Development Con	trol Committee A – 18	October 2017	ITEM NO. 4
WARD:	Hengrove & Whitchurch Park	CONTACT OFFICER:	Jess Leigh
SITE ADDRESS:	Land At Hengrove Park ( BS14 0JZ	plots A, 2B And C) Whitch	urch Lane Whitchurch Bristol
APPLICATION NO:	17/03943/F	Full Planning	
DETERMINATION DEADLINE:	24 October 2017		

Construction of 261 residential units (comprising 27 x 1-bed units, 124 x 2-bed units, 67 x 3-bed units and 43 x 4-bed units) and associated landscaping, access and infrastructure works. (Major).

**APPLICANT:** 

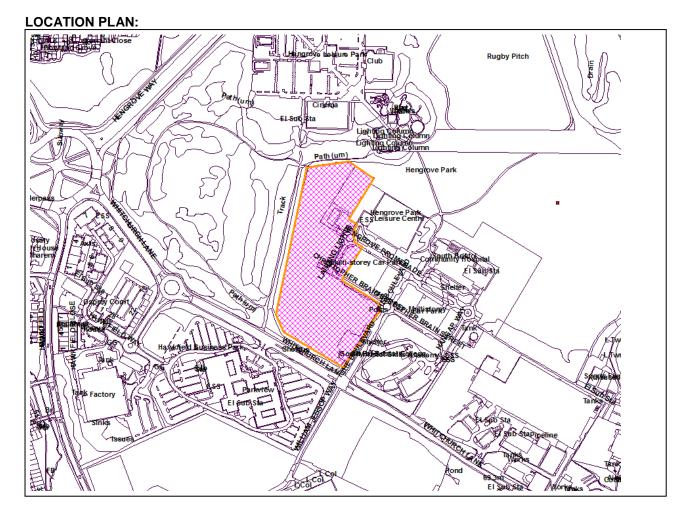
**Kier Living Limited** 

C/o Agent

**RECOMMENDATION:** GRANT subject to Planning Agreement

AGENT: Stride Treglown Limited Promenade House The Promenade Clifton Down Bristol BS8 3NE

The following plan is for illustrative purposes only, and cannot be guaranteed to be up to date.



# SITE DESCRIPTION

The application site lies to the west of Hengrove Leisure Centre, a multi-storey car park, (which it immediately abuts), and the Skills Academy.

Just over half the site is under rough grass with an area to the north having been cleared and levelled to provide overflow parking for the Leisure Centre, the arising's from this work are contained within the site in the form of mounds.

Access to the site is by the new road network installed to serve the development of the wider area as a whole, the site includes one roundabout of this network.

The site is owned by the city council but under offer to Kier, the applicants.

To the north of the site is Hengrove Play Park and the privately owned Leisure Park, which includes a cinema, hotel and food outlets. To the west is an area known as The Mounds, which is owned by the council and designated as Site of Nature Conservation Area in the local plan and to the south is Whitchurch Lane. A bund of mature trees lies just outside of the site along the south and western boundaries, a well-used footpath run adjacent to the latter, which also extends along the northern boundary towards the play park.

# BACKGROUND

The site falls within an area of south Bristol that is prioritised for regeneration as reflected in Policy BCS1 of the Core Strategy.

In 2005 an outline planning application was approved for a mixed use development of large parcel of land, of which the site forms part. The stated uses were; new public park, community hospital, pool and dry sports facilities, residential, offices and light industry, commercial and food and drink.

Subsequent to this individual applications were approved for the road network, hospital, leisure centre and skills centre. The residual area of land following the construction of these buildings is now allocated in the Sites Allocation document for; 'Housing, offices and open space in the form of a large high quality park', it is intended that the park be located to the north of the application site.

There are number of development considerations listed for the allocated area, those most relevant to the application site include;

i) the need for a coordinated approach to delivery of this allocation to be guided by community involvement, ii) provide improved pedestrian links to the area of open space to the mounds, iii) integrate with new community hospital and other existing uses, iv) provide for any necessary improvements to the surrounding transport/highway network, v) be designed to provide natural surveillance over open spaces and streets, vii) be informed by an ecological survey of the site and mitigate if necessary, viii) be informed by a site specific flood risk assessment, ix)incorporate SUDS and x) be informed by a Health Impact Assessment.

In 2014 Design Guidance was prepared by the Urban Design Team for the application site on behalf of the city council as land owners. This guidance also included the 'bookends' at either end of the car parks to the front of the Leisure Centre and the hospital. The guidance set out a number of constraints and opportunities with regard to access, densities and general layout. The bookends were identified as having the capacity to incorporate some commercial uses.

The proposal was the subject of a request for an EIA screening opinion in August 2016 when it was concluded that it would not be an EIA application.

In June 2016, the scheme was presented to the Bristol Urban Design Forum. A number of comments were made on the scheme to include criticism of the similarity of the streets, dominance of the needs of motorists, criticism of north facing gardens, wish to see greater integration of the woodland and consideration of SUDS for recreation and habitat creation.

A second presentation was made in January 2017 when the forum expressed encouragement that the dominance of the car in the design of the streets had been addressed, connection to the woodland strip improved, pedestrian network improved, suggested house types could be developed to give a Bristol style. Design of Hengrove Square was an issue.

A Pre-Application Planning Enquiry was submitted in January 2017 when comments made and discussions regarding design have informed the current application.

The current application site does not include three of the bookends included in the brief, these and the remainder of the allocated area,(generally known as Hengrove Phase 2) are currently the subject of a master planning exercise and community consultation has recently commenced. The aim being to submit an outline planning application in Spring 2018.

# APPLICATION

To build 261 dwellings in the form of 102 one and two bed apartments, 49 two bed houses, 67 three bed houses and 43 four bed houses.

Of these, 28, 15, 14 and 3 respectively are affordable rented and 8, 6 and 4 are for shared ownership, (i.e. no four bed houses).

Most of the apartments are proposed in a four/three storey block facing the junction between Whitchurch Lane and The Boulevard, behind which the housing, all two storey, is sited and laid out in perimeter blocks of differing sizes, shapes and orientations. Where the houses face west, there is an intervening corridor of open space between in and the treed boundary with The Mounds, which includes some swales that form part of the drainage strategy for the site. There are pedestrian connections across this space.

A cluster of three storey apartments is proposed against the flank wall of the car park.

Where proposed the two bedroom houses are in the form of terraces with car spaces sited to the front, the larger houses are mainly in pairs of semi-detached with a small number being detached, these have a mix of car spaces and garages. Both blocks of apartments are served by car parking courts.

The existing roundabout that falls within the site has been changed to become a formal square fronted by houses. The internal road layout is largely designed on home zone principles.

The development will involve the felling of a number of existing street trees but does includes several new trees both to the car parking areas and open spaces. The site will be largely levelled with a slight fall to the south east to accommodate the drainage, as a result there will be some increase in height along the western and northern boundaries.

The dwellings are simple in appearance and use a number of features such as raised brick panels and coloured panels to add interest and identity to individual elements of the scheme.

Full hard and soft landscaping information has been submitted with the application plus documentation to include Air Quality Assessment, Ecology Appraisal, Noise Assessment and Health Impact Assessment.

# COMMUNITY INVOLVEMENT

# Pre-submission consultation undertaken

A programme of public involvement was undertaken in October 2016 and included a presentation to the Hengrove and Whitchurch Forum, a briefing to councillors, a design workshop and presentation to the Neighbourhood Partnership. A staffed public exhibition took place in the Leisure Centre to which key stakeholders and near neighbours were specifically invited along with sending out of leaflets and flyers.

