4174,

7% Brislington.

5% Wick Rd,

This is considered a plausible distribution and highlights that the traffic will spread out in many directions from this site.

The TA further investigated the impact at a number of junctions considered to be the most significant. These were:

- The site access
- The roundabout at Broomhill Rd/ School Rd
- Allison Rd/ School Rd

TEMPRO was used to allow for growth to 2028.

Computer models using “Models 10” were run for the above junctions. The results can be summarised as follows:

Broomhill Road/School Road Roundabout 2028

The arm with the worst Ratio of Flow to Capacity goes from 0.80 for the base to 0.85 for the “with development” scenario. This is just at the limit of what is considered to be adequate spare capacity. This will make the mitigation and Travel Plan particularly important.

Allison Road/School Road Junction 2028

The arm with the worst Ratio of Flow to Capacity increases from 0.71 in base case to 0.81 in the “With Development” scenario. Again, this is just within capacity.

The site access is well within capacity.

The Annual Average Daily Traffic was calculated by grossing up the peak hour flows. This gives a figure of 1,126 vehicles per day. Again this highlights the importance of prioritising non-car modes through mitigation and Travel Plan.

Layout

Accesses

Drawing 7456_101 Rev PL1 shows the Access and Movement Parameter plan. It shows locations for:

- 1 All user access (Broomhill Rd)
- 2 Pedestrian/cycle accesses (School Rd and Allison Rd)
- 3 Pedestrian access (Bonville Rd, Belroyal Ave, connection to E-W link)
- 1 Emergency vehicles, pedestrian and cycle access (Bonville Rd)

We support the principle of 1 primary access, 2 pedestrian/ cycle access, 1 the emergency/ pedestrian/cycle access and the 3 pedestrian access subject to the details set out below. It is assumed that these could be secured by condition with the right safeguards about design.

Streets and Links

- 1 Indicative Primary Street
- 5 Indicative Secondary Streets
- 2 Public Rights of Way (Bonville Rd to Belroyal Ave and Bonville Rd to School Rd)
- 1 Pedestrian link (Allison Rd to E-W Link)

By definition the Primary Street would need to connect with the All User access from Broomhill Road. We are not clear, beyond this, what aspect of the Indicative Primary and Secondary Streets would be secured as part of this application as layout is a Reserved Matter. This should be clarified.

Whilst we support the upgrading of the pedestrian and cycle routes through the site, given that these are not fully worked up and that the application is only for Access it is not clear what would be secured beyond needing full details of these at Reserved Matters.

Further details on accesses

The TA provides additional details of how the works to each access could look.

1. Primary Access

The sole access would be a priority junction on to Broomhill Road. This allows for a refuse truck to enter whilst another vehicles waits to turn right out. 85th percentile speeds are 29.7mph NB and 30.8mph SB and the junction has been designed to these.

Although this would be the sole vehicular access an emergency access would also be secured as well as a number of pedestrian and cycle links. For this reason we are comfortable with the proposal to service up to 260 dwellings from one access providing it is built to a high standard and the alternative ped/cycle/emergency accesses are secured.

The access (shown indicatively on 1066-007 D) should be secured by condition with details including a Stage 1 Road Safety Audit to be submitted at Reserved Matters. It will need to be built prior to first occupation.

2. Emergency access

An emergency access from Bonville Road is shown on drawing "PROPOSED SITE ACCESS - 1066-014 Rev –"

The emergency access would provide some redundancy once the site is fully built out.

Given construction is also proposed from Bonville Rd the phasing of the emergency access would need careful consideration. It may be possible for the construction link to also provide an emergency access. Also, the need for an emergency access only comes into play once the site is largely built out and so we would suggest that a trigger for the opening of the emergency access should be linked to the occupation of the 150th dwelling.

So, the principle of an emergency access from Bonville Rd should be secured with details of construction and phasing to be agreed.

3. New Allison Rd pedestrian and cycle access

A pedestrian and cycle route is proposed linking the site with Allison Rd adjacent to the Broomhill Junior School. This would be a shared use path generally of 5m width narrowing to 3m where it is adjacent to a grass bank. It is shown in principle on drawing 1066-003 Rev H.