Summary of comments;

# i) Hengrove and Whitchurch Forum

A key concern raised was the capacity of services and facilities to cope with increased population, (this was in relation to the wider proposals as well), the potential mix and tenure of homes was raised with a need for one bed units and fully accessible homes highlighted.

A need for a link to the existing bus stop from the site was raised with mixed views about the amount of car parking. Height was an issue. The scope for public art and improvement to the footway around the site were also mentioned.

# ii) Councillors

Consider increase in densities, create an active hub such as supermarket, pressure on GP's and schools - could expand the school on Hengrove Park, parking to be private, affordable and accessible housing need.

#### iii) Design Workshop

Some support for: higher densities, affordable housing to be spread across the site, increased height in key locations, home zones, creation of character areas, native species planting and local shops. Question how commuter parking could be prevented and need for more design work to the square commented upon.

#### iv) Neighbourhood Partnership

Comments focused on Hengrove Park Phase 2

#### v) Public exhibition

Hengrove Phase 2 attracted most comment. Additional traffic and impact on local services were issues raised. The Statement of Community Involvements provides details of comments.

Response to comments received;

Apartments fronting the main street redesigned to provide a stronger gateway, the road around the square is reconfigured, swathe of green along the western edge to provide a more usable public area, increase the number of corner turning houses, more visitor parking, and use of building facilities.

Response to publicity and consultation on the planning application

A total of 138 letters were issued with a final closing date for comment of the 3rd October and Site Notices/Press notices with a closing date for comment of the 30th August 2017.

Three letters have been received, to include one from the Hengrove and Stockwood Neighbourhood Forum, commenting as follows;

i) The principle of housing is generally supported in this location, well served by public transport

ii) Provision of Health Services and local facilities such as shopping- there have been problems with health services in the area and the new development will put further pressure on GP's in the area- the development of Phase 2 will add further pressure on facilities and an integrated approach is needed- See Key Issue A

iii) Loss of park- housing will have an impact on the wildlife, peace and tranquillity- it has the capacity to generate income- See Key Issue A

iv) Parking- an area used for overflow car parking to the leisure centre is to be lost and there is no alternative parking provided - See Key Issue A

v) How the development of individual parcels of land will integrate into the community is important - approval of the application should be delayed until there is sufficient information and outline approval for Phase 2 to make a clear integrated solution in the best manner possible- See Key Issue A

vi) Contributions - these should include monies for the maintenance of the new park- See Key Issue A

vii) The Sustainability and Energy Statement concludes that CHP is not possible due to the low density development of purely residential units but it is adjacent to key sources of heat sharing, at least the infrastructure for future CHP should be included - See Key Issue I

Public Health Bristol has commented as follows:-

The HIA seems fairly brief given the size of the development and I feel that they are focused on how the development sits within the existing infrastructure rather than how a development itself can enhance health. This is usually best achieved using a matrix of key factors and likely impact. It is recognised that we do not provide a template for HIA's.

Crime Reduction Unit has commented as follows:-

There are no objections to the development and consider it will have key benefits; a sustainable place to live in with energy efficient homes and within walking distance of community facilities with pedestrian friendly streets, parkland and places to play, it provides much needed housing stock and makes use of land that is currently redundant. There is however no mention of security measures or standard of security that will be used. Consideration should be given to applying for Secured by Design.

Nature Conservation Officer has commented as follows:-

An ecological mitigation and enhancement strategy prepared by an ecological consultant should be conditioned as a pre-commencement of development. The site supports unimproved neutral grassland which was assessed as a priority habitat and is thus a material consideration. An area of this should be retained on site or translocated. A grassland mitigation strategy and ten year management plan will be required.

Air Quality has commented as follows:-

The assessment methodology used is considered acceptable. The impact of the development proposal on air pollution during the operational phase is considered negligible. The report indicates that there is the potential for some impact during the construction phase and therefore the highly recommended and desirable mitigation measures within Appendix D should be incorporated into a CEMP/Dust Management Plan.

# Pollution Control has commented as follows:-

The acoustic report submitted with the application is acceptable. The report makes some recommendations, particularly with reference to Hengrove Leisure Centre, and it is necessary to ensure by condition that these recommendations and suitable mitigation measures are adopted at the development.

Flood Risk Manager has commented as follows:-

The following comments relate to two aspects; 1. Flood risk to the site and 2. Surface water management from the proposed development

# Flood risk to the site

The Environment Agency surface water flood risk mapping (which for the Bristol area is based on BCC's Surface Water Management Plan model) shows the site to be at significant risk of surface water flooding. However, for reasons outlined in the Flood Risk Assessment this was known to be an inaccurate representation of flood risk to the site. The applicant has therefore undertaken site specific surface water flood modelling in consultation with BCC as the Lead Local Flood Authority. We are satisfied that the assessment of surface water flooding that has been undertaken is appropriate, and the resulting outputs have been appropriately used to inform the site layout to ensure the development remains safe from flood risk. We therefore have no objection or further comment on the application with regards to flood risk to the site.

#### Surface Water Management

The proposals include a drainage strategy that incorporates a number of sustainable drainage measures including permeable paving, detention basins, underground storage and highway bio-retention features. The drainage hierarchy and principles of surface water management train have been followed and peak runoff rates have been agreed with Wessex Water. Corresponding storage volumes have been included to ensure the drainage meets our technical standards. We are satisfied with the level of detail provided at this stage and we are supportive of the approach taken. Further detail may be required as the design progresses and arrangements for on-going future maintenance are yet to be finalised. We therefore request that our standard pre commencement drainage condition is applied should planning permission be granted. We also request that our standard pre-occupation drainage condition is applied in addition to the pre commencement condition.

# Sustainable Cities Team has commented as follows:-

Further information required with regard to measures to mitigate overheating, a site-specific feasibility and viability assessment is required to demonstrate whether a site wide communal heating system is feasible, if it is found to be unfeasible/unviable for the site as a whole, the omission of certain units that are posing a challenge to viability should also be assessed. Should a communal heating system not be viable, a noise assessment should be undertaken to see if ASHP's are feasible for the site, if acceptable then these should be selected as the heating system. Measures to limit water uses should be identified and a commitment to maximise the use of materials with low lifecycle environmental impacts.

Urban Design has commented as follows:-

In summary the scheme has made positive steps forward and the quality of the submission is very good. The key issues have been addressed throughout the preapp process, as such I have very little to comment on with only the detailed issues to include;

boundary treatments, lack of management plan for the landscaped areas, exposed garden wall to plots 56 and 47, bin store between Block E, too strong an emphasis on smaller tree species throughout the scheme, the railing detail to the apartment blocks and gravel path surfaces.

#### 4/10/17- Apartment Design:

The revised plans reflect comments made. Some items to be revisited to include parapet wall, entrance features, materials and rear windows.

# **RELEVANT POLICIES**

#### National Planning Policy Framework – March 2012

Bristol Local Plan comprising Core Strategy (Adopted June 2011), Site Allocations and Development Management Policies (Adopted July 2014) and (as appropriate) the Bristol Central Area Plan (Adopted March 2015) and (as appropriate) the Old Market Quarter Neighbourhood Development Plan 2016 and Lawrence Weston Neighbourhood Development Plan 2017.

In determining this application, the Local Planning Authority has had regard to all relevant policies of the Bristol Local Plan and relevant guidance.

# **KEY ISSUES**

# A. IS THE PRINCIPLE OF HOUSING ACCEPTABLE?

The site falls within a much larger area which has a mixed use designation in the local plan. A programme of master planning and public consultation is currently underway with regard to the remainder. As land owners the council has decided to bring this site forward for housing at an earlier stage. There is no inherent conflict with the designation by doing this and in many ways it is a self-contained site that has a limited interface with the larger area.

Some queries have however been raised regarding the site to include the loss of the land as park, the loss of land for coach/overflow parking in association with events at the Leisure Centre, the need to contribute to the maintenance of the proposed new park impact on education/secondary health care facilities.

In respect of the loss of park, the site has never been open to public use and Hengrove Phase 2 will include a new park, the ecological value of the site is considered under issue B.

With regard to the parking, this use was only ever intended as a temporary short term measure and the leisure centre has now vacated the area. There is potential to use other 'bookends' to the car parks for coach parking as an alternative. It is understood that the centre is looking at reducing the traffic it generates, it is anticipated that this may be an issue which will come forward looking at the area as a whole but not one to hold up the development of the application site.

The maintenance of the new park which will come forward as part of the master planning will be addressed through contributions from the developments included in that plan and not from this site. The issue of education facilities will be considered in connection with this larger development.

The issue of provision of health centres and GP's is more difficult to address as this is not something the council can have any direct control over with regard to the number of GP's in an area or their business decisions to establish a health centre or expand and existing one.

A Health Impact Assessment has been submitted with the application, which covers the broader health implications of the scheme as well as this issue of access to health facilities and services. This refers to the accessibility of open space to the site in the form of the mounds, proximity of sports facilities and a layout that gives priority to pedestrians and cyclists.

It is noted that the Whitchurch Health Centre is within 1.25km of the site and two further within 2km of the site, which it is understood have capacity at present. Dentists within the area are also understood to have capacity.

# B. IS THE IMPACT ON THE ECOLOGY OF THE SITE ACCEPTABLE?

An ecological survey and appraisal was undertaken of the site which showed the majority of the southern part of the site was species rich, lowland meadow grass land, which is identified as a 'priority habitat'. It was recorded that there was little potential to support bats and a bat survey showed evidence of foraging bats around the periphery. Some dense shrub and rough longer grass had potential for reptiles and a subsequent reptile survey identified a small number of slow worms.

There was some evidence of mammal foraging along the western boundary with the trees and scrub offering potential for nesting birds.

With regard to key habitats, the majority of the bank of trees along the Whitchurch Lane frontage is to be retained and the parts of the grassland that are most species rich are to be relocated within the site, details to be agreed. Some new habitats will be created within the landscaping scheme, to include the proposed swales. The planting proposed for the development as a whole incorporates mainly native species and this will add to the biodiversity of the area.

Precautionary methods of working are proposed for all identified species.

It will be a requirement that the external lighting for the scheme be designed in accordance with best practise as set out by the Bat Conservation Trust and prevent any light over spilling onto the undeveloped land around the site.

Pending conditions as appropriate, it is considered that this is an acceptable response to the ecological value of the site.

# C. ARE THERE ANY CONTAMINATION ISSUES ARISING FROM THE DEVELOPMENT?

Ground investigations have been undertaken which shows limited ground contamination on the site as a whole however The Mounds to the west is a former landfill site and there is concern that ground gases may emanate from this area. Accordingly further gas readings beyond those already undertaken are recommended. It is understood that this work has been commissioned but in the meantime conditions are recommended to cover outstanding items.

Any topsoil being imported will need to be certified as being clean.

# D. IS THE IMPACT ON THE TREES ON SITE ACCEPTABLE?

An Arboricultural Survey and Impact Assessment has been submitted with the application. 27 of the street trees that were planted alongside the new access roads when they were built will be lost through the development of the site, these are all classed as category C, as well as a small group

of self-sown trees towards the south east corner that will be lost, these flank the bund of mature trees that fall outside of the site along the southern boundary, these are category B2.

As well as considering the number and value of the trees on site that are to be removed, it is necessary to assess the impact of the development on the bunds of trees along the southern and western boundary, these have significant landscape value.

The report concludes that these are at a sufficient distance from the proposed development not to cause nuisance from shading or require a no dig approach. Tree protection is recommended and this is focused on these trees. Some works are also proposed to a couple of poplar trees within these bunds, these are not specifically conditioned.

121 new trees are proposed within the development which will be managed by a management company.

Overall the approach to the trees on site and new planting is considered acceptable and fully in accordance with DM17

# E. IS THE DENSITY OF, MIX OF HOUSING SIZE AND TENURE ACCEPTABLE?

The overall density of the development is 50 dph which is compliant with BCS18. The introduction of apartments within the development site is a response to known need in the area for smaller units as it is otherwise dominated by two and three bed houses. A total of 5 apartments are fully wheelchair accessible in line with DM4.

Of the development a total of 60 are to be for social rent and 18 shared ownership, this equates to 30% of the development as a whole which is compliant with Policy BCS17 for this part of the city as the split between tenures. The mix of sizes of the affordable element has been discussed and agreed with Housing.

A Section 106 Agreement is proposed which will secure this provision.

# F. IS THE DESIGN OF THE PROPOSAL ACCEPTABLE?

The height of the apartment blocks at the entrance are considered to relate well to the scale of the skills academy on the opposite side of the access road and are designed in a way that introduces visual interest and verticality. The smaller apartment block will help merge the housing development with the two storey car park, which is otherwise an anomalous feature.

The housing is traditional in scale but in a mix of designs that gives identity to individual streets, some are to incorporate a mix of colours to pick up on the 'Bristol Vernacular'.

The new street trees and square will provide a green backdrop to the development.

Samples of all materials, to include paving materials, large scale details and the landscaping will be required by condition.

A draft scheme of public art has been submitted and a condition is recommended requiring a strategy with timescale to be developed and approved.

The development has potential to provide a good quality built environment and add positively to the street scene.

# G. WILL THE PROPOSAL HAVE AN ADVERSE IMPACT ON NEIGHBOURS?

The application site is largely physically removed from any residential neighbours and development of the land to the north will have to take it into account when this is being designed.

However a well-used footpath runs to the north and west of the site, which residents use to gain access to the mounds for recreational purposes. The site is to be remodelled in connection with the proposed main direction of drainage and there will be an increase in height along the western and northern boundary.

Cross sections have been provided to show the anticipated change in levels.

Along the former the increase is approximately 1.2-1.4m and as the bund of trees lies between the path and the boundary it is not considered the impact on the path will be significant.

To the north, the increase in height is a maximum of 2m and given the proximity of the footpath, there is concern that this will reduce sight lines and create a feeling of reduced personal safety and security for users of the path. Given that the linkages between the site and the surrounding footpath network is an important element of knitting it into the built fabric this is of concern.

It is understood that the cross sections show a worst case scenario and there may be scope to increase the height of the path in places to offset the impact. It is agreed with the developer that the treatment of this boundary be conditioned to enable this to be further investigated to provide a satisfactory solution.