The principle of this access is strongly supported, indeed it is essential in terms of permeability. Its delivery prior to first occupation should therefore be secured with details to be agreed at the RM stage.

4. School Road Access

A zebra crossing and raised table are proposed adjacent to the School Rd access and shown on Drawing "SCHOOL ROAD ACCESS AND CROSSING - 1066-016 - Rev –".

The access (shown indicatively on 1066-016 Rev -) should be secured by condition with details including a Stage 1 Road Safety Audit to be submitted at Reserved Matters. It will need to be built prior to first occupation unless alternative phasing is agreed.

Proposals for Broomhill Rd

The TA also provides for a range of measures along Broomhill Rd as mitigation for the development to ensure that a better pedestrian and cycle environment is provided as these routes will see significantly more use.

Whilst Broomhill Rd is only one of the areas needing mitigation (see below) it does provide a menu of works that could be secured as mitigation.

The proposed Broomhill Works are shown in principle on Drawing 1066-015 Rev (Proposed Traffic Calming Broomhall Road) and show a range of measures that would be delivered along Broomhill Road between Condoover Road and Guernsey Avenue.

The principle of these traffic calming works are supported. Their delivery prior to first occupation should therefore be secured with details to be agreed at the RM stage.

Link To Park

The link to Victory Park potentially provides important traffic free onward connections. Further details should be provided of if and how such improvements are to be secured.

Detailed Layout

This application is an outline application with only approval of access sought. Other matters relating to layout, scale, landscape and appearance are reserved. Therefore we are not agreeing the detailed design of the site. A number of documents have however been provided that we wish to comment on. Furthermore, we would like to set out the matters that will need to be resolved at the RM stage.

Indicative Master Plan

Whilst an indicative masterplan has been submitted to show how the site COULD be developed, we have not assessed this in detail as it is only indicative. Should the proposal be recommended for approval we would want to be satisfied that the implicit details in the indicative layout are not being explicitly approved.

Design Code

The Design Code sets out requirements and principles RM can be assessed against.

It sets out lots of good design principles including:

- If a steeper street is required then a shallower alternative should also be available.
- Clutter free streets designed for 20mph
- Primary streets should have 5.5m carriageway and 2m footways
- Houses should be set back 1.5m or 2m where bin and bikes stores at front
- There should be a 1.5m verge on at least one side for trees

It also provides illustrative following sections which show the following widths:

Primary Street

1.5m defensible space / 2.0m footpath/ 1.5m green verge/ 5.5m carriageway/ 2.0 m footpath/(4.8m on street parking)/ 1.5m defensible space with localised narrowings at green spaces and where main pedestrian routes cross.

Secondary Street

EITHER

1.5m defensible space/ 2.0m footway/ 5.5m carriageway/2m footway/ 1.5m defensible space

OR

1.5m defensible space / 4.8m on plot parking/ 7.5m pedestrian priority street/1.5m defensible space

Parking

Parking should accord with these principles:

- Group driveways in pairs
- No more than 6 parking spaces at a time
- On street unallocated parking for visitors
- On street parking should only be on one side (although this can alternate)
- No more than 3 parallel or 6 perpendicular spaces at a time
- Maximum of 20 spaces in parking courts which should be overlooked

These design standards are considered sensible and accord with our evolving design standards and national guidance. The only area we would stress is that on street parking cannot be allocated and must be adopted (we cannot have islands of allocated private parking surrounded by adopted highway).

It is not clear how the Design Code would be secured or how enforceable it would be.

Proposed Contour and Retaining Wall plan

This plan is problematic. It shows much more level of detail than would be expected at Outline. It shows extensive details of contours and retaining walls including retaining walls that retain the highway. We would not be able to support this permission if we were granting permission for this plan as we would essentially be approving the detailed design. So, can we ask that this plan is either withdrawn or made indicative or changed in some other way such that we are not seen to be approving the detailed highway layout and gradients.