# H. IS THE ACCOMMODATION BEING PROPOSED ACCEPTABLE?

All the proposed accommodation complies with the nationally described space standards. Due to the proximity of a main road, car park and leisure centre a noise assessment was requested and this has been submitted with the application. This has concluded that the façade of the apartment blocks facing the road boundary will require mitigation works to achieve a satisfactory internal noise level, to include acoustic glazing. In addition it is recommended that those windows in the proximity of the leisure centre have an alternative means of ventilation to an open window. A condition requiring full detail of these measures is recommended.

A mix of building mass, passive ventilation from windows and tree planting will reduce any potential overheating as a result of climate change.

The Air Quality Assessment shows that the site is acceptable for the proposed use.

# I. IS THE DEVELOPMENT SUSTAINABLE?

Given that the development is over 100 dwellings there is a policy requirement for a BREEAM communities assessment however as the development is for housing only and does not raise a large number of issues, it was agreed that the developers could take responsibility for the assessment as opposed to employing a professional assessor. BREEAM assessments apply to three stages; the initially planning of a site, the detailed layout stage and designing details- usually done after grant of planning consent. The document included with the application shows the development to satisfactorily address the appropriate criteria.

In addition to this a Sustainability Statement and SUDS concept scheme have been submitted with the application to address a number of the issues set out in policies BSCS13-16.

It is stated that the dwellings have been designed to high energy efficiency and this will exceed those set by building regulations.

However there is concern that the energy strategy does not adequately assess the possibility of providing a CHP plant on site, powered by renewable energy, and associated infrastructure, which could subsequently link into a District Heat Plant if incorporated into Hengrove Phase 2. Feasibility work is underway on this option.

Accordingly a site specific feasibility and viability assessment has been requested to demonstrate whether a site wide communal heating system is feasible for all or part of the site. At the time of writing this work had not been completed and a verbal update will be given at committee with recommended conditions as appropriate.

# J. IS THE PROPOSAL ACCEPTABLE ON HIGHWAY SAFETY GROUND?

The main access to the site is via The Boulevard and Christopher Brain Street, which are both part of the purpose built highway network to serve the development of Hengrove Park and therefore there are no concerns about the capacity of the highway network to serve the development.

The site is well served by public transport to include the MetroBus and there are plans to provide a set down stop adjacent to the site. A current project is underway to provide a cycle route along Whitchurch Lane and improved pedestrian crossing facilities on Whitchurch Lane. There are existing paths close to the site from the surrounding area and the development of the land to the north will contain links in all directions.

The internal road layout of the development has been tracked to show that it can be accessed by an 11.4m vehicle and a passing car at the same time though there remain some concerns about the tracking at junctions. A response has been sent from the applicant on this matter and an update will be reported at committee.

The number of car spaces being provided equates to the maximum standard as set out in Appendix 2 of the Site Allocation and Development Management Local Plan. In spite of the availability of public transport, the site is some distance from the city centre and there is a high car ownership in the area, accordingly it is considered important that a sufficient number of car spaces are provided.

Where garages are proposed 13 amp plugs are to be provided to enable electric vehicles to be charged at a future date. Four charging points are to be provided adjacent the apartments in the south east corner.

A satisfactory level of cycle parking is being provided to comply with adopted standards. Refuse storage is either in stores to the front of house or in communal areas serving the flats. All is within an acceptable distance of the highway for collection. Conditions are recommended to require these items.

A contribution towards a bus set down, improved crossing facilities on Whitchurch Lane and a cycle way on the main road, a contribution of £30,000 is considered a reasonable amount.

A Residential Travel Plan has been included with the submission though more detail is required before it can be approved.

The Section 106 Agreement will include an amount to enable the travel plan to be audited and monitored, an amount to pay for a Traffic Regulation Order to impose a 20mph within the site.

On this basis there can be no objections to the proposal on highway safety grounds.

# K. IS THE DEVELOPMENT CIL LIABLE?

The CIL liability for this development is £1,592,078.84, however social housing relief may be claimed on those residential dwellings included in the development that are to be managed by a Housing Association for the provision of affordable housing.

# **RECOMMENDED** GRANT subject to Planning Agreement

# Time limit for commencement of development

1. Full Planning Permission

The development hereby permitted shall begin before the expiration of three years from the date of this permission.

Reason: As required by Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

# Pre commencement condition(s)

2. Construction Management Plan

No development shall take place until a site specific Construction Environmental Management Plan has been submitted to and been approved in writing by the Council. The approved plan/statement shall be adhered to throughout the construction period. The statement shall provide for traffic management and use of the best practicable means to reduce the effects of noise, vibration, dust and site lighting, it shall include - but not be limited to- the following;

- Parking of vehicle of site operatives and visitors
- Routes for construction traffic
- Method of prevention of mud being carried onto highway
- Pedestrian and cyclist protection
- Proposed temporary traffic restrictions
- Arrangements for turning vehicles
- Procedures for maintaining good public relations including complaint management, public consultation and liaison
- Arrangements for liaison with the Council's Pollution Control Team
- All works and ancillary operations which are audible at the site boundary, or at such other place as may be agreed with the Local Planning Authority, shall be carried out only between the following hours:
   08 00 Hours and 18 00 Hours on Mondays to Fridays and 08 00 and 13 00 Hours on

Saturdays and; at no time on Sundays and Bank Holidays.

- Deliveries to and removal of plant, equipment, machinery and waste from the site must only take place within the permitted hours detailed above.
- Mitigation measures as defined in BS 5528: Parts 1 and 2: 2009 Noise and Vibration Control on Construction and Open Sites shall be used to minimise noise disturbance from construction works.
- Procedures for emergency deviation of the agreed working hours.
- Bristol City Council encourages all contractors to be 'Considerate Contractors' when working in the city by being aware of the needs of neighbours and the environment.

- Control measures for dust and other air-borne pollutants. This must also take into account the need to protect any local resident who may have a particular susceptibility to air-borne pollutants.
- Measures for controlling the use of site lighting whether required for safe working or for security purposes.

Reason: In the interests of highway safety and the amenities of surrounding occupiers during the construction of the development.

3. Highway Works

Prior to commencement of development general arrangement plan(s) indicating the following works to the highway shall be submitted and approved in writing by the Local Planning Authority

- Internal access roads

Indicating proposals for:

- Threshold levels of the finished highway and building levels
- Alterations to waiting restrictions or other Traffic Regulation Orders to enable the works
- Locations of lighting, signing, street furniture, street trees and pits
- Structures on or adjacent to the highway
- Extents of any stopping up or dedication of new highway

These works shall then be completed prior to first occupation of the development to the satisfaction of the Local Highway Authority and as approved in writing by the Local Planning Authority.

Reason: In the interests of public safety and to ensure that all road works associated with the proposed development are planned and approved in good time to include any statutory processes, are undertaken to a standard approved by the Local Planning Authority, and are completed before occupation.

NB: Planning permission is not permission to work in the highway. A Highway Agreement under Section 278 of the Highways Act 1980 must be completed, the bond secured and the City Council's technical approval and inspection fees paid before any drawings are considered and approved and formal technical approval is necessary prior to any works being permitted.

4. No development of the dwellings hereby approved shall take place until general construction details of the internal access roads to achieve an adoptable standard have been submitted and been approved in writing by the Local Planning Authority. The dwellings shall not be occupied until the roads serving them are constructed to base course layer with all turning provision and parking provision completed in accordance with the approved plans.

Reason: In the interests of highway safety.

5. Protection of Retained Trees During the Construction Period

No work of any kind shall take place on the site until the protective fence(s) has (have) been erected around the retained trees, to include those outside the site, in the position and to the specification shown on Drawing No. 32507 STL XX Xx DR L ZZZZ 090901 Pl01. The Local Planning Authority shall be given not less than two weeks prior written notice by the developer of the commencement of works on the site in order that the council may verify in writing that

the approved tree protection measures are in place when the work commences. The approved fence(s) shall be in place before any equipment, machinery or materials are brought on to the site for the purposes of the development and shall be maintained until all equipment, machinery and surplus materials have been removed from the site. Within the fenced area(s) there shall be no scaffolding, no stockpiling of any materials or soil, no machinery or other equipment parked or operated, no traffic over the root system, no changes to the soil level, no excavation of trenches, no site huts, no fires lit, no dumping of toxic chemicals and no retained trees shall be used for winching purposes. If any retained tree is removed, uprooted or destroyed or dies, another tree shall be planted at the same place and that tree shall be of such size and species, and shall be planted at such time, as may be specified in writing by the council.

Reason: To protect the retained trees from damage during construction, including all ground works and works that may be required by other conditions, and in recognition of the contribution which the retained tree(s) give(s) and will continue to give to the amenity of the area.

6. Sustainable Drainage System (SuDS)

The development hereby approved shall not commence until a Sustainable Drainage Strategy and associated detailed design, management and maintenance plan of surface water drainage for the site using SuDS methods has been submitted to and approved in writing by the Local Planning Authority. The approved drainage system shall be implemented in accordance with the approved Sustainable Drainage Strategy prior to the use of the building commencing and maintained thereafter for the lifetime of the development.

Reason: To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal is incorporated into the design and the build and that the principles of sustainable drainage are incorporated into this proposal and maintained for the lifetime of the proposal.

7. Prior to the commencement of vegetation clearance on site an ecological mitigation and enhancement strategy shall be submitted and approved in writing by the Local Planning Authority and thereafter implemented as approved. The strategy shall include the following; i) precautionary measures to avoid impacts on nesting birds, reptiles and hedgehogs, ii) updated survey for badgers immediately prior to the commencement of works and site/vegetation clearance, iii) toolbox talks for site operatives, iv) the supervision of relevant site clearance works under an Ecological Clerk of Works (ECoW) and v)measures to prevent foraging badgers being trapped in excavations or open pipework during construction works (open pipework larger than 150 mm outside diameter should be blanked off at the end of each working day), vi) the provision of a reptile hibernacula and the retention of an area of suitable habitat such as a wildflower meadow for slow-worms on site within an area of green space, vii) access holes for hedgehogs (15 x 15 cm gaps) should be provided in the bases of garden fencing panels, viii) the provision of bare ground with accompanying flowery swards, deadwood and a butterfly meadow with a list of recommended plant species, (ref pages 10-11 of the invertebrate survey dated 29th September 2019)

Reason: In the interests of nature conservation value of the site.

8. Prior to the commencement of vegetation clearance on site a Grassland mitigation strategy and ten year management plan for the unimproved grassland on site as identified in the Ecological Appraisal dated October 2016 shall be submitted and approved in writing by the Local Planning Authority and implemented in accordance with that approval. This shall include either the retention on, or translocation of, the unimproved neutral grassland habitat.

Reason: In order to preserve this priority habitat.

9. No construction shall take place until there has been submitted to and approved in writing by the Local Planning Authority a detailed scheme of noise insulation measures, including ventilation, with regards to noise from commercial sound arising from the Hengrove Park Leisure Centre operations.

The scheme of noise insulation measures shall take into account the recommendations detailed in the Noise Assessments submitted with the application and the provisions of BS 8233: 2014 "Guidance on sound insulation and noise reduction for buildings".

The approved details shall be implemented in full prior to the commencement of the use permitted and be permanently maintained.

Reason: In order to secure a satisfactory living environment

10. Further details

Detailed drawings at the scale of 1:10 of the following shall be submitted to and be approved in writing by the Local Planning Authority before the relevant part of work is begun. The detail thereby approved shall be carried out in accordance with that approval.

- i) Typical windows and doors to show details of the header, cill, reveal, and jambs.
- ii) Typical details of eaves, verges, coping and rainwater goods.
- iii) Details of all balconies
- iv) Raised parapet to corner elevation of the apartment block D
- v) Entrance to apartment block D
- vi) Rear windows to apartment block D
- vii) Details of all boundary treatments

viii) External lighting- to include details of fixtures, luminaires and lux contour diagrams- (to comply with Guidance for External Lighting issued by the Bat Conservation Trust).

Reason: In the interests of visual amenity and the character of the area.

11. Submission of samples before work starts

No development shall take place until samples as follows have been submitted to and been approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved samples.

i) 1m x 1m samples panel of proposed brick demonstrating typical facing, bond and mortar.

ii) 1m x 1m samples panel of proposed brick detail panels demonstrating typical facing, bond and mortar.

- iii) Samples of all other facing materials.
- iv) Samples of hard landscaping materials

Reason: To ensure that the external appearance of the building is satisfactory.

12. Land affected by contamination - Submission of Remediation Scheme

No development shall take place until a detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment has been prepared,

submitted to and approved in writing by the Local Planning Authority. The remediation strategy must include a revised section on ground gas risk assessment. The scheme must include all works to be undertaken, proposed remediation objectives and remediation criteria, timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

Reason: To ensure that risks from land contamination is understood prior to works on site both during the construction phase to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

13. Land affected by contamination - Implementation of Approved Remediation Scheme

In the event that contamination is found, no occupation of the development shall take place until the approved remediation scheme has been carried out in accordance with its terms. The Local Planning Authority must be given two weeks written notification of commencement of the remediation scheme works.

Following completion of measures identified in the approved remediation scheme, a verification report (otherwise known as a validation report) that demonstrates the effectiveness of the remediation carried out must be produced, and be approved in writing by the Local Planning Authority.

Reason: To ensure that risks from land contamination both during the construction phase and to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

14. Prior to the commencement of the earth works in association with the development of Phase 4 - as illustrated in the Design and Access Statement- there shall be submitted and approved in writing by the Local Planning Authority details of the regrading of the land around the periphery to the northern boundary of the development site and compensatory increase in the height of the adjacent length of existing footpath to the north. The scheme thereby approved shall be undertaken by the developer prior to the occupation of the dwellings within Phase 4 and to a time table to be agreed with the LPA.

Reason: in order to mitigate the impact on the existing pedestrian path network and to enable/encourage sustainable modes of transport.

# Pre occupation condition(s)

15. Prior to occupation of the development details provided by a qualified ecological consultant shall be submitted to and approved in writing by the Local Planning Authority providing the specification, orientation, height and location for built-in bird nesting and bat roosting opportunities. This shall include 30 built-in bird boxes or bricks to include at least 20 swift boxes, and 15 built-in bat boxes. Development shall be undertaken in accordance with the approved details. See Advice Note 1

Reason: To help conserve legally protected bats and birds which include priority species.

16. Completion and Maintenance of Sustainable Drainage System (SuDS) - Shown on Approved Plans

No building or use hereby permitted shall be occupied or the use commenced until the SuDS scheme for the phase within with the building falls- as shown on the drawing included in the Design and Access Statement- has been completed in accordance with the approved Sustainable Drainage Strategy. The SuDS scheme shall be managed and maintained thereafter in accordance with the agreed management and maintenance plan.

Reason: To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal and that the principles of sustainable drainage are incorporated into this proposal and maintained for the lifetime of the proposal.