Note on gradients

The contour plan demonstrates the tension there will be between earthworks and gradients within this hilly site. We would note that there is an approximately 35 m height difference between the top and bottom of the site and it is very likely that, when the detailed layout is submitted, roads will be steeper than 1 in 20 in places. It would need to be demonstrated that the site has been made as accessible as possible within the constraints on the site – ie that accessibility is As High As Reasonably Practicable.

We consider that it would be difficult to sustain an objection solely on gradient grounds if all other matters were resolved and the developer could demonstrate that they had made all reasonable efforts to make the site as accessible as possible. This is a developing area and we are not aware of specific case law that defines when gradient alone can be grounds for refusal.

Public Rights Of Way

The application seeks to divert and improve BCC/478 and BCC/482 which cross the site, and the developers have also recently deposited a Section 31(6) statutory declaration to formalise public rights to use other informal paths across the site, to be followed by a process of formally diverting them to align with the interconnecting pedestrian and cycle access routes designed to enable good permeability across the site.

PROW BCC/478 runs across the eastern section of the development, and PROW BCC/482 runs across the southern part of the development site from east to west. Both will be retained on their general course but with the intention to realign onto new paths constructed across the site, and so a public path diversion order under the Town & Country Planning Act 1990 will be required as part of the planning process. No development should take place over the existing PROW routes prior to the confirmation of the diversion order.

PROW BCC/478 will be crossed by an access road into the development and appropriate warning signage and other safety measures will also need to be put in place.

The application notes that the visual impact of the new development would be most acute for users of the PROW

traversing the site and this would be adverse given the change from an area of open grassland. It is noted that the realigned PROW are proposed to run through retained areas of open space and woodland in the indicative master plan; it will be important to ensure that the boundary treatments and landscaping around the PROW routes retain as much of an open and green space feel as possible.

The PROW Team will require continued involvement in agreeing the finalised alignment of the diverted existing PROW and the other routes to be dedicated as PROW, the diversion order process, and the design of the new routes.

Consideration would also need to be given to public access and safety for users of the PROW during construction work. As construction works are likely to require the temporary closure or diversion of the PROW, a Temporary Traffic Regulation Order (TTRO) will be required for the duration of the works on the grounds of safety of the public.

Flooding

A good SuDS scheme is proposed, restricting the discharge rate so as not to increase the downstream flood risk on School Road that has historic flooding issues. Wessex Water would need to confirm approval of the sewer connection and BCC Parks team acceptance of the drainage ditch outlet.

Details for RM

The following matters would need to be resolved at RM stage:

- Quantum and design of cycle parking to meet relevant local and national standards
- Quantum and design of bin storage to meet relevant local and national standards
- Quantum and design of disabled parking to meet relevant local and national standards
- Quantum and design of Electric Vehicle parking to meet relevant local and national standards
- Tracking to be provided for a refuse truck/ fire engine including turning heads where appropriate
- Adequate forward visibility is achieved in line with design speed
- Appropriate use of materials in line with BCC adoption standards
- Agreed limits of adoption
- Details of rerouted PROWS
- Wayfinding
- Any Highway Structures will require Approval In Principle.
- Agreement of any green infrastructure to be adopted
- Agreement of any novel drainage infrastructure (eg SUDS) to be adopted
- Construction Methodology
- Details of phasing

Where appropriate a condition requiring details should be sought although where it is purely a layout matter then it may not be necessary to impose a condition and Outline stage.

Mitigation

Having considered the full impact of the development as set out in the TA, we consider that significant improvements to walking, cycling and public transport infrastructure are required to ensure that the additional pressure is adequately mitigated. Furthermore, we would expect a Travel Plan will deliver a range of measure to further ensure the development is sustainable.