17. Residential travel plan

Prior to the occupation of the development hereby permitted, (or in accordance with other times as specified), there shall be submitted and approved in writing by the Local Planning Authority an updated Residential Travel Plan to include, but not solely, the following;

A branded and informative Travel Information Pack (to be provided to the LPA for approval 3 months prior to occupation), Bus tickets to be provided free of charge rather than at discounted rates as stated, Cycle vouchers and measures to be offered and a comprehensive personalised travel planning programme to be offered via door knocking rather than on request as suggested, Identification of the roles of the Travel Plan Coordinator, The promotion of sustainable travel through marketing materials and provision of the Travel Information Pack at the marketing suite.

The Action Plan must include all measures, together with budgets, the commencement date and implementation timetable, together with details of the Travel Plan Co-ordinator responsible for delivery. The Travel Plan requires clear SMART targets, with deadlines specified by when these will be achieved, the principal target being a reduction year-on-year in single occupancy car use. A 10% reduction from the baseline is acceptable rather than as is.

The Travel Plan must include a set of baseline travel data and describe how monitoring will be undertaken biennially over a 5-year period (i.e. years 1, 3 and 5), the data to be collected and reported on, measured against the baseline data and agreed targets. This needs to include a consideration of the following:

- o Frequency of monitoring
- o Description of how surveys will be undertaken
- o Duration of surveys
- o Define who will be responsible for the survey work
- o Use of traffic counters
- o Resident/employee surveys and the survey return rate

A monitoring timetable should be included, including the expected date of the first monitoring report.

Reason: In order to promote sustainable modes of transport. See Advice note 2

# 18. Land affected by contamination - Reporting of Unexpected Contamination

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken in accordance with the requirements of Condition and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of Condition \*\*\*\*, which is to be submitted to and be approved in writing by the Local Planning Authority.

Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority in accordance with condition \*\*\*\*.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

19. Implementation/Installation of Refuse Storage and Recycling Facilities - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the refuse store, and area/facilities allocated for storing of recyclable materials, to serve that building, as shown on the approved plans have been completed in accordance with the approved plans. Thereafter, all refuse and recyclable materials associated with the building shall either be stored within this dedicated store/area, as shown on the approved plans, or internally within the building(s) that form part of the application site. No refuse or recycling material shall be stored or placed for collection on the public highway or pavement, except on the day of collection.

Reason: To safeguard the amenity of the occupiers of adjoining premises, protect the general environment, and prevent obstruction to pedestrian movement, and to ensure that there are adequate facilities for the storage and recycling of recoverable materials.

20. Completion of Vehicular Access - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the means of vehicular access to serve the building has been constructed and completed in accordance with the approved plans and the said means of vehicular access shall thereafter be retained for access purposes only.

Reason: In the interests of highway safety.

## 21. Completion and Maintenance of Car/Vehicle Parking - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the car/vehicle parking area to serve that building as shown on the approved plans has been completed, and thereafter, the area shall be kept free of obstruction and available for the parking of vehicles associated with the building.

Reason: To ensure that there are adequate parking facilities to serve the development.

22. Completion of Pedestrians/Cyclists Access - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the means of access for pedestrians and/or cyclists to serve the building has been constructed in accordance with the approved plans and shall thereafter be retained for access purposes only.

Reason: In the interests of highway safety.

23. Completion and Maintenance of Cycle Provision - Shown on approved plans

No building or use hereby permitted shall be occupied or the use commenced until the cycle parking provision shown to serve the building on the approved plans has been completed, and thereafter, be kept free of obstruction and available for the parking of cycles only.

Reason: To ensure the provision and availability of adequate cycle parking.

24. Prior to the occupation of the dwellings hereby approved, a ten year landscape and nature conservation management plan shall be produced for the application area. This shall include consideration of features of interest, objectives, management compartments and prescriptions, a work schedule including a 10 year annual work plan, resourcing including a financial budget and ecological monitoring. The development shall be carried out in accordance with the approved plan or any amendment as approved in writing by the Local Planning Authority.

Reason: In the interests of nature conservation value and landscape value of the development.

25. Prior to the occupation of apartment block C, D or E, hereby approved the electrical vehicle charging points shall be installed as per the approved drawings and thereafter retained.

Reason: In order to support and encourage lower polluting forms of vehicles.

#### Post occupation management

26. The wheelchair accessible units shown on the approved plans shall be provided in accordance with the approval and thereafter retained.

Reason: In the interests of equality

27. Landscape (planting) works - shown

The planting proposals hereby approved shall be carried out no later than during the first planting season following the date when each phase, (as shown in the Design and Access Statement) of the development hereby permitted is ready for occupation or in accordance with a programme agreed in writing with the council. All planted materials shall be maintained for five years and any trees or plants removed, dying, being severely damaged or becoming seriously diseased within 5 years of planting shall be replaced with others of similar size and species to those originally required to be planted.

Reason: To ensure that the appearance of the development is satisfactory.

# List of approved plans

28. List of approved plans and drawings

The development shall conform in all aspects with the plans and details shown in the application as listed below, unless variations are agreed by the Local Planning Authority in order to discharge other conditions attached to this decision.

Development proposals: Phase 1 - Hengrove Park, received 25 July 2017 Health impact assessment, received 25 July 2017 Noise assessment report, received 25 July 2017 Public art strategy planning application stage, received 25 July 2017 Residential travel plan, received 25 July 2017 Transport assessment, received 25 July 2017 UXO NIS report, received 25 July 2017 V2 Energy and sustainability statement - Hengrove phase 1, received 25 July 2017 Outline soft landscape specification, received 25 July 2017 Application cover letter, received 25 July 2017 Arboricultural report reduced, received 25 July 2017 0257-A-0105-C Visibility splay plan sheet 2, received 25 July 2017 02576 - 0113 Schematic drainage layout foul- sheet 2, received 25 July 2017 02576-0701-D Vehicle tracking - sheet 1, received 25 July 2017 02576-0702-E Vehicle tracking - sheet 2, received 25 July 2017 02576-0703-D Vehicle tracking - sheet 3, received 25 July 2017 02576-0704-D Vehicle tracking - sheet 4, received 25 July 2017 02576-A -0100-D Extent of highway adoption sheet 1, received 25 July 2017 02576-A- 0101-D Extent of highway adoption sheet 2, received 25 July 2017 02576-A- 0104-C Visibility splay plan sheet 1, received 25 July 2017 02576-P -0110-C Drainage layout sheet 1, received 25 July 2017 02576-P-0112 Schematic drainage layout foul - sheet 1, received 25 July 2017 02576-P-2003-B Proposed levels - sheet 4, received 25 July 2017 02576-P-0111-C Drainage strategy - sheet 2, received 25 July 2017 02576-P-2000 Proposed levels - sheet 1, received 25 July 2017 02576-P-2000 Proposed levels-sheet 2, received 25 July 2017 02576-P-2000-A Proposed levels-sheet 1, received 25 July 2017 32507-STL-XX-00-DR-A-XXXX-PL 01 Location plan, received 25 July 2017 32507-STL-XX-00-DR-A-XXXX-PL\_035 Plans and elevations 06 type 4B7P and Castleford, received 25 July 2017 32507-STL-XX-00-DR-A-XXXX-PL 036 Plans and elevations 07 type Castleford 3 storey, received 25 July 2017 32507-STL-XX-00-DR-A-XXXX-PL 038 Plans and elevations 09 type 3B5P, 4B6PN, received 25 July 2017 32507-STL-XX-00-DR-A-XXXX-PL85 Woodland edge view, received 25 July 2017 32507\_STL-00-ZZ-DR-A-XXXX-PL1010 Block A plans and elevations, received 25 July 2017 32507\_STL-00-ZZ-DR-A-XXXX-PL1010 Block B plans and elevations, received 25 July 2017 32507\_STL-00-ZZ-DR-A-XXXX-PL86 View from Hengrove Park towards Lime Street, received 25 July 2017 32507\_STL-00-ZZ-DR-A-XXXX-PL86 Entrance to site from Boulevard, received 25 July 2017 32507 STL 00-ZZ-DR A XXXX PL88 View south along Maple Street, received 25 July 2017 32507\_STL\_00\_XX\_DR\_A\_XXXX\_PL\_02 Existing site plan, received 25 July 2017 32507 STL 00 ZZ-DR-A-XXXX-PL1010 Elevations - block D, received 32507\_STL\_00\_ZZ-DR-A-XXXX-PL1010 Floor plans - apartment block C, received 32507 STL 00 ZZ-DR-A-XXXX-PL1010 Elevations - block C, received 32507\_STL\_XX\_00\_DR\_A\_XXXX\_PL\_50 House layout plan, received

32507 STL XX 00 DR A XXXX PL 58 Heights plan, received 25 July 2017 32507 STL XX 00 DR A XXXX PL 60 Street elevations - sheet 2, received 25 July 2017 32507\_STL\_XX\_00\_DR\_A\_XXXX\_PL\_70 Shadow study - 21.03.2017, received 25 July 2017 32507 STL XX 00 DR A XXXX PL 71 Shadow study - 21.06.2017, received 25 July 2017 32507\_STL\_XX\_00\_DR\_A\_XXXX\_PL\_72 Shadow study - 21.12.2017, received 25 July 2017 32507\_STL\_XX\_00\_DR\_A\_XXXX\_PL\_84 Solar strategy plan, received 25 July 2017 32507\_STL\_XX\_XX\_DR\_L\_ZZZZ\_09001- Landscape general arrangement plan, received 25 July 2017 32507 STL\_XX\_XX\_DR\_L\_ZZZZ\_09101- Tree protection, removal and retention plan, received 25 July 2017 32507\_STL\_XX\_XX\_DR\_L\_ZZZZ\_09401- Tree pit details - soft, received 25 July 2017 32507 STL XX XX DR L ZZZZ 09402- Tree pit details - hard, received 25 July 2017 32507\_STL\_XX\_XX\_DR\_L\_ZZZZ\_09403- Landscape detail - biorention suds feature, received 25 July 2017 32507 STL XX XX DR L ZZZZ 09404- Landscape detail - brick wall, received 25 July 2017 32507\_STL\_XX\_XX\_DR\_L\_ZZZZ\_09405- Landscape detail - metal fencing, received 25 July 2017 32507 STL XX XX DR L ZZZZ 09406- Landscape detail - timber knee rail, received 25 July 2017 32507 STL XX XX DR L ZZZZ 09406- Landscape detail - timber fencing, received 25 July 2017 32507\_STL\_XX\_XX\_DR\_L\_ZZZZ\_09408- Landscape detail - brick wall with metal railing, received 25 July 2017 32507\_STL\_XX\_XX\_DR\_L\_ZZZZ\_09409- Landscape detail - swale, received 25 July 2017 32507\_STL\_XX\_XX\_RP\_L\_9075\_RP001 Materials board sheet 1, received 25 July 2017 32507 STL XX XX RP L 9075 RP002 Materials board sheet 2, received 25 July 2017 Air quality assessment, received 25 July 2017 Anomaly investigation and clearance report, received 25 July 2017 Appendix A: proposed development layout, received 25 July 2017 Appendix A: Pre-application correspondence and scoping report, received 25 July 2017 Appendix E: Proposed Metrobus routes, received 25 July 2017 BREEAM communities report, received 25 July 2017 32507-STL-XX-00-DR-A-PL 030 PL1 Plans and elevations 01 type Hatton, Thornton, received 4 October 2017 32507-STL-XX-00-DR-A-PL 031 PL1 Plans and elevations 02 type Maywood, Holmewood, received 4 October 2017 2507-STL-XX-00-DR-A-PL\_032 PL1 Plans and elevations 03 type lockwood, hpwood, received 4 October 2017 2507-STL-XX-00-DR-A-PL 033 PL1 Plans and elevations 04 Westwood, 4B6P, received 4 October 2017 2507-STL-XX-00-DR-A-PL 034 PL1 Plans and elevations 05 type 4B6P NV, Chelmsford, received 4 October 2017 2507-STL-XX-00-DR-A-PL 037 PL1 Plans and elevations 08 type 2B4P, 2B4P SQ, received 4 October 2017 Accommodation Schedule, received 4 October 2017 2507-STL-XX-00-DR-A-PL\_051 PL1 Site Plan, received 4 October 2017 2507-STL-XX-00-DR-A-PL 60 PL2 Street elevations - sheet 1, received 4 October 2017 2507-STL-XX-00-DR-A-PL 62 PL2, received 4 October 2017 32507 STL 00 ZZ-DR-A-PL10100 PL2 Floor plans - block E, received 4 October 2017 32507\_STL\_00\_ZZ-DR-A-PL10101 PL2 Elevations - apartment block E, received 4 October 2017 32507\_STL\_00\_ZZ-DR-A-PL10100 PL2 Floor plans - apartment block D, received 4 October 2017

Reason: For the avoidance of doubt.

# Advices

1. Guidance: Examples of built-in bird and bat boxes are available from: http://www.ibstock.com/sustainability-ecozone.asp http://www.nhbs.com/brick boxes for birds eqcat 431.html If built-in bird and bat boxes cannot be provided within built structures, they should be provided on trees (with no more than one bird box per tree). Bird boxes should be installed to face between north and east to avoid direct sunlight and heavy rain. Bat boxes should face south, between south-east and south-west. Bird boxes should be erected out of the reach of predators and at least 3.5 metres high on publicly accessible sites. For small hole-nesting species bird boxes should be erected between two and four metres high. Bat boxes should be erected at a height of at least four metres, close to hedges, shrubs or tree-lines and avoid well-lit locations. Bat boxes which are being placed on buildings should be placed as close to the eaves (if present) as possible. Swifts Internal nest trays or boxes are particularly recommended for swifts. Swift bricks are best provided in pairs or groups (e.g. at least two or three on a building, avoiding windows). This is because they are usually colonial nesters. Swift boxes/bricks are best located on north, north-east or east facing walls, at least 5 metres high, so that there is a clear distance (drop) below the swift boxes/bricks of 5 metres or more so that there is space for the swifts to easily fly in and out of the boxes. Locating swift boxes under the eaves (where present) is desirable. One of the best designs is those by Schwegler because they are very durable. See below for some websites with examples of swift boxes: http://www.nhbs.com/schwegler\_swift\_box\_16\_tefno\_173237.html http://swift-conservation.org/Shopping!.htm Further guidance is available at: http://www.swift-conservation.org/InternalNestTrays.htm