Some mitigation measures are either directly linked to the access, or are an integral part of the proposed development (such as public right of way upgrades) or have been offered by the developer as part of the application (Broomhill Road Traffic calming). However, as identified by the pedestrian and cycle audit a number of serious gaps in the connections have been noted and a package of mitigation measure along the main corridors to the site would be required. The routes audited were:

Route 1 – Eastern Pedestrian access to Brislington Retail Park
Route 2 – Eastern Pedestrian access to Oasis Brislington Academy
Route 3 – Eastern Pedestrian access to St Brendan’s Sixth Form College
Route 4 – Eastern Pedestrian access to Industrial Area
Route 5 – Broomhill Road access to Broomhill Shops
Route 6 – Fermaine Avenue access to Broomhill Shops
Route 7 – Fermaine Avenue to Sandy Park Road
Route 8 – School Road access to Sandy Park Road

In our view the most significant shortcoming in terms of accessibility to the site is the connection to Emery Rd which then leads to Oasis Academy and St Brendans as well as a range of bus routes, particularly as this is likely to be heavily used by schoolchildren. The connection using Bonville Rd and Emery Rd is through the Brislington Trading Estate where large numbers of HGV movements are likely to be present.

Until this has been further analysed we are unable to support this proposal. Before we could make a positive recommendation new would need to see a package of measures to rectify the deficiencies identified (with a particularly focus on Route 2 – Eastern Pedestrian access to Oasis Brislington Academy and Route 3 – Eastern Pedestrian access to St Brendan’s Sixth Form College). One particular area where we think there is potential is for a shared use walking/ cycling route along one side of Emery Rd within Brislington Trading Estate). We are also aware that there is likely to be significant opposition to removing car parking and so measures should consider how best to control parking to avoid problematic pavement parking in such a way as to deliver a good route for pedestrians and cyclists whilst retaining the car parking that the industrial estate needs to operate.

Public Transport

The nearby bus facilities are basic and it can be expected that demand will increase at these stops as a result of the new development. New and upgraded public transport facilities are required, in order to provide a more viable alternative to the private car and to encourage modal shift. The upgrade should include the provision of Real-time Information displays, raised kerbs and, for 2 locations, new shelters. The total package of measures to upgrade of 5 bus stops in the vicinity of the development would cost £143,208.

TROs

Based on the current outline plans, but depending on the outcome of detailed proposals, we will need separate individual TRO fees for:

- New ped crossing on School Road
- New road humps -School Road (crossing site) & Bonville road (emergency access site)
- Area wide waiting restrictions – new “adopted” development roads and roads surrounding the development site
- 20mph on new adopted roads within development site

A contribution of $4 \times 6,310 = £25,240$ would be required for these Traffic Regulation Orders.

If a package of measures can be agreed then it would need to be secured via a s106. Failure to agree an acceptable package of measures to ensure the site can be reached in a safe and accessible way would be likely to result in a recommendation to refuse the development on transport grounds.

Travel Plan

An acceptable Framework Travel Plan that has been submitted. It is proposed that Bristol City Council (BCC) would be appointed as Travel Plan Co-ordinator. BCC will therefore be responsible for implementing appropriate Travel Plan measures and monitoring. This would need to be secured via a s106 agreement at a cost of £220 per dwelling.

Conditions and S106

Should all the matters set out above be resolved to our satisfaction such that we could support a recommendation to grant planning permission a wide range of conditions and s106 measures would be required. These would be expected to include:

Mitigation to be secured by condition or s106 as appropriate:

- Accesses including tying in to adjacent streets
- Upgraded links through site
- Upgrades to key walking and cycling links to the site
- Upgrade to public transport infrastructure
- Travel Plan
- TROs

A large number of details will need to be agreed. Some of these can wait until the Reserved Matters submission as they are inherently linked to the design whereas others are key principles which must be secured at outline. We would welcome discussion on which of the following sit in the former and which sit in the latter category. Measures that will need to be secured whether at outline or RM stages are:

- Quantum and design of cycle parking
- Quantum and design of bin storage
- Quantum and design of disabled parking
- Quantum and design of Electric Vehicle parking
- Tracking to be provided for a refuse truck/ fire engine
- Adequate forward visibility is achieved in line with design speed
- Appropriate use of materials in line with BCC adoption standards
- Agreed limits of adoption
- Details of rerouted PROWS
- Wayfinding
- Any Highway Structures will require Approval In Principle.
- Agreement of any green infrastructure to be adopted
- Agreement of any novel drainage infrastructure (eg SUDS) to be adopted
- Construction Methodology
- Details of phasing
- Internal Highway Works Condition (s38)
- External Highway Works Condition (s278)

A corresponding range of advices would also be required.