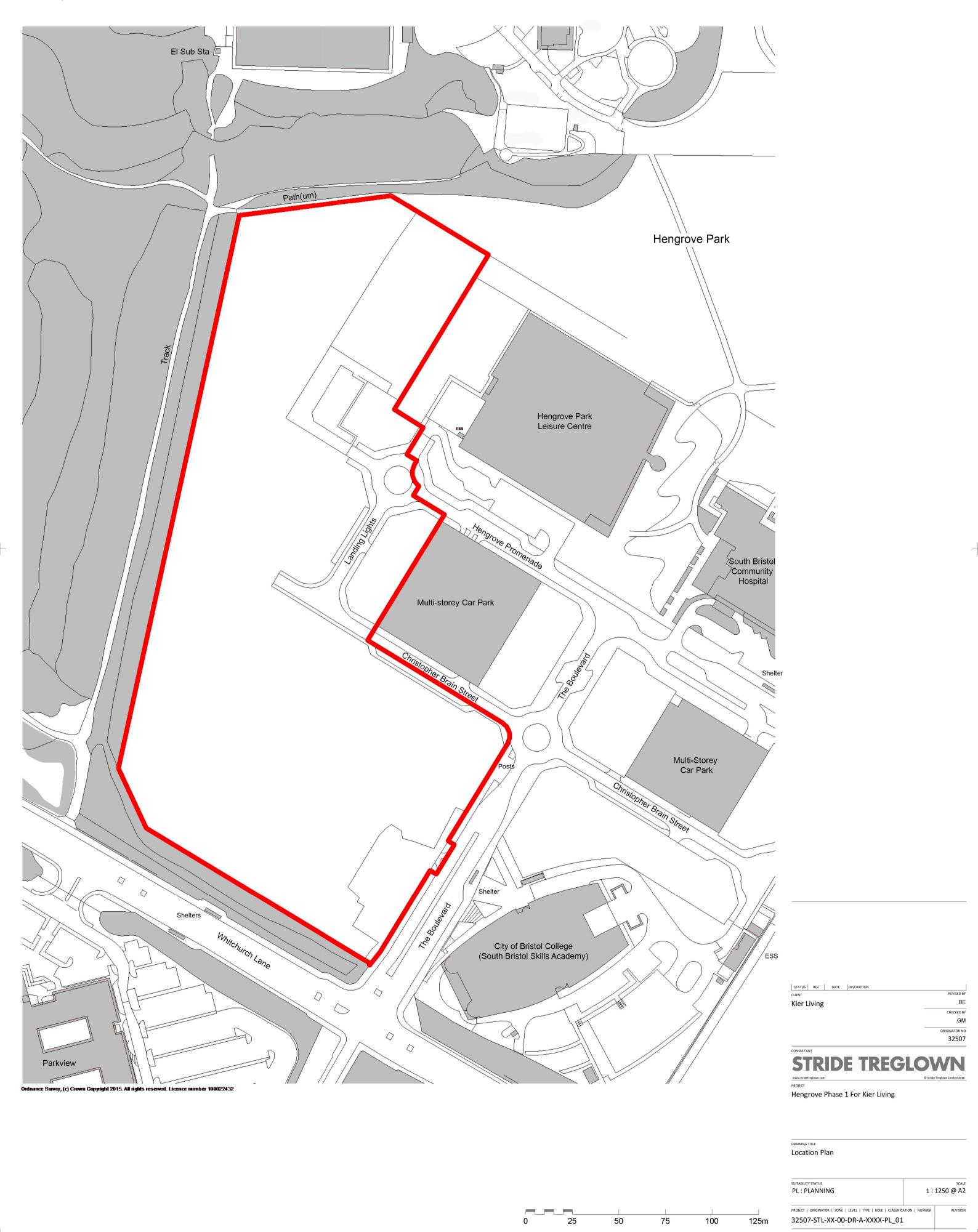
2 The most relevant local websites for travel, journey planning and cycling are www.travelwest.info and www.betterbybike.info Promotion of bus checker apps www.travelwest.info/apps

# **Supporting Documents**

#### 1. Land At Hengrove Park

- Location plan
   Layout plan
   Street elevations
- 4. Entrance to site from The Boulevard illustrative view
- 5. Woodland edge illustrative view





Responsibility is not accepted for errors made by others in scaling from this drawing.
All construction information should be taken from figured dimensions only.



Tarmac- to Include Ramps	Private Garden	Compacted Gravel Pathway
Homezone Block Paving	Adopted Soft Landscape	Paving 6- Refer to Landscape Architects drawings
Private Frontage- Block Paving with Permeable Parking Bays	SUDS Landscape- Refer to Landscape Architects drawings	Private Paths- Concrete Textured Slabs
Footpath and Margins Block Paving	Soft Landscape - Refer to Landscape Architects drawings	
Feature Square Block Paving	Paving 4- Refer to Landscape Architects drawings	
<sup>-</sup> details of materials, please ndscape Architects drawings.		

Hengrove Phase 1 For Kier Living

DRAWING TITLE			
site plan			

SUITABILITY STATUS		SCALE
PL : PLANNING	1	: 500 @ A0
PROJECT   ORIGINATOR   ZONE   LEVEL   TYPE   ROLE   CLASSIFICA	ATION   NUMBER	REVISION
32507-STL-XX-00-DR-A-XXXX-PL_51		



Birch Homezone North





Beech Homezone North 1 : 200

**Beech Homezone South** 

1:200





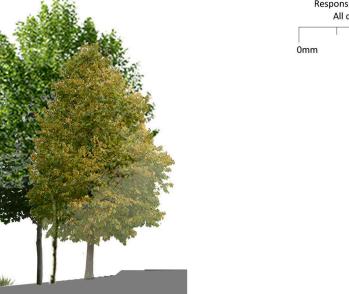
SUITABILITY STATUS		SCALE
PL : PLANNING	1	: 200 @ A1
PROJECT   ORIGINATOR   ZONE   LEVEL   TYPE   ROLE   CLASSIFIC	ATION   NUMBER	REVISION

DRAWING TITLE Street Elevations Sheet 2

32507-STL-XX-00-DR-A-XXXX-PL61

# Hengrove Phase 1 For Kier Living





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ORIGINATOR   ZONE   LEVEL   TYPE   ROLE   CLASSIFICATION   NUMBER	
7-STL-00-ZZ-DR-A-XXXX-PL87	

PROJECT | 32507 scale @ A3

REVISION

REVISED BY

CHECKED BY GVM ORIGINATOR NO

GS

# Entrance to site from The Boulevard

DRAWING TITLE

SUITABILITY STATUS

PROJECT			
Hengrove Pha	ase 1 For	Kier	Living



CLIENT **Kier Living** 

A 18.07.2017 Landscaping added STATUS REV DATE DESCRIPTION

ponsibility is not accepted for errors made by others in scaling from this drawin All construction information should be taken from figured dimensions only.



PROJECT   ORIGINATOR   ZONE   LEVEL   TYPE   ROLE   CLASSIFICATION   NUMBER	
32507-STL-XX-00-DR-A-XXXX-PL85	

REVISION

SUITABILITY STATUS PL : PLANNING scale @ A3

REVISED BY

CHECKED BY GVM ORIGINATOR NO 32507

GS

# Woodland Edge view

DRAWING TITLE

STRIDE TR	EGLOWN
www.stridetreglown.com	© Stride Treglown Limited 2016
PROJECT	
Hengrove Phase 1 For Kier L	iving

CLIENT Kier Living

CONSULTANT

A 18.07.2017 Landscaping added STATUS REV DATE DESCRIPTION

